



A healthy and potentially sustainable Nordic diet in early life and aspects of child growth and development

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Preface

Mahatma Gandhi (1869-1948) once stated that “*The world has enough for everyone’s need, but not enough for everyone’s greed.*” These words have stayed with me since a written assignment in earlier school years, and the relevance of this quote has indeed a place in the present as well. Over the years, starting from a bachelor’s degree in Nutrition to a master’s degree in Public Health Sciences, concerns regarding sustainability became an increasing part of the study field and also in the general public. In earlier years, idealism and more or less utopian perspectives dominated my viewpoints and opinions on how things ought to be in political and public health affairs. However, in 2012, I recall attending a seminar with the topic *Sustainable diets*, where one of the presenters particularly left me with a new understanding of the complexity and the challenges of sustainable diets, while still having an idealistic approach to the subject. This presenter, *Elling Bere*, turned out to be one of my supervisors in this project, several years later.

When I applied for the current PhD-position at the *Faculty of Health and Sports Sciences* at University of Agder, there was never any hesitation in my mind regarding having to move to Kristiansand for such an interesting project that was planned. Not only did the project address the issue of the environmental impact of diets, but it also concerned the importance of having a healthy diet from pregnancy and beyond for optimal child growth and development. The former research already conducted in this field by the team inspired me and made the decision very easy. At that point, I never knew how these years would turn out to be the most challenging and also the most enriching time of my life, both personally and professionally. It has been a highly educational and inspirational process, and a journey of self-development through setbacks and progress.

The current thesis stands as the result of the contribution, guidance and support of several people. First and foremost, I extend my utmost gratitude to my main supervisor, *Nina Cecilie Øverby*. You truly are the definition of the word *veileder*, by knowing how to guide one back on track when astray, and by seeing the potential and providing space and possibilities so one may become the best version of oneself. This work would have never been completed without your support, encouragement and guidance, and I am forever grateful for that.

The same words go for my co-supervisor and also head of department at *Department of Nutrition and Public health, Elisabet Rудjord Hillesund*. I have learned a great amount working close with you and I am deeply grateful for your valuable contributions and the knowledge and warmth shared. Together, you and Nina make an enthusiastic team which has been a joyful, inspiring and fun experience to be a part of, even throughout the hardships. To my co-supervisor, *Elling Bere*, thank you for the valuable contributions and for engaging yourself, me, and others in an important area of research. I have truly appreciated your support and our talks, and your keen interest in your field has been inspiring. I feel privileged to have worked with you all and I am immensely grateful for all the expertise, knowledge and experiences that have been exchanged. Thank you.

Several fellow colleagues and co-authors have contributed to the papers in this thesis. *Andrew K. Wills*, thank you for the valuable input and statistical guidance, and not at least, for the enlightening and interesting conversations on your Norway visits, which I have deeply appreciated. *Kristine Vejrup*, I have sincerely enjoyed and valued working with you and discussing our paper on “coffee-walks and talks” in Oslo during corona-times. I hope for continued contact with you both. Thank you, *Anne-Lise Brantsæter and Synnve Schjølberg*, for sharing your expertise as senior researchers and partners from the Norwegian Mother, Father and Child Cohort Study. *Marissa Leblanc*, I am thankful for your statistical guidance. It has been a pleasure and an honour to know you all.

I would also like to express my gratitude to the Faculty of Health and Sports Sciences and to former department leaders, *Geir Torstveit* and *Anne Ask*, for your assistance in challenging times and for making it possible to finish this work by providing workspace and other necessary accommodations throughout the years. A special thanks to *Eli Andås* in the PhD-programme for always meeting any inquiry with a gentle smile, and to *Rune Brynildsrud* for always helping out with any IT-related requests.

Heartfelt gratitude also goes to different people of the health-care system in Kristiansand. Thank you for doing your jobs, so that others may do theirs. I would also like to sincerely thank all participants of the Norwegian Mother, Father and Child cohort study. Without your valuable contributions and time, this research could not have taken place.

The time as a PhD-student has been made considerably more joyful with all my wonderful colleagues and fellow PhD-students I have gotten to know over the years, both at *Bygg 17* and in different floors at *I-bygget*. Thank you for all the cheering, encouragement and open-hearted conversations throughout the years. Special appreciation goes to *Shaista, Cecilie, Kaia, Lene, Sissel, Kristine, Ingrid, Ann-Christin, Wendy, Yannis* and *Agapi* for the good times spent together here in Kristiansand. *Marianne, Torunn* and *Synne*, I have sincerely enjoyed sharing office and conversations with you in the last year. I look forward to even more memories with you all.

Oslo-trips and contact with my close and dear friends there have become less with the years. To each and everyone of you, thank you so much for having faith in me and keeping up the friendships despite the physical distance. I am also very grateful to my whole extended family who have supported and cheered for me over the years. I am blessed to have you all in my life.

Finally, my deepest gratitude goes to my closest family. To my dearest parents, I am eternally grateful for your unconditional support in every way during these years. Thank you for teaching me to work hard and to never give up. To my dear brother *Ravi* and his wife *Shikha*, I am sincerely thankful for your always uplifting company, love and support. Lastly, to my dearest baby nephew *Vivek*, whose name means wisdom: the video calls and time spent with you have filled my days and nights with joy and smiles. Thank you for showing me the value of my efforts.

I will be forever grateful for the time spent at *Sørlandet*, and for the beautiful, nourishing and pleasant surroundings that have provided for the most cherished years in my life.

Thank you.

Kristiansand, February 2023

Neha Agnihotri

Summary

Healthy diets optimize our developmental potential starting from life in womb and can promote longevity, well-being and healthy lives. On the other hand, diets of poor quality were attributable to one in five deaths globally in 2017, mainly caused by cardiovascular disease followed by cancer and diabetes. Moreover, 39 million children under the age of five were overweight or obese in 2020, being at increased future risk of non-communicable diseases. Not only are unhealthy diets detrimental to public health, but more so, they negatively impact the global environment. What we eat directly impacts public health, food systems, environment, economy and the future. However, all healthy foods do not directly translate to being environmentally sustainable. Besides, our dietary habits tend to be influenced by culture, palatability, availability and affordability. *Sustainable diets* are defined as being health-enhancing with a low environmental impact, while also being culturally appropriate and economically viable. The *New Nordic Diet (NND)* has been proposed as a regionally appropriate and sustainable diet to the Nordic countries. Consequently, the potential health benefits of the NND have been increasingly investigated in different samples and populations, but there is as yet limited knowledge on the effects of adherence to the NND from fetal life through maternal diet and into childhood. *The first 1000 days of life* represent a vulnerable phase from the time of conception to child age two years. Healthy child growth and development resulting from a nutritionally adequate maternal and child diet during this phase and beyond, has the potential to impact both present and future health.

In the current thesis, we wanted to investigate whether a dietary pattern in line with the NND could be beneficial for aspects of growth and development in children, while also being healthy and potentially sustainable. Three research aims were put forth to investigate this overarching purpose, which also correspond to the three research papers included in this thesis. First, we aimed to develop child diet scores reflecting adherence to the NND, based on a maternal pregnancy NND-score comprising of ten subscales, which was developed in an earlier related project. The subscales of the score intended to capture foods with a Nordic identity that are locally available, traditionally consumed or have an importance as a food source in the Nordic countries, and that have a healthier potential compared to similar foods in the same food group. Second, we aimed to

assess potential associations with the NND-scores and weight status at eight years of age. Third, we wanted to investigate potential associations with the NND-scores and measures of child development up to five years of age.

The data material for this thesis was obtained from the Norwegian Mother, Father and Child Cohort Study (MoBa). Dietary data was available from parent-completed questionnaires at four time-points, resulting in *child NND-scores* operationalizing adherence to a healthy and potentially sustainable child diet at age 6 months (n=89 715), 18 months (n=76,432), 3 years (n=58,884), and 7 years (n=35,978) (Paper I). The scores at 6 months and 3 years comprised of six subscales with a possible scoring range from 0-6, whereas the scores at 18 months and 7 years consisted of nine subscales, yielding a total scoring range between 0-9. Values of 0 or 1 were assigned for each subscale depending on whether the participant scored above or below the cohort-specific median. Receiving 1 point acknowledged a healthier food choice or behaviour. Higher total scoring indicated higher adherence to the NND. Participants were further categorized into low, medium, and high adherence groups for descriptive and analysis purposes. In paper II, logistic regression models were applied in a sample of 14,989 dyads to estimate crude and adjusted odds ratios for *child overweight* at 8 years with continuous and categorized maternal and child NND-scores. Linear and logistic regression were applied in paper III (n=83,800) to estimate crude and adjusted associations between maternal and child NND-adherence at 6 months, 18 months and 3 years and measures of *child development* at 6 months, 18 months, 3 and 5 years.

The main results from this thesis show that the developed child NND-scores could not fully resemble the maternal pregnancy NND-score, due to limited dietary information in the child questionnaires (Paper I). However, aspects of diet quality and features of a healthy and potentially sustainable diet in children could still be captured to some degree. There was no association with NND adherence and weight status at 8 years in adjusted analyses, which could be a true null-finding, or could partly be explained by the complexity of this relationship and that the MoBa-sample was healthier than the general population (Paper II). On the other hand, we did find a positive association between maternal and child NND-adherence with communication and motor skills, and with low and medium

adherence indicating higher odds for developmental delay at almost all measured timepoints in crude and adjusted analyses (Paper III).

Thus, a diet based on the NND during pregnancy and childhood, with key foods such as whole grains, fruits, vegetables, cabbages, potatoes, milk, oatmeal, fish, water, and being breast-fed and receiving homemade food as a toddler, can be beneficial for immediate and future child development, while also having an environmental-friendly potential. Although the developed scores may have shortcomings regarding validity, the findings in the current thesis contribute to the field with its prospective and longitudinal nature. The findings are relevant in terms of expanding the knowledge on the health effects of regional and sustainable diets from early life and onwards. Future research in this line is encouraged to encompass sustainability aspects in more sophisticated ways, as to continue to respond to the global call towards more sustainable diets.

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List of papers

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Agnihotri N, Hillesund ER, Bere E, Wills AK, Brantsaeter AL, Øverby NC. *Development and description of New Nordic Diet scores across infancy and childhood in the Norwegian Mother, Father and Child Cohort Study (MoBa)*. *Matern Child Nutr.* 2021;17(3): e13150. doi: 10.1111/mcn.13150

Paper II

Agnihotri N, Øverby NC, Bere E, Wills AK, Brantsaeter AL, Hillesund ER. *Childhood adherence to a potentially healthy and sustainable Nordic diet and later overweight: The Norwegian Mother, Father and Child Cohort Study (MoBa)*. *Matern Child Nutr.* 2021;17(2): e13101. doi:10.1111/mcn.13101

Paper III

Vejrup K, Agnihotri N, Bere E, Schjølberg S, LeBlanc M, Hillesund ER, Øverby NC. *Adherence to a healthy and potentially sustainable Nordic diet is associated with child development in The Norwegian Mother, Father and Child Cohort Study (MoBa)*. *Nutr J.* 2022;21(1):46. doi: 10.1186/s12937-022-00799-5

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List of abbreviations

ASQ	Ages and Stages Questionnaire
CDI	Child Development Inventory
CI	Confidence interval
CVD	Cardiovascular disease
DHA	Docosahexaenoic acid
DXA	Dual-energy X-ray absorptiometry
EPA	Eicosapentaenoic acid
FAO	The Food and Agriculture Organization of the United Nations
FBDG	Food-based dietary guidelines
FFQ	Food frequency questionnaire
GHG	Greenhouse gas emissions
HCL	Hopkins Symptoms Checklist
IQR	Interquartile range
MBRN	Medical Birth Registry Norway
MoBa	The Norwegian Mother, Father and Child Cohort Study
NCD	Non-communicable disease
NND	New Nordic diet
NNR	Nordic nutrition recommendations
OR	Odds ratio
RCT	Randomized controlled trial
SD	Standard deviation
UN	United Nations
WHO	World Health Organization

1 Introduction

“*Eat to live, not live to eat*”, the Greek philosopher Sokrates (469-399 BC) stated more than 2000 years ago. Yet, from decades of improving global health and life expectancy through providing adequate nutritional status, we are currently witnessing a transition towards unhealthy diets which are high in calories, ultra-processed and are animal-based (1, 2). Not only do diets of low quality pose the largest global burden of disease (2), but they are also contributing to environmental degradation (3) with food production being the main cause of environmental changes globally (1). The consequences of low dietary quality are seen through undernutrition, micronutrient deficiencies, a rise in non-communicable diseases (NCDs) and a global prevalence of 1.9 billion adults and 39 million children under the age of five who were overweight or obese in 2020 (4). From a perspective of sustaining public health and the global environment, a shift towards more healthy and sustainable diets is needed, with consumption of more local and regional plant-based foods.

When addressing diet to improve health and prevent diseases, one must acknowledge that nutrition and diet as an exposure already starts within the womb (5-7). The conditions of the fetal environment are affected by the mother’s health, nutritional status and diet around conception, and is followed by another critical period of development where the first 1000 days after conception are recognized as a particularly sensitive window to target the child’s future health (6). The field of lifecourse epidemiology embodies “*the study of long-term effects on later health or disease risk of physical or social exposures during gestation, childhood, adolescence, young adulthood and later adult life.*” (p.778) (8).

Thus, by incorporating a life-course approach considering the origins of health and disease together with the call for a global shift towards healthy and sustainable diets, valuable investment in human and planetary health may be yielded for several generations.

1.1 Diet, health and sustainability

Tilman & Clark (2014) describe diet as a direct link between environmental and human health (3). They further explain that the current global dietary transition from traditional diets towards processed and animal-based diets, could by 2050 significantly contribute to an approximately 80% increase in agricultural greenhouse gas emissions (GHG) stemming from food production and land clearing globally. Furthermore, diets of low quality have contributed to an increase in overall mortality and in NCDs, such as cardiovascular disease (CVD), type 2 diabetes and certain types of cancers (9).

In 2015, the General Assembly of United Nations (UN) launched 17 Sustainable Development goals with 169 targets aiming towards eradicating poverty, hunger and disease and promoting prosperity and equality in a manner that protects the planet and its natural resources and ensures a sustainable development in economic, social and environmental dimensions (10). Moreover, a tremendous focus has been shifted towards the environmental burden of unhealthy diets and food production. The EAT-Lancet Commission on Food, Planet and Health launched their report on healthy diets from sustainable food systems in 2019, communicating an urgent need of a global transformation of the food systems (1).

The Food and Agriculture Organization of the United Nations (FAO) defined sustainable diets as “*diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable, nutritionally adequate, safe and health; while optimizing natural and human resources.*”(p.7) (11). Figure 1 illustrates the key components of a sustainable diet.

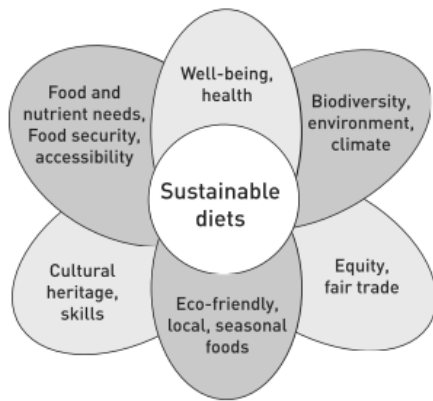


Figure 1: The FAO-Biodiversity International model of sustainable diets

(Retrieved from: Burlingame B, Dernini S. *Sustainable diets and biodiversity. Directions and solutions for policy, research and action*. Rome, Italy: FAO; 2010 (11))

A sustainable diet can only be sustainable if it also is healthy. Environmentally friendly foods with low GHG emissions do not directly translate to being healthy foods, such as prepared items high in sugars, fats or carbohydrates (12).

Moreover, fruits and vegetables imported from warmer climates may not have a low carbon footprint, despite being healthy (12). Thus, a sustainable diet should cover required nutritional and energy intake adequately, as well as maintaining the socio-cultural, economic, environmental, and ecological dimensions (13).

The EAT-Lancet Commission defined a global healthy reference diet which potentially would halve GHG emissions and prevent 11 million deaths yearly by 2050, compared to a continued status-quo scenario (1, 14). The proposed diet is predominantly plant-based with colourful fruits and vegetables, more whole-grains, plant-proteins from beans and pulses, some unsaturated oils, and very modest intake of dairy and animal proteins, which is also suggested to be optional (1, 13). Yet, to fully embody sustainability, local and regional adaptations based on seasonality, culture, availability, geography, and climate are essential (1, 14).

The Mediterranean diet has been extensively researched and is associated with lower total mortality, mortality from cardiovascular diseases and lower risk of cancer (15-17). Being characterized by a high intake of vegetables, legumes, fruits and nuts, cereals, fish, and olive oil, and low intakes of meat and dairy products (17), the sustainability potential of the Mediterranean diet has also been confirmed, given that it is consumed in its natural environment (18).

The Mediterranean diet pyramid, a way of defining the Mediterranean diet, has also recently been revised to incorporate sustainability aspects of the diet (19). Historically, adherence to the Mediterranean diet has been low in the Nordic countries (20) and given the potential health and environmental benefits of a more local and regional dietary pattern, the *Nordic diet* has been more thoroughly examined the last decades. The Nordic diet and the Mediterranean diet have been estimated to have a similar GHG emission impact (21).

1.2 The (New) Nordic Diet

Meltzer et al. describe “the Nordic diet” as an umbrella term that has been widely used in the literature when defining a Nordic dietary pattern, which essentially encompasses the national Food-Based Dietary Guidelines (FBDG), in addition to include local, Nordic foods (12). On a general basis, the Nordic Nutrition Recommendations (NNR) of 2012 promotes an increase in plant-based foods, fish and seafood, exchanging refined cereals with wholegrains and high-fat dairy with low-fat dairy products, and limiting the consumption of processed and red meat, added sugar, salt and alcohol (22). The updated NNR, which is to be launched in late 2023, aims to integrate environmental sustainability into the FBDG (23).

Nevertheless, the idea of a palatable, regional and sustainable Nordic diet with foods that carry a Nordic identity was first introduced some years ago. In 2004, Nordic chefs launched a manifesto for the “New Nordic Cuisine” with ten specific aims listed in *Table 1* (24). This concept has, however, been described as a heuristic approach, as it was not evidence-based (12). It was later adopted by the Nordic Council of Ministers as the ideology of the New Nordic Food programme in 2005, which aimed to introduce the Nordic cuisine worldwide (25). In line with the tenth aim of the manifesto (joining forces with researchers) (24), Bere & Brug launched the idea of a theoretically defined environmentally-friendly and health-enhancing *New Nordic Diet* (NND), where six key ingredients were defined in 2008: i) native berries; ii) cabbage; iii) native fish and other seafood; (iv) wild and pasture-fed land-based animals; v) rapeseed oil; and vi) oat/barley/rye (26). This was followed by dietary guidelines and dietary composition for the NND defined by Mithril et al. in 2012, based on the key principles of the NND having a health-promoting and gastronomic potential,

carrying a Nordic identity and being potentially sustainable (25, 27). The overall guidelines for the NND were presented as a diet with: i) more calories from plant foods and less from meat; ii) more foods from the sea and lakes; (iii) more foods from the wild countryside (25). The proposed specific dietary components are presented in Table 1 next to the aims of the New Nordic Cuisine.

Table 1: Overview of the ten aims of the New Nordic Cuisine (24) and the ten proposed components of the New Nordic Diet (27).

Aims of the New Nordic Cuisine:	Dietary composition of the New Nordic Diet:
To express the purity, freshness, simplicity and ethics we wish to associate with our region.	Fruits and vegetables, including berries, cabbages, root vegetables and legumes
To reflect the changing of the seasons in the meals we make.	Fresh herbs
To base our cooking on ingredients and produce whose characteristics are particularly excellent in our climates, landscapes and waters.	Potatoes
To combine the demand for good taste with modern knowledge of health and well-being	Plants and mushrooms from the wild countryside
To promote Nordic products and the variety of Nordic producers – and to spread the word about their underlying cultures	Whole grains
To promote animal welfare and a sound production process in our seas, on our farmland and in the wild	Nuts
To develop potentially new applications of traditional Nordic food products.	Fish and shellfish
To combine the best in Nordic cookery and culinary traditions with impulses from abroad.	Seaweed
To combine local self-sufficiency with regional sharing of high-quality products	Free-range livestock (including pigs and poultry) and game
To join forces with consumer representatives, other cooking craftsmen, agriculture, the fishing, food, retail and wholesale industries, researchers, teachers, politicians and authorities on this project for the benefit and advantage of everyone in the Nordic countries.	Dairy products as per the Danish Food-Based Dietary Guidelines.

As a result of the increased focus on the Nordic diet as a regional alternative to the Mediterranean diet, a wealth of literature from intervention and prospective studies have emerged on the topic the last decades, particularly on examining the Nordic diet’s association with health outcomes in pregnant women, children and adults. Favorable outcomes in pregnant women have been demonstrated with

optimal gestational weight gain, improved fetal growth (28), long-term weight regulation after birth (29), and a lower risk of preeclampsia and preterm birth (30). In Denmark, school meals based on the NND was served for 6 months for school children aged 8-11 years and the findings showed improved dietary intake and nutrient levels (vit D and iodine) (31), improved school performance, reading comprehension and eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) status (32). Still, an increase in inattention was also seen and there was no effect on concentration in the children (32, 33). Regarding adults, a recent review and meta-analysis has shown that a high adherence to a healthy Nordic diet may be associated with a lower risk of total mortality, CVD and cancer mortality and NCDs such as stroke, myocardial infarcts and type 2 diabetes (34). Other reviews have shown associations with lower blood pressure, improved risk profile for CVD (35) and a possible beneficial effect on low-grade inflammation (36). Long-term weight maintenance has been reported in a population study (37) and facilitation of weight loss in randomized controlled trials (RCTs) (38, 39). In seniors, adherence to a healthy Nordic diet in a 10-year follow up cohort study has shown to predict muscle strength (40) and to be associated with better overall physical performance in women (41), and protection against disability in men and women (42). Another study has displayed a possible positive association with cognition (43).

Research conducted on the Nordic diet and associated outcomes in infants and pre-school children, however, appears scarce. One Swedish intervention study in infants aged 4-6 months showed a higher intake of fruits and vegetables at 9 months in infants who were introduced to complementary foods based on a Nordic diet, compared to infants whose parents were advised to follow Swedish recommendations on complementary food (44). Thus, there are indications that an early life exposure of a NND may have potential health benefits beyond the conventional national dietary recommendations.

Overall, the current evidence suggests that a high adherence to a healthy and sustainable Nordic diet may be of benefit throughout the lifecourse, starting from maternal diet during pregnancy into adulthood and senior life. There is, however, yet limited information on the effects of the NND as an exposure in early life and throughout childhood.

1.3 Lifecourse epidemiology and the developmental origins of health and disease

A lifecourse perspective in epidemiology has been described to embody biological, physical, social and behavioral factors that may affect health and disease risk from preconception to adult life (8, 45). Nutrition is a factor that may cover all these aspects and concordantly carry the potential to shape individual or population health trajectories across generations (45). Four key concepts of life course theory have been presented: (I) today's exposures influence tomorrow's health (timeline), (II) health trajectories are particularly affected during critical periods (timing), (III) inequality in health reflects more than genetics and personal choice (equity), and (IV) the broad environment strongly affects the capacity to be healthy (environment) (46). The interactions between *timeline*, *timing* and *environment* are particularly well illustrated in *Figure 2*, showing the lifecourse view of NCD risk and the potential to shape future health trajectories by intervening early when plasticity is high and the accumulated detrimental effects of lifestyle is low (47).

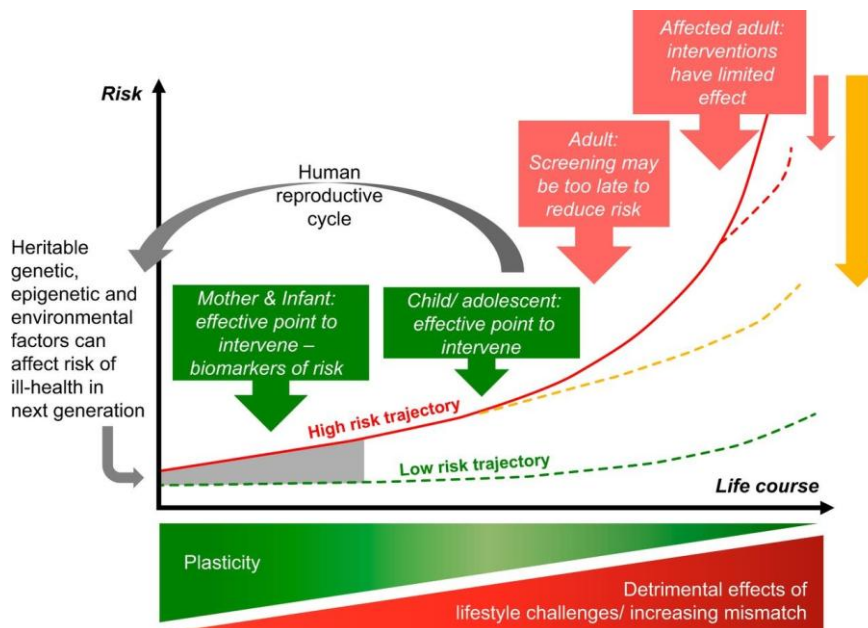


Figure 2. Disease risk trajectory in a lifecourse perspective. Illustration of the nonlinear noncommunicable disease risk in a lifecourse perspective and the potential health-benefit of early intervention when plasticity is high. (Retrieved from: Hanson MA, Gluckman PD. *Early Developmental Conditioning of Later Health and Disease: Physiology or Pathophysiology?* Physiological Reviews, 2014) (47).

The illustration represents a recognized field of biomedical science and public health where the environmental conditioning during early human development and the following risk of chronic diseases later in life are concerned, known as “The Developmental Origins of Health and Disease (DOHaD) (47). The concept was initially known as a ‘fetal origins of disease’, or the ‘Barker hypothesis’, based on the observed relationship between low birth size due to malnutrition prenatally and the child’s increased subsequent risk of developing CVD, poorer renal function and insulin resistance later in life (7, 48). There are also detrimental transgenerational effects as the offspring of these children have been reported to have increased neonatal adiposity at birth and poorer health later in life (49). Proposed mechanisms explaining the effects of preconception and prenatal experiences that may cause metabolic alteration in later life have been suggested to act through multiple pathways, which include genetic, fetal environment, gene-environment interaction, epigenetic conditioning and socioeconomic and lifestyle factors (50). The maternal diet during pregnancy is therefore undoubtedly critical for a healthy and optimal development of the fetus, both for the immediate embryonic development, organogenesis and neural development and for the long-term transgenerational impact (49, 51). Yet, the plastic phase of human development continues after birth, and the potential of environmental influences in infancy and early childhood affecting long-term health must be as well recognized (52, 53).

The first 1000 days of early life refers to the time from conception through the child’s second birthday, emphasizing a particularly vulnerable window where adequate maternal and child nutrition is crucial for optimal growth and neural development and for preventing diseases (51). This window has been suggested as an important time frame to target by interventions that may promote healthy growth and enable children to maximize their cognitive and developmental potential (6).

1.4 Breastfeeding and early child diet

The health benefits of breastfeeding are well-established, and the World Health Organization (WHO) recommends exclusive breastfeeding for at least 6 months followed by breast milk continuing to be part of the child diet during the first 2 years and for as long as it is suitable to the mother and child (54). According to the Norwegian guidelines, exclusive breastfeeding is recommended until 6

months if growth is satisfactory, and if the mother and child are content with it (55). Further, breast milk as part of the diet is endorsed for the first year of life or beyond (22, 55). Not only does human breast milk provide all energy and nutrients needed for adequate growth and optimal development during the first months of life, but it also protects against child infections, development of overweight and obesity, and improves intelligence (56, 57). Moreover, being breastfed provides a diversity of taste experiences from the maternal diet which can influence later acceptance for new foods (58). From the age of 6 months, the introduction of complementary feeding beyond breastfeed is necessary to meet the infant's increasing needs for nutrients and energy (54), which opens up a new exposure pathway for the child. During this weaning phase and in later infancy and early childhood, the foundations for establishing a healthy dietary pattern trajectory may be facilitated through the exposure of a diversity of healthy foods, flavours and textures (13, 59, 60). The importance of this phase is increasingly being emphasized as dietary patterns laid in infancy and early childhood have shown to track into adolescence and adulthood (61, 62).

1.5 Diet and child overweight and obesity

According to the WHO, there has been a threefold increase of overweight and obesity among children and adolescents aged 5-19 years since 1975, translating to 340 million (18%) overweight or obese individuals in this particular age group in 2016 (4). Moreover, it has been estimated that 39 million children under the age of 5 years were overweight or obese in 2020 (4). Numbers from Norway suggest approximately the same prevalence – 15-20% of the Norwegian children suffer from overweight or obesity, however, a plateauing seems to be evident the last decade (63). Still, the plateau effects are mainly observed in developing countries (64), and with the current development, it is estimated that one third of the projected global population in 2030 may be overweight or obese (65). Reversing the growth of overweight/obesity once developed has not been deemed successful by any country yet (65), which emphasizes the importance of early prevention. The WHO ascribes the energy imbalance between the increased intake of energy-dense foods, rich in fat and sugars and the more sedentary everyday-life as the main cause of the current development (4). Yet, the origin of overweight/obesity is multifactorial and complex, and eventually a result of

being in an obesogenic environment that is conducive to unhealthy weight gain (66, 67).

The Commission on Ending Childhood Obesity (2014) has presented six main areas by which childhood obesity may be targeted: (I) intake of healthy foods, (II) physical activity, (III) preconception and pregnancy care, (IV) early childhood diet and physical activity, (V) health, nutrition and physical activity for school-age children, (VI) and weight management (67). They further stress the physical, psychological and economic consequences of childhood obesity, as it not only has an immediate effect on morbidities in and during childhood, but also is a strong predictor of adult obesity and adult health (67-69).

The Commission acknowledges the importance of targeting the obesity epidemic preconceptionally and through pregnancy care, as there are two main developmental pathways that may shape unfavourable processes in the developing fetus, making it particularly vulnerable to an obesogenic environment (67). The ‘mismatch’ concept refers to epigenetic alterations in the fetus and low birth size due to maternal or child undernutrition or placental dysfunction, which conditions the child and future offspring to be at higher risk of obesity and CVDs (47, 49, 67). The consequences of this pathway are of high relevance in developing countries where unhealthy foods have become more affordable and accessible for people, after experiencing scarcity. These countries are currently not only encountering a double-burden of malnutrition, with both large underweight and overweight/obese populations, but are also on a pathway of more children developing obesity as more people are lifted out of poverty, but into obesogenic environments (67, 70). The other developmental pathway is based on conditioning by overnutrition, where maternal obesity, excessive gestational weight gain or gestational diabetes mellitus may predispose the offspring to later risk of obesity and metabolic disease (47, 71).

Hence, maternal diet quality and weight management preconceptionally and during pregnancy is of utmost importance to prevent offspring overweight/obesity, followed by the introduction of and exclusive breastfeeding in the child’s first 6 months of life (72). Any breastfeeding at all has been reported by the American Academy of Pediatrics to lower the risk of obesity by 24%, followed by an additional 4% decreased risk with every subsequent month

of breastfeeding in a dose-response manner (72-74). Infant formula feeding on the other hand is associated with rapid weight gain, which in turn increases the likelihood of being overweight or obese in later childhood (75). Appleton et al. suggest a variety of mechanisms and practices that may explain this association, for example the nutrient profile of formula (high protein content compared to breastmilk, although a reduction has been seen the last 10-15 years), higher energy intake in the first weeks after birth, being bottle-fed (regardless of its content), overfeeding (as opposed to self-regulation by the infant) and putting the baby to sleep with a bottle (75). Furthermore, the timing of introducing complementary feeding (76) and establishing unfavourable dietary patterns in infancy may also predispose for adverse weight status in early childhood (77). Being formula-fed particularly increases the risk of obesity if in combination with complementary feeding before four months of age, and it is also associated with unhealthier dietary patterns in infancy (76, 77). Other empirically derived dietary patterns in childhood with foods that are energy-dense, high in fats, and low in fibre have demonstrated to put children at risk for later obesity (78). Therefore, making healthy dietary and feeding choices from preconception and beyond into early childhood could be an effective pathway of facilitating a favourable growth development in children.

1.6 Diet and child development

There are sensitive and critical time periods of fetal development where optimal nutritional status is crucial for normal neurodevelopment. For example, deficiency of the B-vitamin folate in pregnant women was since the 1960s suspected to be the cause of neural tube defects and for the last three decades (79), recommendations of folic acid supplementation for women of reproductive age have been estimated to reduce the risk for neural tube defects by 50% (45, 80). The time frame of where folate deficiency may predispose to neural tube defects is within day 21 to 28 after conception, referring to a *critical period* where development and performance may be altered permanently within a *sensitive period* (81, 82). A sensitive period describes a broader, but a vulnerable time frame where environmental circumstances can shape the developmental aspects. Adequate maternal intake of omega-3 fatty acids (DHA+EPA) is another critical factor, as they are an important and functional structure of cell membranes and the central nervous system, and have multiple roles in brain

tissue, among others signal processing and neural transmission (81, 83). Other nutrients that are important for optimal fetal development are carotenoids, choline, iodine, iron and vitamin D (51). Within the age of two years, 80% of the brain's weight development towards the adult brain has already occurred, and the brain size has reached 90% of its adult size by 5 years (81, 84, 85). The rapid neurological development that occurs in the first 1000 days of life and in early childhood is therefore dependent on a healthy diet that provides the needed macro- and micronutrients for optimal fetal and postnatal growth and development (51, 86).

The immediate effects of sufficient nutritional status during pregnancy for fetal neurodevelopment are well-researched, but there are also indications of a following impact on child development. In a meta-analysis including 18 studies, better maternal diet quality during pregnancy showed a small, but positive association with aspects of child neurodevelopment (87). Breastfeeding has also been associated with improved cognitive development, measured by intelligence tests in childhood and adolescence, with the effect still remaining after controlling for maternal intelligence (88). It should, however, be noted that cognitive development is measured by varying aspects and the relationship is also likely to be confounded by several variables (89). There is also evidence that diet quality, as measured by dietary patterns in infants and toddlers, has a small effect on IQ at 8 and 15 years (90, 91), and that healthy dietary patterns before the age of 5 years is associated with favourable cognitive outcomes in later childhood (92).

1.7 Conceptualizing dietary intake in nutritional epidemiology

1.7.1 *A glimpse into epistemological orientations of nutrition research*

Since the rise of humankind, nothing has been more certain than the fact that we depend on the availability, digestibility and palatability of food and nutrients to develop and survive. Despite an early awareness of the link between diet and health or sickness, the field of nutritional epidemiology is regarded a relatively new formal area of research (93). Traditionally, the epistemological direction in the nutritional field has been dominated by a reductionist approach, where the scientific aim is to reconstruct reality down to the smallest parts, and to seek linear cause-effect constructs, so that the whole can be explained by its parts (94). This perspective, mainly adapted from the predominating positivist medical field, ultimately lead to a paradigm where food was being researched as single nutrients or food compounds with a cause-effect association to a physiological process (95). Within a positivist paradigm in health sciences, one would view reality as fixed and argue that it is possible to achieve objective knowledge through rigorous methodology (96). Consequently, numerous essential nutrients have been identified during the last 200 years, as deficiencies of certain vitamin and minerals can result in specific diseases or deficiency syndromes (93). For instance, vitamin C-deficiency due to lack of fresh fruits and vegetables on ships was a common cause of death among millions of sailors in the earlier centuries, until Lind (1753) conducted one of the earliest controlled trials to cure scurvy (93).

Thus, the reductionist approach and the positivist paradigm have contributed to a significant knowledge development and advances within the field of nutrition, by preventing deaths and improving the nutritional status in the population through evidence-based nutritional recommendations, guidelines, and treatment.

Nevertheless, there has been a major paradigm shift during the last decades, namely towards a more *holistic* perspective of nutrition (94, 95). This would imply to first consider complex phenomena globally, and then to use a reductionist approach where necessary to explain a particular part, translating to a top-down perspective, rather than a bottom-up approach (95). Holism may be encompassed at many levels of nutritional research; from a reductionist approach of being exposed to nutrients, compounds, and food ingredients, to food, food groups, diet, dietary patterns over time, and even over to more global and

environmental perspectives by including food systems. The two approaches are, however, to be understood as complementary and interdependent perspectives (97). Studying dietary patterns could be understood as a holistic approach of examining the diet (98), while it also acknowledges and integrates the former rigorous research conducted on the health effects of various nutrients, foods and food groups (95). Moreover, including sustainability aspects of the diet have been described by Fardet & Rock (2015) as a direction towards “ethical paradigms” in preventive nutrition research (99).

1.7.2 Observational study design and food frequency questionnaires

Satija et al. (100) describes the prospective cohort study as the strongest observational study design as it may be less conditioned by several biases, such as reverse causation, recall bias and selection bias. Additionally, potential confounding factors may be statistically adjusted for in regression models, and updated information on the participants may be provided throughout the longitudinal data collection (100). The most common method of dietary assessment in large studies has been food frequency questionnaires (FFQs), which have the advantage of assessing a wide and varied specter of foods over an extended period of time, although in a crude way (101). They commonly consist of a food list and a frequency response section where the subject reports how often the food is consumed and aims to rank individuals so subjects with high intakes may be separated from subjects with low intakes (101, 102). In comparison to methods where a subject must describe specific meals earlier consumed, reporting habitual food intake and frequency is considered to be less challenging; a concept referred to as *episodic* and *generic* memory, respectively (101).

FFQs are normally self- or parent-reported, easily administrated to many subjects at a low cost, and they have a low participation burden (101). In epidemiologic studies, FFQs were regarded as the primary method of measuring dietary intake over an extended time period, and the assessment method has made large prospective studies possible (101). Moreover, the method has made repeated assessments of the same subjects and large populations over time more feasible. Despite that FFQs has been among the primary instruments for dietary

assessment in large-scale studies between 1980 and 2010, they are subject to measurement error and several biases (103).

1.7.3 Dietary patterns and diet scores

As formerly described, important advances have emerged from studying nutrients and food components and their associated relationship with disease development (104). However, this approach also presents some conceptual and methodological limitations as people do not eat isolated nutrients (105). Namely, the human diet is characterized by a variety of foods, drinks and food groups usually consumed as meals and it is likely that the complex combinations of micro- and macronutrients may interrelate through various interactions and synergies (106). Multiple single nutrients examined simultaneously in a model may also introduce a challenge as strongly correlated nutrients can confound each other, and their isolated effects cannot be differentiated (105, 107). Thus, examining dietary patterns is a conceptually broader approach and more close to real-life conditions as the joint effects of diet and nutrients on health may be investigated the way food normally is consumed (105). Additionally, addressing the diet as a whole may contribute to detect the cumulative health effect of multiple nutrients, which otherwise could be too small to detect when investigated as individual components (107). As such, the otherwise potential limitation of high level of collinearity between food variables may be considered an advantage when examining dietary patterns (105, 106).

Dietary patterns are commonly operationalized and quantified through diet scores. There are two main methodologies described for operationalizing dietary patterns, that is, theoretically defined dietary patterns and empirically derived dietary patterns (98, 106). The latter approach is considered '*a posteriori*' as the eating patterns are statistically modelled through factor, cluster or principal component analysis and are derived from previously collected dietary data. On the other hand, theoretically defined dietary patterns are approached '*a priori*', and are grounded in the current body of nutritional knowledge and occasionally includes cultural aspects of diet (98, 105, 107). In a priori analysis, adherence to a predefined healthy or unhealthy dietary pattern is quantified through diet scores or indices and exposure to certain foods or nutrients is measured (108), which in turn are tested against a specific health outcome (106).

Several a-priori indices have been developed to describe diet quality and adherence to various dietary patterns or dietary guidelines (109). Examples of these indices are the Diet Quality Index (110), Healthy Eating Index (111), Baltic Sea Diet Score (112), Danish Diet Quality Index (113) and the Mediterranean Diet Score (16), nearly all having been modified and revised over time. Some indices have been adapted to describe diet quality in pediatric populations (114-116). The Mediterranean Diet Score, first described by Trichopoulou et al. (1995) in a Greek cohort, is probably the most well-known index that operationalizes adherence to a traditional and regional Mediterranean dietary pattern (16). The score was originally composed of eight component characteristics (later modified to nine to include fish intake) (17), and sex-specific cut-offs by median intake were used to assign values of either zero or one to the participants, determined by if each of the included food components were presumed to be healthy and beneficial or unhealthy and detrimental (16, 17, 117). This would result in a 10-unit dietary score, where a higher score indicated higher adherence to a healthy Mediterranean diet, and a lower score was considered to be a diet of low quality, potentially associated with adverse health outcomes. Waijers et al. (2007) argue that as diet is culturally determined, the dietary habits of a population should be taken into account when selecting index items and choosing the cut-offs (98).

1.7.4 The New Nordic Diet score

Hillesund et. al (2014) developed a maternal pregnancy NND score from dietary data collected around week 22 in the Norwegian Mother, Father and Child Cohort Study (MoBa) (28, 118). The score comprises of ten *a priori* defined subscales, each measuring aspects of a potentially healthy and sustainable diet inspired by and partly based on the NND guidelines by Mithril et al. (25). The food groups included in the score were Nordic fruits and berries, root vegetables and cabbages, potatoes, whole grain bread and oatmeal and foods from the wild countryside. In addition, milk, juice, sweetened beverages and water intake were addressed, as was meal frequency. The main principles behind the subscales were to reflect a diet with foods with a potential Nordic identity and foods that are traditionally consumed or have an importance as a food source in the Nordic countries (28, 118). Further, the possibility for the foods to be locally grown, caught or harvested, and having health-enhancing potential compared to similar foods within the same food group were also incorporated.

1.8 Knowledge gaps

The link between diet, health and sustainability has increasingly been studied over the last decade, given the urgency and the global call of a transition towards more healthy and sustainable diets (1, 3). With that, the interest in the (New) Nordic diet as a healthy regional, local and sustainable dietary pattern also increased extensively, resulting in numerous studies and a wealth of literature confirming many health benefits of the Nordic diet in various forms. Although some studies have focused on benefits of the NND in school age, there is a gap in the literature regarding the potential health benefits of the NND on growth and development during infancy and in pre-school children. Moreover, a lifecourse approach of the NND starting from maternal diet to school age has, to our knowledge, not been applied in any studies and prospective studies on the NND also remain limited.

1.9 Aims and objectives

Given the presented knowledge gaps, the overarching purpose of this project was to investigate maternal and child diet in a way that integrates aspects of human and planetary health, as well as acknowledging a lifecourse perspective of diet as an exposure in relation to aspects of child development.

To achieve this, the overall aim of this thesis was to develop child diet scores reflecting adherence to a healthy, regional and potentially sustainable Nordic diet during infancy and early childhood and to explore potential associations between the age-specific scores and subsequent weight status, language and motor development.

The specific research objectives were to:

- i) develop child diet scores at 6 months, 18 months, 3 years and 7 years capturing adherence to a healthy, local and potentially sustainable diet based on the NND and a previously developed maternal NND score within the MoBa.
- ii) examine the potential association between adherence to the NND during pregnancy, infancy and childhood, as measured by the developed diet scores, and the odds of child overweight at 8 years of age.
- iii) investigate the potential relationship between adherence to the NND during pregnancy, infancy and childhood, as measured by the developed diet scores, with child language and motor development up to 5 years of age.

2 Materials and methods

In this chapter, the sample and the applied methods in this thesis are presented in detail. The development of the child diet scores is also described here, although it also corresponds as the result to research objective I.

2.1 Study design and sample

2.1.1 *The Norwegian Mother, Father and Child Cohort Study*

The data material used in this study was retrieved from The Norwegian Mother, Father and Child Cohort Study (MoBa), which is a large prospective pregnancy cohort study conducted in Norway (119). The primary goal of the cohort was to identify environmental and genetic factors in pregnancy and childhood for potential disease-risk and the prevention of these (119).

The study was initially planned partly by researchers from the Norwegian Institute of Public Health and partly by the Medical Birth Registry of Norway (MBRN). The target population of the study was all women who gave birth in Norway from the time of recruitment in 1999 to 2008 and there were no exclusion criteria. All information material and questionnaires were, however, only available in Norwegian (120). Pregnant women were recruited through 50 of Norway's 52 hospitals with maternity units. The women received postal invitations along with the notice for a routine ultrasound scanning in week 17-18 of the pregnancy (119) (*Appendix A*). A written informed consent was to be submitted to participate in the study (*Appendix B*). During the recruitment period from July 1999 to December 2008, invitations were sent out to women in 277 702 pregnancies and the participation rate was 41% (120). The cohort now includes more than 114.500 children, 95.200 mothers and 75.200 fathers. Approximately 16 400 women participate with more than one child and around 1900 pairs of twins are born in the cohort. The fathers were included in the study after the initial phase of recruitment. The participants have responded to several questionnaires (*Appendices C-L*) at different time points which are described in *Table 2*.

The mothers participating in the MoBa differed from the general pregnant population (121). There was an overrepresentation of multivitamin and folic acid supplement users in MoBa. Furthermore, participating women were more likely

to be older (>25 years) and cohabitating, and less likely to be smoking, having more than two previous births, or having experienced stillbirths, compared to the general population. Paper I and II used data from version 8 of a quality-assured MoBa datafile. For paper III, access to a more recent dataset (version 12) was applied for in May 2020 and granted in August 2020. Data collection of Q8 was still not completed in version 8 of the datafile when the file was released.

Table 2. Questionnaires from MoBa used in our study (N provided by Elin Alsaker, MoBa, Norwegian Institute of Public Health)

Questionnaire	Data collection time point		Topics included	N (preg/children) Version 8	N (preg/children) Version 12
MFR				114 275	114 143
Q1	Pregnancy	Week 15	Physical and mental health, lifestyle, work, education	102 265	102 151
Q2	Pregnancy	Week 22	Maternal diet during pregnancy	87 779	87 690
Q3	Pregnancy	Week 30	Physical and mental health	94 241	94 156
QFather	Pregnancy	Week 13-20	Physical and mental health, lifestyle, work life	77 260	77 242
Q4	Child age	6 months	Physical and mental health, birth-related health, child health, development and nutrition	89 715	89 655
Q5	Child age	18 months	Maternal and child health, development and nutrition/diet	76 432	76 404
Q6	Child age	3 years	Maternal and child health, development and nutrition/diet	58 844	58 838
Q5y	Child age	5 years	Child health, language, communication, development	32 841	41 617
Q7y	Child age	7 years	Child health, lifestyle, nutrition/diet	35 978	54 777
Q8y	Child age	8 years	Maternal mental health and lifestyle. Child mental/cognitive development	19 946	43 616

MoBa: the Norwegian Mother, Father and Child Cohort Study

MFR: Medical Birth Registry Norway, y: years.

N is given in number of pregnancies in Q1-Q3 and QFather, and in number of children from Q4-Q8y.

Version 8 was used in Paper I and II, and version 12 in Paper III. The decline of participants in version 12 compared to version 8 is because of withdrawn consents from MoBa participation.

2.1.2 Study population and data material

Paper I

The study population in paper I included all children in the respective datasets. The questionnaires at child age 6 months (Q4), 18 months (Q5), 3 years (Q6) and 7 years (Q7y) were employed for the purpose of developing child diet scores. No children were excluded as to maximize data use and for representativeness in determining cut-offs for the child scores. The sample sizes at each age, comprised of n=89,715 at age 6 months, n=76,432 at 18 months, n=58,884 at 3 years and n=35,978 at 7 years. To explore socio-economic differences according to child diet, data from the maternal questionnaire (Q1) and paternal (QFather) questionnaire was also used, with n=102,265 and n=77,260 respectively.

Paper II

In paper II, the association between childhood adherence to a potentially healthy and sustainable diet and the odds of being overweight or obese at 8 years of age was examined. In this paper, data from seven MoBa questionnaires were used, and the dataset was also linked to a datafile from MBRN. The data material comprised of data from Q1 (at baseline, week 13–20 of the pregnancy), Q2 (week 22), Q4 (child age 6 months), Q5 (child age 18 months), Q6 (child age 3 years), Q7 (child age 7 years) and Q8 (child age 8 years). To be eligible for inclusion, the mothers had to have responded to Q1 and have data in the MBRN. Exclusion criteria were multiple pregnancies (n=1840), pregnancies where the child was no more alive or where the parents were no more present in Norway (n=1768), pregnancies with no dietary data from Q2 (n=14,231) and pregnancies with an implausible energy intake defined as <4500 kilojoule or >20,000 kilojoule (n=1360) (122). After careful consideration, a decision was made to only include the first child in the cohort to avoid use of multiple dependent observations, which excluded n=10 964 more pregnancies by the same mother. This resulted in a datafile comprising 71,648 mother and child pairs. From this sample, n=17,873 had responded to the follow-up questionnaire at 8 years. Furthermore, infants with birth weight beyond $\pm 4SD$ (n=526), eight-year-olds with height, weight, and BMI beyond $\pm 4SD$ (n=62), and children lacking information on height and/or weight at 8 years were excluded (n=2034). To maintain a homogenous age group, children in the dataset who were <7 years (84

months) or >9.5 years (114 months) at the time of completing Q8 were also excluded (n=262). This resulted in a final study sample of 14,989 dyads.

Paper III

In paper III, we examined the association between maternal and child adherence to the developed diet scores up to 3 years and child development at four measure points up to 5 years of age. The dataset was linked to the MBRN and data material from seven MoBa questionnaires (Q1, Q2, Q3, Q4, Q5, Q6 and Q5y) was used in this paper. The included participants had responded to Q1 and Q2 and were registered in MBRN with singleton births. An exclusion criterion was calculated energy intake outside the range of 4.5-20 megajoule/day. This resulted in a study sample of 83,800 dyads.

2.2 Dietary assessment in MoBa and preparation of data material

The dietary assessment in MoBa was conducted through postal and some web questionnaires during pregnancy, and further at follow-up at different time points for the children. These are elaborated below.

2.2.1 Maternal dietary data

The first 8954 respondents in MoBa responded to a FFQ that was taken out of use in June 2001 due to an unsatisfactory ability to reflect research interests and because it was not validated for pregnant women (122). These respondents have not been included in any of the studies of this thesis. The succeeding FFQ was specifically developed for the MoBa and aimed to embrace both dietary components and the possibility to explore different dietary patterns or diet profiles. In total, the semi-quantitative FFQ comprised of 255 food items which were grouped according to a Norwegian meal pattern. The participating women received the questionnaire (Q2) during week 22 of gestation and reported their daily/weekly and/or monthly mean intake of the food items during the first 4 months of their pregnancy. The FFQ has been validated in pregnant women against a 4-day weight record and some biomarkers and provides reasonable valid intake estimates and is considered a valid tool to rank pregnant women according to low and high intakes of energy, nutrients and foods (123).

When collecting large amounts of dietary data, food items may often be left blank by the responders which contributes to missing values (107). This could potentially raise an issue when computing diet scores from a variety of food or drink items, as one missing item can lead to missing values of a whole subscale. Items that are left blank are assumed to reflect non-consumption, and a null imputation was therefore made in accordance with recommendations by Cade (124, 125).

2.2.2 Child dietary data

Child diet was reported by the mothers in the questionnaires at child age 6 months (Q4), 18 months (Q5), 3 years (Q6) and 7 years (Q8). These dietary assessments aimed to capture the child’s diet quality according to how frequently a variety of food and drink items were consumed on a weekly basis and the included items varied across the questionnaires. The number of food and drink items varied from 28 in Q4 to 47 in Q8. The dietary questionnaires for the children have not been validated against other dietary assessment methods or energy intake. Details about the available items in each questionnaire are elaborated in the tables under the description of the respective scores.

Imputation of missing values was done differently with the child diet scores, compared to with the maternal score. We observed the missing patterns within each dataset and decided to define respondents who had missing on all included items within the score as true missing. The remaining respondents had zero (never/seldom/no consumption) imputed to their missing items.

Spreads are usually eaten frequently, but in smaller amounts, and their reported frequency was therefore downweighed to a quarter of whole foods by being multiplied by 0.25. We used a formula (presented below) to get a relative measure of consumption in the subscales where consumption of a food group/beverage was compared to the consumption of another food group/beverage. The value of 0.1 was added to avoid zero in the denominator in cases where unpreferred foods were reported to be consumed never or seldom.

$$\frac{(Healthy\ food\ 1 + Healthy\ food\ 2 + \dots)}{((Unhealthy\ food\ 1 + Unhealthy\ food\ 2 + \dots) + 0.1)}$$

2.3 Development and rationale of the New Nordic Diet scores

The diet scores that were developed to operationalize adherence to the NND in children was based on the rationale of a previously developed NND score for the mothers in MoBa (see chapter 1.7.4 *The New Nordic Diet Score*) (28). The rationale for the selected food and drink items for this score is described in detail elsewhere (118). There was an overall intention to develop the child NND scores based on the maternal score and that the child scores would resemble the maternal score as far as possible, as described under aims. In the following text, the construction of the maternal score and the child NND scores are explained in detail. The child NND scores were developed with the same approach and method that was applied in the development of the maternal NND score, which is described below.

2.3.1 Maternal NND score

Based on the previously described rationale of the NND score and the available FFQ-data in the MoBa-dataset, the subscales to be included in the maternal NND score were operationalized as following (28, 118):

- 1) Meal pattern: combined frequency of eating breakfast, lunch, dinner and evening meal.
- 2) Nordic fruits: frequency of eating apples, pears, plums and strawberries.
- 3) Root vegetables: frequency of eating carrots, rutabaga and various types of onions.
- 4) Cabbages: frequency of eating kale, cauliflower, broccoli and Brussels sprouts.
- 5) Potatoes: frequency of eating potatoes relative to rice and pasta.
- 6) Whole grain breads: frequency of consuming whole grain breads relative to refined breads.
- 7) Oatmeal porridge: frequency of eating oatmeal porridge.
- 8) Foods from the wild countryside: frequency of eating game, fish, seafood and native berries.
- 9) Milk: frequency of consuming unsweetened milk relative to fruit juice.
- 10) Water: frequency of consuming water relative to sweetened beverages.

Each subscale was computed from a variety of food items, spreads or drinks which were available in the FFQ, except for the first subscale addressing meal

frequency. The food or drink items were recoded to reflect a weekly consumption. The subscales were further dichotomised by the median to yield a cohort-specific cut-off and assigned values of 0 or 1, where 1 indicated the preferable or favourable behaviour. In total, the score ranged from 0-10 points, where a higher score indicated a higher adherence to the NND. Lastly, a categorisation was applied to the score to yield three adherence groups: low (0-3 points), medium (4-5 points) and high (6-10 points). The NND score has shown acceptable test-retest reliability in a small sample of parents of toddlers in Southern-Norway (126), and a higher score has been associated with higher intake of certain healthy foods and nutrients (127).

2.3.2 NND score at 6 months

The MoBa-questionnaire at 6 months comprised of 28 food and drink items, as presented in *Table 3*.

Table 3. Available food and drink items and response options in Q4 (6 months)

Question (as numbered in Q4)	Food list items	Response type/ response options
15. What did you give your child to drink during the first week of life?	Breast milk, water, sugar water, formula, other, don't know/ remember	Tick box
16. What has your child been given to drink during the first 6 months of his/her life?	Breast milk, Standard Collett formula w/omega 3, standard NAN formula, Nan HA1 formula, other milk (specify), water, squash/juice.	Tick box matrix Drink item and child age when offered (0-6 months)
17. How often do you give your child the following to drink at the moment?	Breast milk; breast milk supplementation; normal sweet milk (any type); sour milk; organic milk products; boiled water; tap water; bottled water; bottled baby cordial; other type of cordial (sweetened); cordial artificially sweetened; juice; other.	Never/seldom 1-3 times a week 4-6 times a week At least once a day
18. How often does your child eat the following at the moment, and how old was your child when you started giving him/her this food?	<i>Instant porridge:</i> rice porridge, maize porridge; oatmeal porridge, different types; wheat porridge, all types, rusk porridge. <i>Homemade porridge using:</i> wheat flour (rough/fine) rusk, semolina, oats; iron-enriched	Never/seldom 1-3 times a week 4-6 times a week At least once a day

	wheat flour; Helios baby flour; millet. <i>Snack/dessert:</i> Homemade fruit puree; fruit/berry puree in a jar; rusks/biscuits/bread; other.	Blank box to fill in age in months.
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We included 23 of the food and drink items to construct the score at 6 months. Additionally, two questions addressed breastfeeding duration and frequency. Exclusive breastfeeding duration, i.e. for how long the infant received breastmilk with no supplementary milk and/or solid food, was calculated from the question of duration of breastfeeding and/or other types of milk feeding and the question about time of introduction to various types of solid food.

Further, the questionnaire addressed the frequency of consuming different porridges, dinners and fruit purees. These were differentiated between homemade or commercially prepared foods or products. In compliance with the intended rationale of a potentially healthy, sustainable and local diet, we chose to favour serving homemade food to the child over commercially prepared baby foods (subscales 1-3). Based on the questions that were available in the questionnaire and as breast milk is a recommended food source for infants with many known health benefits (56), breastfeeding was valued as a healthy, environmentally friendly and sustainable alternative in the current score (128) and weighted in the score with two subscales (4 and 5). The last subscale (6) addressed consuming water relative to sweetened beverages, in line with the maternal score.

This resulted in a NND score at 6 months comprising of six subscales, presented with each included food item or response options in the brackets:

1) Homemade fruit puree relative to commercially prepared fruit puree

(Homemade fruit puree relative to commercially prepared fruit/berry puree).

2) Homemade dinners relative to commercially prepared dinners

(Homemade dinners from: potato/vegetable puree + fish and vegetables/potato + meat and vegetables/potato relative to commercially prepared meals from vegetables + vegetables/meat).

3) Homemade porridge relative to commercially prepared porridge

(Homemade porridge from: wheat flour (whole/refined) rusk, semolina, rolled oat + iron enriched wheat flour + Helios flour + millet relative to commercially prepared porridge from rice/corn + different types of oatmeal + wheat porridge/ruak porridge).

4) Being exclusively breast-fed for at least 4 months

(yes/no).

5) Still being breastfed at the time of responding to the 6-months questionnaire

(yes/no).

6) Water relative to sweetened beverages

(Boiled water + tap water + bottled water relative to squash, sugared drinks (bottled) + other sweet beverages + artificially sweetened squash + juice).

The presented subscales were summarized into a 6-month NND score ranging from 0 to 6 points. The categorization applied to the score yielded three adherence groups: low (0-2 points), medium (3-4 points) and high (5-6 points).

2.3.3 NND score at 18 months

In the MoBa-questionnaire at 18 months (Q5), the questionnaire food list comprised of 39 food items as presented in *Table 4*. We used 23 of the food items to construct the diet score at this age point. There were different versions of the questionnaire throughout the data collection period, and the response options for the first 5008 respondents differed to such a degree that we chose to exclude these in the construction of the diet score.

Table 4. Available food and drink items and response options in Q5 (18 months).

Question (as numbered in Q5)	Food list items	Response type/ response options
1. What type of milk has your baby been given since he/she was 6 months old?	Breast milk; formula; formula in case of lactose intolerance; whole milk; low-fat milk; extra low-fat milk; skimmed milk;	Tick box Child age in months: 6-8, 9-11, 12-14, 15-18

	yoghurt with active lactobacillus; other yoghurt; other types of sour milk.	
2. How often do you give your child the following to drink now that he/she is 18 months old? Select the frequency which is most applicable on average.	Breast milk; formula; whole milk; low-fat milk; extra low-fat milk; skimmed milk; yoghurt with active lactobacillus; yoghurt natural; yoghurt with fruit; other types of sour milk; tap water; bottled water; cordial, sweetened; cordial artificially sweetened; juice; fizzy drinks; diet fizzy drinks; other.	Never Less than once a week 1-3 times a week 4-6 times a week 1-2 times in 24 hrs 3-4 times in 24 hrs 5 or more times in 24 hrs
3. Do you give your child the following to drink during the night now that he/she is roughly 18 months old?	Water; milk or cordial from a cup; milk or cordial from a bottle; breast milk.	Never/seldom Now and then Yes, most nights
4. How often do you give your child the following to eat now that he/she is 18 months old? Select the frequency which is most applicable on average.	Liver paste sandwich; meat sandwich; fish sandwich (e.g., sardines, mackerel); cheese sandwich; jam/honey sandwich; sandwich with other filling; baby porridge (instant); homemade porridge; meat, sausages meat balls, etc; fish, fish balls, fish pudding, etc; pancakes; potatoes; pasta; rice; peas, beans; other cooked vegetables; raw vegetables; fruit; cakes/waffles/biscuits; chocolate; other sweets, jelly beans, other confectionery.	Less than once a week 1-3 times a week 4-6 times a week 1-2 times in 24 hrs 3-4 times in 24 hrs 3 or more times in 24 hrs
5. Do you give your child a homemade dinner or readymade (processed) baby food in a jar?		Only homemade Mostly homemade About half and half of each Mostly ready-made Only ready-made
6. How often do you give your child organic food/drink?	Sweet milk; buttermilk/yoghurt; vegetables/fruit; porridge/flour/bread; meat.	Never Sometimes Often Almost always

The score at this age (presented below) comprised of nine subscales, where three subscales are in line with the maternal score addressing the relative consumption of potatoes over rice/pasta (4), milk over fruit juice (7), and water over sweet beverages (8). One subscale (9) addresses the aspect of consuming homemade food relative to commercially prepared food, and another aiming to address to what degree homemade porridge was served compared to commercially prepared

porridge (5). There was no variety of fruits and vegetables specified in the current dietary assessment, and subscale 1 and 2 is therefore scoring a general consumption of fruits and vegetables above the median. The consumption of peas and beans is additionally included as a subscale (3). This resulted in a NND score at 18 months comprising of nine subscales, presented with included food items in the brackets:

1) Fruits: eating fruits more than 10.5 times a week

(Fruit type not specified).

2) Vegetables: eating vegetables more than 5.5 times a week

(Raw vegetables + Boiled vegetables).

3) Peas and beans: eating peas and beans more than 5 times a week.

4) Potatoes: potatoes relative to rice and pasta

(Potatoes / Rice, pasta).

5) Porridge: homemade porridge/baby cereal relative to commercially prepared porridge/baby cereal.

6) Fish: eating fish more than 2.13 times a week

(Fish, fish balls, fish pudding + Bread with fish *0.25).

7) Milk: milk relative to fruit juice

(Whole milk + Low fat milk + Extra low-fat milk + Skimmed milk / Juice).

8) Water: water relative to sweetened beverages

(Tap water + Bottled water / Squash, sugared + Squash, artificially sweetened + Soda + Light soda).

9) Homemade food: homemade dinners relative to commercially prepared baby food.

Summarizing the subscales, the NND-score at 18 months consisted of nine subscales with a score range from 0-9 points. The categorization applied to the score yielded three adherence groups: low (0-3 points), medium (4-5 points) and high (6-9 points).

2.3.4 NND score at 3 years

In the questionnaire at 3 years (Q6), the questionnaire food list comprised of 37 items (Table 5), of which 14 were used in the construction of the score.

Table 5. Available food and drink items and response options in Q6 (3 years)

Question (as numbered in Q6)	Food list items	Response type/ response options
<p>41. How often does your child drink or eat the following at the present?</p>	<p>Whole milk, sweet/sour; low-fat, extra low-fat; skimmed milk, sweet/sour; yoghurt natural; yoghurt/yoghurt drink with fruit, yoghurt with active Lactobacillus; juice; cordial/nectar/squash/fizzy drinks, sweetened; cordial/squash/fizzy drinks, with artificial sweeteners.</p> <p>Meat filling (liver paste, ham, etc.); fish filling (mackerel, caviar, etc.); brown cheese, brown cheese spread; other types of cheese; jam, honey, chocolate spread, other sweet spread; eggs, boiled, fried, scrambled; other filling.</p> <p>Fruit; raisins; ice cream; ice lolly; biscuits; buns, cakes, waffles; chocolate; sweets, jelly babies, etc; crisps, potato snacks.</p>	<p>Seldom/less than once a week 1-3 times a week 4-6 times a week Once in 24 hrs Twice in 24 hrs 3 times in 24 hrs 4 or more times in 24 hrs</p>
<p>42. How many slices of bread/crispbread does your child eat every day?</p> <p>How many of these include fibre-rich bread/crispbread (e.g., rye bread, Fedons bread)</p>		<p>Blank box to fill in number of slices.</p> <p>Blank box to fill in number of fibre-rich bread.</p>
<p>43. How often does your child eat the following at present?</p>	<p>Meat, rissoles, sausages, etc.; oily fish (salmon, herring, etc.); white fish (cod, coley, etc.); fish pudding, fish cakes, fish balls, etc.; soup; pancakes; potatoes; pasta, spaghetti, noodles; pizza; rice; cooked vegetables; raw vegetables, salad.</p>	<p>Once a month or less often 2-3 times a month Once a week Twice a week 3 times a week 4 times a week 5 or more times a week</p>

The score at 3 years was composed of 6 subscales, as the dietary assessment at this age was less extensive compared to the other questionnaires. As there was no question addressing water intake in this questionnaire, there was no possibility to construct subscale 6 as a relative measure, as was done in the other scores. The subscale was therefore adjusted to score respondents who reported an intake of sweet beverages below the median. Whole grain bread consumption was unfortunately estimated by a poorly constructed item, which generated a lot of missing data (12.7%). This variable and subscale was therefore excluded in this score. There was no differentiation of various types of fruits and vegetables (subscale 1 and 2) in this questionnaire, apart from distinguishing between raw and boiled vegetables. The subscales of the score at 3 years are presented as following:

1) Fruits: Eating fruits more than 7 times a week
(fruit type not specified).

2) Vegetables: eating vegetables more than 5 times a week
(raw vegetables, salad + boiled vegetables).

3) Potatoes: potatoes relative to rice and pasta
(Potatoes / Rice + Pasta, spaghetti, noodles).

4) Fish: eating fish more than 2.12 times a week
(Fat fish (salmon, herring) + Lean fish (cod, pollock) + Fish spread (mackerel, caviar spread) *0.25).

5) Milk: milk relative to fruit juice
(Whole milk + Low fat milk and skimmed milk / Juice).

6) Sweetened beverages: drinking sweetened beverages less than 2.5 times a week
(Squash, nectar, soda (sugared) + Squash, soda, sweet drinks (artificially sweetened)).

After summarizing the subscales, the NND score at 3 years ranged from 0 to 6 points. The categorization applied to the scores yielded three adherence groups: low (0-1 points), medium (2-3 points) and high (4-6 points).

2.3.5 NND score at 7 years

At 7 years (Q7y), the questionnaire food list comprised 47 food and drink items (Table 6), of which 19 were used in the construction of the score.

Table 6. Available food and drink items and response options in Q7y (7 years)

Question (as numbered in Q7y)	Food list items	Response type/ response options
30. How many slices of bread/crispbread does your child usually eat per day?	White bread, medium refined grain bread, whole grain, crispbread.	Blank boxes to fill in number of slices
31. How often does your child usually eat the following?	Carrot; cabbage, cauliflower, broccoli; lettuce; potatoes; other vegetables; oranges, clementines; apple, pear, grapes; banana; other fresh fruit or berries; ecologically grown fruits/vegetables; sliced meat, liver pate, bologna or similar; fish spread, including roe; cheese (white/brown), cheese spread; jam; chocolate and nut spread; peanut butter; cornflakes, Honeycorn, Frosties or similar; muesli/oatmeal; yoghurt (all types); egg; rice, spaghetti, pasta; fatty fish (salmon, mackerel, herring); other fish (cod, pollack or similar); fish balls/fish pudding or similar; shellfish; pure meat (chops, steak etc.); pizza; processed meats (beef-patties, sausages, meat balls); vegetarian dishes; pancakes; sweet buns/waffles/cakes; ice cream and milk based desserts; chocolate, sweets/candy; peanuts; other nuts; potato crisps or similar.	Never/seldom 1-3 times per month 1-2 times per week 3-4 times per week 5-6 times per week 1 time or more per day
39. How often does your child usually drink the following?	Whole fat milk (sweet/sour); low fat- and skimmed milk; chocolate milk; Biola/cultured milk; orange juice, other juice; apple nectar/other nectar; diluting squash with added sugar; artificially sweetened diluting squash; sodas with sugar (coke or similar); diet sodas; water.	Never/seldom 1-3 glass per month 1-3 glass per week 4-6 glass per week 1-3 glass per day 4 glass or more per day

As seen from Table 6, the dietary assessment at 7 years was the most extensive of all included child questionnaires and also provided information on a variety of fruits and vegetables. The subscales of this score were therefore constructed most similarly to the maternal NND score. The response option for bread consumption

yielded a certain amount of missing data, and many options were considered to utilise the data in the best possible way. Thus, respondents who reported no consumption of white/semi-white bread were scored (subscale 5), with the intention of potentially capturing a healthy behaviour of using whole-grain foods. The subscale assessing local fruits (1) included a variable which collectively reported the consumption of apple, pears and grapes altogether. We chose to still include this subscale, as it was the only item potentially identifying Nordic fruits.

This resulted in a NND score at 7 years comprising of nine subscales, presented as following:

- 1) Local fruits:** eating apple, pear and grapes more than 3.5 times a week.
- 2) Root vegetables:** eating carrots more than 1.5 times a week.
- 3) Cabbages:** eating kale, cauliflower and broccoli more than 1.5 times a week.
- 4) Potatoes:** potatoes relative to rice and pasta
(Potatoes / Rice + Spaghetti, rice and pasta).
- 5) Whole grain bread:** reporting no consumption of white bread
(yes/no).
- 6) Oatmeal:** eating muesli or oatmeal more than 1.5 times a week.
- 7) Fish:** eating fish more than 2 times a week
(Fat fish (salmon, mackerel, herring) + Other fish (cod, pollock) + Fish spread (incl. caviar) *0.25).
- 8) Milk:** milk relative to fruit juice
(Whole milk + Low fat milk and skimmed milk / Juice).
- 9) Water:** water relative to sweetened beverages
(Water/ Squash with sugar + Squash, artificially sweetened + Soda with sugar + Soda, artificially sweetened + Nectar).

After summarizing the subscales, the NND score at 7 years had a possible scoring range from 0-9 points. The categorization applied to the scores yielded three adherence groups: low (0-3 points), medium (4-5 points) and high (6-9 points).

2.4 Outcome variables

2.4.1 Child overweight

In paper II, we investigated the child diet scores and their association to body mass index (BMI, kg/m²) at 8 years. Child overweight was computed from parent-reported child height and weight in the MoBa questionnaire filled in at 8 years (Q8y). We chose to only include observations within +/- 4 standard deviations of height, weight and BMI. The normal distribution of weight and BMI were skewed and were therefore logarithmically transformed before computing Z-scores. The BMI-cut offs used to assess overweight in the children were age and gender specific as recommended by Cole et al. (129). To include most children in the range of +/- 8 years, we chose inclusion from 7 years (84 months) to 9.5 years (114 months). The cut-off values by Cole (129) that were employed to assess overweight are presented in *Table 7*:

Table 7: Age and gender specific cut-offs for child overweight (129)

Age	Age and gender specific BMI cut-offs for overweight	
	Girls	Boys
7	17.75	17.92
7.5	18.03	18.16
8	18.35	18.44
8.5	18.69	18.76
9	19.07	19.10

2.4.2 *Child development*

Child development was the outcome of interest in paper III. There are four main domains by which child development is conceptualised (130):

- i) Motor development: covers both gross motor (walking, sitting, movement) and fine motor abilities (using the hands in different ways to eat, draw, play etc.). These milestones are usually attained in a clear and orderly sequence.
- ii) Language performance: encompassing articulation and language skills.
- iii) Adaptive/cognitive development: covers problem solving through intuition, perception and verbal/non-verbal reasoning, and applying learned information.
- iv) Personal/social development: covers responsiveness and interactions through forming and maintaining relationships. Self-help skills of daily life, such as feeding and dressing, are encompassed in personal development.

Different tools and instruments may be used to assess *developmental delay*, which describes the child reaching developmental milestones slower than what is estimated for the given age (130). In our study, this was measured by short versions of the Ages and Stages Questionnaire (ASQ) and the Child Development Inventory (CDI), which was partly included in many of the questionnaires in MoBa. The ASQ is a parent-completed developmental screening tool which covers several aspects of child development covering an age-range of 4 to 60 months (5 years) (131). The original questionnaire-series comprises of nineteen age-specific questionnaires which each consist of five six-item scales where communication, gross motor, fine motor, problem-solving and personal-social skills are assessed. The possible response options are given as ‘yes (most of the time)’, ‘sometimes’ and ‘not yet/rarely’ which are scored as 10, 5 and 0 points respectively. Thus, a low sum score in the ASQ reflects developmental delay and/or disturbances. The ASQ has been validated for use in a Norwegian population (132).

In MoBa, there was only a selection of items from the original ASQ that were employed and not all items were selected from age appropriate ASQ-questionnaires. In each MoBa-questionnaire, one or two items from the preceding and subsequent ASQ-form were included, which means that the 6-months questionnaire (Q4) also comprises of ASQ-items from 4 and 10 months.

The rationale for this has been described by MoBa as to achieve a greater variation in the answers and to account for that the child could be older or younger than the appropriate questionnaire at the time of response. Information on motor and language development were available from ASQ at 6 months (Q4), 18 months (Q5) and 3 years (Q6). At 5 years, ASQ only covered language development. Therefore, the CDI was applied at 5 years to cover motor skills.

2.5 Other variables included in analyses

2.5.1 Paper I

In addition to presenting the construction and rationale of the child NND scores in paper I, we also described their relation to parental educational attainment, maternal age at delivery and child gender according to grouping/ranking within the respective child scores. Information on maternal and paternal educational attainment was measured by highest completed educational level and the categories were collapsed into a variable with three categories equating to ≤ 12 years, 13-16 years, and ≥ 17 years of education. This data was obtained from the MoBa baseline questionnaire (Q1) and information on maternal age and child gender was derived from the MBRN.

2.5.2 Paper II

Many determinants of overweight and obesity are also associated with diet and dietary behavior and may therefore confound associations between diet and weight status if not controlled for (133). Based on previous studies, we included child gender, maternal educational attainment, maternal smoking during pregnancy, maternal age at delivery (years), parity, marital status, maternal prepregnant overweight computed from self-reported height and weight ($\text{BMI} \geq 25 \text{ kg/m}^2$) and the maternal NND score during pregnancy. Child birth weight was used in a continuous form. Data on child gender, child birth weight, maternal age, parity and marital status was derived from the MBRN, and the remaining information was obtained from Q1.

2.5.3 Paper III

The covariates included in the analyses for paper III were decided upon a priori based on previous studies identifying potential confounders in the relationship between diet and child development (134-136). We thus included parity, maternal age at delivery, maternal education, pre-pregnancy BMI, smoking during pregnancy and a five-item short version of Hopkins Symptoms Checklist-25 (SCL-25), which measures symptoms of depression and anxiety. The short version (SCL-5) was used in MoBa and correlates well ($r=0.92$) with the original instrument (137). All data was collected during pregnancy in Q1.

The variables included parity (nulliparous vs multiparous), maternal age in 8 categories (≤ 17 y, 18-19y, 20-24y, 25-29y, 30-34y, 35-39y, 40-44y, ≥ 45 y), maternal education (≤ 12 y, 13-16y, ≥ 17 y), maternal pre-pregnancy BMI (< 18.5 , 18.5-24.9, 25.0-29.9, ≥ 30.0 kg/m²). Smoking prior to pregnancy (no, occasional, daily), smoking during pregnancy (no smoking, smoking), exposure to passive smoking during pregnancy (yes vs. no). In addition, maternal alcohol consumption during pregnancy (yes vs. no), total energy intake (kcal, assessed concomitantly with acrylamide), were tested as potential confounders.

2.6 Statistical analyses

All statistical analyses and handling of the data were performed using the IBM SPSS Statistics versions 24 and 25 and STATA/SE 16.1. A two-sided p-value of ≤ 0.05 was considered statistically significant. In line with novel understanding of the p-value, the emphasis and phrasing in this thesis will be on discussing the presence or absence of evidence rather than statistical significance.

2.7.1 Paper I

The statistical approach for the construction of the subscales and the scores have been described in detail under 2.3. The characteristics were presented using cross-tabulation according to low, medium, and high adherence groups within each score and the proportions or mean of parental and child characteristics presented accordingly. Interquartile ranges (IQR) were reported for each child score.

2.7.2 Paper II

We described how a number of selected variables were associated with the level of adherence to the NND score at 7 years with proportions (%) for categorical variables and as means with standard deviations (SD) for continuous variables. Differences in means and proportions across the low, medium and high categories were tested using Pearson's chi-squared test and one-way analysis of variance (ANOVA), respectively. Next, we estimated the odds of being overweight at 8 years, according to maternal NND-scoring during pregnancy, and child scoring at 6 and 18 months and 3 and 7 years by performing binary logistic regression analyses with each of the diet scores as exposure. This was done for both the continuous and the categorical scores. For the former, we assessed the effect of a one-point increase in diet score at each age on odds of overweight at 8 years. For the latter, low NND adherence was used as the reference group, and odds ratios (OR) for overweight for the medium and high adherence group were assessed with 95% confidence intervals (CI).

Three models (crude, model A and model B) were put forth to estimate crude and adjusted ORs. In model A, we included covariates that could affect the potential associations (child sex, maternal education, maternal age, parity, smoking during pregnancy, marital status, maternal prepregnant overweight and child birth

weight. Model B additionally included the maternal NND score to remove a potential independent effect of maternal diet during pregnancy. Further, we also investigated maternal prepregnant BMI and child sex for interaction between the diet scores and the odds of overweight, based on previous knowledge. Finally, a sensitivity analysis was performed excluding all preterm births (birth prior to 37 completed weeks), to observe the potential influence on the findings.

2.7.3 Paper III

To explore the potential associations between the maternal and age-specific NND scores (6 months, 18 months and 3 years) and measures of child development (6 months, 18 months, 3 years and 5 years), linear and logistic regression analyses with robust standard errors were employed. Both crude and adjusted (covariates described under 2.5.3) estimates were computed. With the linear regression analyses, we examined the association between the continuous maternal and child NND-scores with the total scores on the short forms of ASQ (6 months, 18 months and 3 years) and CDI at 5 years. Both the exposure and outcome variables were standardized by computing the percentage of maximum scoring in this analysis. This was done to yield more comparable results across the given timepoints.

For the logistic regression models, the categorized diet scores (low, medium high) were applied, as defined for each score under chapter 2.3. High adherence category was chosen as reference group (valued 0). Further, two standard deviations below the mean score ($<2SD$) were chosen as a cut-off for dichotomization of the developmental scores. Values at $2SD$ or lower were defined as developmental delay and was assigned the value 1 and the rest were given the value 0. To account for siblings participating in the cohort, all confidence intervals were imputed using robust standard errors.

Both the linear and logistic models explored the data cross-sectionally and prospectively. Despite having longitudinal data, the exposure and outcome measurements were constructed too differently to be able to compare equally across time-points. Therefore, potential trends and patterns were examined rather than applying true repeated measures analyses in the results.

2.7 Ethical considerations

The establishment of MoBa and initial data collection was based on a license from the Norwegian Data Protection Agency and approval from The Regional Committees for Medical and Health Research Ethics (REK). The MoBa cohort is now based on regulations related to the Norwegian Health Registry Act. Participants of the MoBa cohort study signed a written informed consent to participate (*Appendix B*). The current project was approved by REK (2019/339) and had ethical approval from the Norwegian Center for Research Data (reference number: 954873) (*Appendix M*). The data received from MoBa has been stored behind password-encrypted computers and has only been applied as designated.

3 Results

A brief summary of the main results from each paper is presented here.

Paper I:

Development and description of New Nordic Diet scores across infancy and childhood in the Norwegian Mother, Father and Child Cohort Study (MoBa).

We used food frequency data from n=89,715 at child age 6 months, n=76,432 at 18 months, n=58,884 at 3 years, and n=35,978 at 7 years to develop age-specific NND scores in accordance with the previously developed maternal NND score within the MoBa. The score at 6 months comprised of six subscales (median score 3, IQR 2–4) and addressed breastfeeding and breastfeeding duration, and the consumption of homemade food relative to commercially prepared baby foods. The score at 18 months (median score 4, IQR 3–5) and 7 years (median score 4, IQR 3–6) comprised of nine subscales with a possible scoring of 0-9 points. The score at 3 years comprised of six subscales with a possible scoring of 0-6 points (median score 3, IQR 2-4).

Further, we investigated potential patterning by parental characteristics across low, medium and high NND scoring at each time point assessment. High NND score was associated with higher parental educational attainment pre-pregnancy, and at all time points of assessment, compared to low and medium scoring. A marginally higher maternal age at delivery was also observed among the high NND adherers, except for at 7 years. Additionally, there was a slightly higher proportion of girls at 6 months and 3 years.

Paper II:

Childhood adherence to a potentially healthy and sustainable Nordic diet and later overweight: The Norwegian Mother, Father and Child Cohort Study (MoBa).

In a sample of 14 989 mother and child pairs, we described child and maternal characteristics for the whole sample and according to low (29.2%), medium (43.4%) and high (27.4%) NND score at 7 years of age.

The children with high NND score at 7 years had higher mean NND score at all previous time points compared to the lower NND categories and were also taller than the children in the lower NND-adherence categories. We did not observe any differences between the categories regarding sex and birth weight of the child, nor weight, BMI or proportion with overweight at 8 years.

Logistic regression with the continuous score as exposure showed evidence for an association between the NND-score at 6 months and odds of being overweight at 8 years in the crude model (OR= 0.95, 95% CI [0.91, 0.98], $p<0.003$), however, the association was attenuated when including the covariates into the model (OR: 0.99, 95% CI [0.96, 1.03], $p=0.773$).

When investigating the categorical age-specific NND-scores and odds of overweight at 8 years comparing medium and high adherence with low adherers as a reference group, we found that children with high NND adherence at 6 months had lower odds of overweight at 8 years in the crude model (OR: 0.81, 95% CI [0.70, 0.94], $p=0.005$), but not in the adjusted analyses (OR: 0.97, 95% CI [0.83, 1.13], $p=0.724$). No associations with overweight were observed with the NND scores at 18 months, 3 years and 7 years.

Paper III:

Adherence to a healthy and potentially sustainable Nordic diet is associated with child development in the Norwegian Mother, Father and Child Cohort Study (MoBa)

In a sample of 83,800 mother and child pairs, maternal pregnancy and child (6 and 18 months and 3 years) NND-scores were calculated and associations with measures of child development were estimated with linear and logistic regression. Child communication and motor developmental skills were reported at 6 months, 18 months, 3 and 5 years.

We found positive associations between the NND-scores (maternal and child) and higher scoring on child development using developmental scores as percentages of total scores (adjusted $\hat{\beta}$ s [95% CI] ranging from 0.007 [0.004, 0.009] to 0.045 [0.040, 0.050]). Further, we found that low and medium adherence to the NND were associated with higher odds of later emerging developmental skills compared to high NND adherence at most timepoints assessed in adjusted analyses (ORs [95% CI] ranging from significant values 1.15 [1.03, 1.29] to 1.79 [1.55, 2.06]).

4 Discussion

The first part of this chapter discusses the methodological challenges of the study in order to first present the limitations under which the results of the study are yielded. In the second part, the associations between the child diet scores and aspects of child development will be discussed. In the last part, the public health relevance and some final considerations are argued for.

4.1 Methodological considerations

The term validity can be described as by Hawkins et al. ”...to the extent to which data-derived inferences are appropriate, meaningful, and useful for intended decision making.” (138). There are several aspects of assessing the validity of a study, which among others are; *concept validity*, *internal validity*, *external validity* and *statistical validity* (139). The methodological considerations and generalizability of this thesis will be argued for and discussed under this framework.

4.1.1 Concept validity

Concept validity can be described as to which level the data reflect the variables of interest that cannot be asserted directly (140). Other authors also refer to this term as construct validity and it concerns the operationalization of a certain concept, thus, the constructs and measures used to quantify and capture an intended characteristic (141). Although the term is more widely used in the field of social medicine, psychology and psychiatry (140), it will be applied here to discuss the operationalization of the NND and other measures used in this study.

The diet scores

When developing the four child diet scores, we aimed to have them resemble the maternal NND-score as far as possible. However, the dietary assessment in the child questionnaires was limited and not as comprehensive as in the maternal FFQ in Q1, which is a major limitation of the child scores and consequently a threat to their concept validity. There are three main concerns that can be pointed to: 1) to what extent do the scores resemble the maternal score; 2) to what extent do the scores operationalize a healthy diet in children and 3) to what extent can the scores operationalize a potentially sustainable diet with Nordic characteristics?

Regarding the first concern, the rather disparate score at 6 months should be understood more as an adaptation to, rather than a deviation from the aim of resembling the maternal score. This is a natural consequence of encompassing the importance of breastfeeding into the score and also including the aspect of serving homemade meals. Although breastfeeding can be considered as a healthy and sustainable choice (128), there is limited research on the sustainability aspects of serving homemade baby food vs commercially prepared meals. Besides, there was an attempt to utilize the information from the available data at this time point efficiently, despite not being in line with the maternal score.

The diet scores at 18 months, 3 years and 7 years correspond with the maternal score to a higher degree, although with certain shortfalls and limitations. For example, at 18 months and 3 years, no distinction could be made on types of fruits and vegetables, as these items were aggregated into one generic option and left no possibility to capture specific Nordic fruits or root vegetables and cabbages. The diet score at 7 years is the one most comparable to the maternal score, where certain Nordic fruits and vegetables such as apples, pear and grapes, carrot, cabbage, cauliflower and broccoli were part of the score. Ideally, grapes would be excluded as part of a Nordic diet, however, it was part of the item assessing consumption of apples and pears and was therefore included. None of the child scores could unfortunately encompass *meal frequency* as part of the score, as this information was not available in any of the child dietary assessments. Although not fully comparable to meal frequency, the number of shared family meals have been related to nutritional health in children, with higher likelihood of being normal-weight and having a healthier dietary and eating pattern (142). Also, assessment of *whole grain bread* was only available in the questionnaire at 7 years, albeit as a poorly constructed item. As we chose to only score respondents who reported no consumption of white or semi-white bread, it could also mean that these respondents did not consume bread at all, as their response on intake of whole grain bread was not accounted for.

Furthermore, due to lack of data on *wild fish, game and berries* (subscale 8, maternal score), the corresponding subscales at 18 months, 3 and 7 years only captured overall fish intake, thus not in line with the maternal score, but still capturing a healthy and important aspect of the traditional Nordic diet (22). Three subscales were consistently common between the maternal and the child scores,

excluding the 6-month score: potatoes relative to rice and pasta, the consumption of unsweetened milk relative to fruit juice and consuming water more than sweetened beverages (differently constructed at 3 years due to no data on water intake).

Overall, the current developed child diet scores could only resemble the previously developed maternal NND score to a certain degree, because of the limited dietary data in the following MoBa-questionnaires and the necessary adjustments made accordingly. The maternal score was also limited to the dietary data at hand. Consequently, it is questionable if the scores, and in particular the child scores, can capture the concept of a NND as per definition. The following discussion on whether the scores may capture a healthy and potentially sustainable diet is discussed in a later chapter (4.2.1).

Child overweight

The outcome measure in Paper II was child overweight assessed by age- and sex-specific BMI cut-offs for children (129). As discussed in the paper, BMI may not be a precise enough tool to identify overweight and obesity, particularly in children. Okubo et al. demonstrated this well in their study where they were able to identify strong independent associations between diet quality in early childhood with adiposity at 6 years, measured by dual-energy X-ray absorptiometry (DXA), but not with BMI (143). Height and weight were assessed at home visits using calibrated stadiometers and digital scales, which indicates that the limitation of using BMI is not solely an issue related to self- or parent-reported data. Not only may weight be more affected by height during growth and development, but BMI is also more an indicator of excess weight instead of body fatness (144, 145). This further leads to the argument that the term “overweight” is characterized by carrying excess body weight, which also includes fat free mass, such as lean body mass, bones and water (146). Obesity, on the other hand, is related to having excess body fat.

Thus, the assessment of overweight in our study, can only translate into children carrying excess body weight for their given sex, age and height, but not necessarily excess body fat and a following higher risk of morbidity and mortality.

Child developmental measures

The original instruments of ASQ and CDI are validated parent-reported instruments for assessing developmental delay in children, for use by pediatricians and other health-care personnel (131, 132, 147). The abbreviated forms used in the MoBa have not been validated in the same manner, although they have been successfully applied in several MoBa studies (148-150).

It should be emphasized that the applied cut-off of scoring 2SD below the mean is not a validated cut-off to assess *clinically* delayed development in the MoBa. However, it is a commonly used approach which allows for a certain differentiation within the sample by capturing the children scoring in the extreme end of the distribution. We expect that these children would be more likely to have developmental delay as compared to their peers scoring within the normal range of the distribution.

The given cut-off categorized 3.5% (child age 18 months) to 5.2% (child age 6 months) of the children into the developmental delay category in our study (Paper III). In another Norwegian study, a longitudinal sample of n=1555 infants and their parents were recruited through “health-care clinics” and completed the validated Norwegian version of the ASQ at 4, 6 and 12 months to estimate the prevalence of suspected developmental delay in infants (151). Here, two different cut-offs were applied, namely by US standards (2SD or more below the mean) (131) and Norwegian standards (2nd percentile) (152). At 6 months, 5.7% scored at or below the Norwegian cut-off in at least one developmental domain, whereas the corresponding US cut-off ($<2SD$) identified 10.3% infants. They also report that the Norwegian ASQ normative sample had a prevalence rate of 11.8% at 6 months; more than double of what was found in our study (5.2%) and by Norwegian cut-offs in Valla’s study (5.7%) (151, 152). One MoBa study used 1 SD below the mean as cut-off to estimate slow language development in 2-year olds, based on the data and previous knowledge that 13% to 19% of children at this age have delayed language development (153).

Hence, the arbitrary cut-offs generally applied in this field, along with the limited selection of items from the original instruments in MoBa, makes it challenging to compare results across studies and to truly understand the subgroup we are

identifying within the sample. The normal distribution of the developmental scores was highly left skewed at all measured timepoints. As the ASQ instrument is developed as a screening tool, this distribution would perhaps be expected. Still, it can also indicate that the children in the MoBa-sample are presumably healthy and mostly follow a normal development compared to the general population, which is also corroborated by the low prevalence findings with -2SD as cut-off, compared to 11.8% in the Norwegian ASQ normative sample (152).

Lastly, it should be noticed that a left-skewed distribution would generate a lower mean compared to the median. In hindsight, one could argue whether using the median and applying percentiles/quartiles to derive the cut-offs would be a more correct handling of the data. Yet, as the approach of using SDs as cut-off has been widely applied in the MoBa data, it allows for more meaningful comparisons, for example in future summarizing studies (154).

4.1.2 Internal validity

Studies that involve human beings and explore phenomena in natural settings will always be flawed to some degree. Identifying the limitations of our data is crucial to understand the true impact and relevance of our findings.

Selection bias

Prospective studies such as the MoBa are especially prone to selection bias, amplified by attrition with time (121). It has been demonstrated that young women (<25 years), women living alone, those who were multiparous (>2 previous births), or had experienced stillbirths were strongly underrepresented in MoBa, whereas women using multivitamin and folate supplements and non-smokers were overrepresented (121). Still, when comparing the MoBa population to the general population of birth-giving women in the MBRN, there was only evidence for bias in prevalence and exposure estimates, but not in association and risk estimates for exposure outcomes (121). This corresponds with our prevalence findings in Paper III, as discussed in the preceding section. However, a recent follow-up study of the MoBa-population showed that the maternal participants who continued to respond through 8 years differed from the dropouts by being older, more educated, less likely to smoke and having a lower BMI, and

thereby contributing to a non-random loss to follow-up (155). This may result in a more homogenous study population over time, affecting the external validity.

Information bias

Misclassification through information bias can ultimately lead to false estimations of risk (156). The data collection in MoBa is mainly based on self-reported or parent-reported data from postal questionnaires. Reporting data on sensitive topics such as pregnancy and child diet, height and weight, and developmental milestones of their child, may be prone to social desirability bias. This is typically related to overestimation of consumption of healthy foods, energy intake and height and an underestimation of unhealthy foods and weight (157-160). The maternal FFQ for pregnancy diet has been validated against 4-day weighed food diaries, motion monitoring of energy expenditure, and urine and blood samples, and is considered to provide valid estimates in ranking the participants based on low and high intakes of energy, nutrients and foods (123). The dietary data were also adjusted for total energy intake to avoid confounding of the diet score-outcome associations by total food intake (or body size or physical activity level), and to allow for conceptualisation of dietary composition instead of absolute intake of nutrients (161). In comparison, no such validation has been conducted with the child dietary assessment used in this study, which is a major limitation. Validation studies show that misreporting of child diet is common with most assessment methods, with overreporting as the main concern with FFQs (124, 162). A recent systematic review and meta-analysis showed that the FFQ may provide a fair relative validity to assess dietary intake in children and adolescents, but the validity is weak for assessment of energy intake, macronutrients, some micronutrients and also for some food items, such as milk, fruits and vegetables (163). Moreover, children with more body fat and their parents are more likely to underreport food consumption (164). There is also a possibility that the parents are not correctly reporting all foods and drinks that are consumed in kindergartens or for example with other caretakers. It has been suggested that parents are more reliable reporters of the children's food intake at home, as opposed to reporting foods that are eaten outside the home environment (165).

Altogether, these issues could have contributed to misclassification and a potential attenuation of an association in paper II. On the other hand, despite the flaws of using the FFQ, the intention of the current study was to conceptualize food quality, and not food quantity, and to rank the women and children according to low or high frequency of intake of specific foods - a purpose which the FFQ and the child dietary assessment may be considered useful for.

Lastly, data collection at age 8 years was not completed in version 8 of the datafile, which also may be a threat to the internal validity in paper II. It is unclear whether a complete datafile would have changed the estimates in either direction, but the questionnaires have been continuously distributed as the children have reached 8 years of age, meaning that the applied sample should not deviate substantially from the sample in a complete version file, apart from the sample size.

4.1.3 External validity

Given the issues with selection bias and attrition as discussed above, the external validity of the findings from the current study may be compromised. Not only does the MoBa population differ from the general population in terms of educational level and prior health behaviours, but the participants were also mainly of Norwegian or European descent (121). In 2022, 15.1% of the Norwegian population had an immigrant background and 8.3% of these had an origin from non-Western countries (166) and these are unfortunately hardly represented in MoBa. From a public health perspective, the misrepresentation disadvantages a large part of the population who do not only have a higher prevalence and risk of a number of diseases, but who also may be in a more vulnerable position in terms of socio-economic position and being able to find and utilize information and health advice (167). It is likely that both prevalence and risk estimates studied in the current thesis would be higher in immigrant subgroups and in samples with lower socio-economic position, which emphasizes the importance of having a representative sample or replicating the findings in subgroups at greater risk.

4.1.4 Statistical validity

In paper II, maternal prepregnant BMI was calculated from self-reported weight and height and used as a covariate dichotomized into BMI < 25 kg/m² vs. BMI ≥ 25 kg/m². Several studies show that categorization of a confounder variable may inflate Type-1 error (mistakenly rejection of a true null hypothesis; a false positive) (168, 169). Although no evidence for an association between low NND adherence and later child overweight was found in the paper, maternal BMI as a covariate should preferably have been entered as a continuous variable to avoid a potential inflation of a Type-1 error, as was done in Paper III.

Furthermore, categorization of predictor and outcome variables is highly debated and generally discouraged, as it may reduce power due to misclassification and thus inflate Type-II errors (false negative) (170, 171). Still, the approach of categorizing data is common in the field of nutritional epidemiology (107), and the advantage of categorizing diet adherence into low, medium and high in our study allows for meaningful risk comparisons and probably quantifies risk estimates that are more easily conveyed to the general public. To take these issues into account, we first examined the diet scores as continuous variables as the primary analysis and then further examined the categorized scores with the respective outcomes of interest. However, there is still a possibility for misclassification due to the arbitrary and cohort-specific medians applied in both the subscales and in the categorization of each diet score.

Non-response by leaving some items blank is a common issue in FFQs, which is often dealt with by using different imputation methods (172). In the current study, we examined the missing pattern when constructing the child diet scores and made an assumption that blank items reflected a null intake, which were further zero-imputed. Respondents who had missing on all items that were included in a respective subscale, were defined to be true missing. Alternative methods such as multiple imputation of missing items have been encouraged for use in nutritional epidemiology, as it can reduce bias by including variables into the model that are predictive of non-response (172). However, all imputation models are still subject to introducing bias when data are missing not at random (MNAR); that is, when the likelihood of non-response depends on the missing values themselves (172).

Presumably, exploring and understanding the missingness is important before applying any corrective measures, regardless of the chosen method.

Altogether, it can be assumed that the applied statistical approaches within this thesis have provided estimates that could likely be replicated within the same population. However, the possibility of non-measured and residual confounding and bias cannot be ruled out, which calls for the importance of comparing our results with similar findings from other study samples. This is discussed in the following chapter.

4.2 Discussion of the findings

Our findings contribute to the field by acknowledging that a diet partly based on the principles of the NND in early life and during childhood, can optimize child cognitive and motor development as well as having potentially sustainable aspects. Given the knowledge that dietary patterns tend to track within life phases, this finding should be considered relevant for long-term sustainable dietary behavior. Still, the applied scores were developed in a crude way, and there was no indication of an association with weight status at child age 8 years. In the following sections, the content of the scores and the associated findings and null-findings are elaborated and discussed in detail, followed by a chapter where the relevance of the results is argued for in a public health perspective, which is finally succeeded with ending remarks for future considerations.

4.2.1 Healthy and potentially sustainable Nordic child diet scores?

Despite that the developed child diet scores could not fully resemble the maternal score, and in hindsight, perhaps should be refrained from being labelled as NND child scores, there are indications that they may reflect a healthy and potentially sustainable dietary pattern appropriate to Nordic countries, to some degree. The importance of the included elements of the child scores and to which extent they in fact may identify characteristics of a healthy and potentially sustainable child diet is discussed below.

Early taste experiences as a part of a sustainable diet

A high NND-score during pregnancy would likely provide a diet that is nutritionally adequate for optimal fetal development. In addition, such a diet could also contribute to a more varied taste experience for the fetus through the amniotic fluid. Programming of acceptance of bitter and specific tastes from prenatal life has been confirmed (58), which are tastes experienced in many of the vegetables that are typical for the NND. This argument is also valid for infants being breastfed, as breast milk will contain flavours from the mother's diet, adding to the early taste experiences (58). Consequently, acceptance of foods that are in line with a potentially sustainable Nordic diet can be programmed as early as in fetal life.

At 6 months of age, the score was dominated by consumption of homemade food over commercially prepared meals, given its health and sustainability potential (13). However, according to Maslin & Venter, it is unclear whether homemade infant food and porridges indeed are healthier than commercially prepared baby meals, based on the existing knowledge (173). For example, a German study showed that vegetable variety was low in both homemade and commercially prepared meals, with 26 different vegetables in homemade meals compared to 17 different vegetables in commercially prepared meals (174). A greater variety in vegetable intake at 12 months was even observed in the infants who consumed more commercially prepared meals, however, this was likely attributed to some vegetables such as tomato and carrot being used as food colouring/sweetening in many products, in addition to general mixing of vegetables (174). Despite a greater variety, the amount of each vegetable in the product may be insufficient to provide a proper taste experience and health benefits of the given vegetable. They further state that a varied diet reduces the risk of developing nutrient deficiencies or excessive consumption, and that many commercially prepared products are primarily based on a limited selection of vegetables, which typically can be sweet and more palatable for children, perhaps due to marketing purposes and increased likelihood of repurchase (175). As a result, bitter tastes associated with leafy green vegetables are less used, limiting the child's taste development for nutritious vegetables such as spinach, broccoli and brussels sprouts. This particular limitation of commercially prepared baby foods is demonstrated by the arguments of Wadhera et al. (176), who describe taste preferences and liking in children and adolescents presumably as key determinants of consuming vegetables (177, 178). As such, a diverse vegetable and taste exposure from infancy through the age of two years is particularly of benefit, before the onset of food neophobia. Between the age of 2-5 years, the child's reluctance towards new food and tastes is usually at its highest (179), and as healthy dietary patterns tend to track from infancy and early childhood through adolescence and adulthood (61, 62, 180), this window is particularly important to establish beneficial eating habits (176). In line with these arguments, consuming more homemade food over commercially prepared products at an early age may have several health benefits in the long-term, beyond the nutrient content of the food. This includes potentially facilitating the future diet towards healthy and sustainable trajectories (13).

Other food items included (or not included) in the scores

Regarding the health and sustainability aspects of certain included food and drink items, there are some concerns to address. There are certain main characteristics of the conventional Nordic diet, which differs from most European countries, such as lower intake of fruits and vegetables and a higher consumption of potatoes, fish, milk, and sugar-sweetened beverages (12, 181). Three of the child scores cover these Nordic key features with a positive scoring (potatoes, fish, milk), which are staple foods of the Nordic Diet (182). Yet, there are indications that women with higher adherence to a healthy Nordic diet also report a slightly higher consumption of meat, cakes and desserts (28) and processed meat and sweets (183) in FFQ-based studies. There is a possibility that this could also be likely for the children in the current study. In another MoBa-study, Jacka et al. identified an *unhealthy* dietary pattern (characterized by consumption of a variety of snacks and desserts, ice cream, soda, artificially sweetened beverages, pizza and bread with jam and honey) and a *healthy* pattern (characterized by consumption of fish and fish products, fruits, vegetables, egg, brown cheese, and bread with meat) at 18 months and 3 years (184). Their findings with mental health outcomes at 5 years implied that the two patterns were not simply the inverse of each other but may independently influence mechanisms related to adverse mental health outcomes. The two patterns were only weakly correlated, and the authors argue that a child can score high on a healthy diet, but at the same time eat many unhealthy and processed foods.

As such, not all aspects of a healthy diet were addressed in the maternal NND score and the child scores, for example a low consumption of meat, and ultra-processed and unhealthy food items, which could have been encompassed in the subscales with negative value scorings. With this, potential relationships between diet and disease that are more related to high consumption of unhealthy foods, rather than high consumption of healthy and beneficial foods could have been taken into consideration (118). Furthermore, fat quality was not featured in neither the maternal score nor in any of the child scores. In the Mediterranean diet and the adapted KIDMED-questionnaire for use in children, using olive oil at home is assigned a positive value (114). An adaptation to the NND would be to assess the use of rapeseed oil in the diet, however, this information was not available in the child questionnaires.

Cow's milk has traditionally been an important part of children's diet in the Nordic countries, providing high-quality protein, fat and essential micronutrients such as iodine, calcium, vitamin A, riboflavin and vitamin B12 (cobalamin) (22, 185). Milk products contribute to more than 60 percent of calcium and iodine intake in the Nordic population (22). Still, the way milk consumption is assessed in our scores could be a limitation, as the subscales assessing milk in the child scores include all types of milk. The official recommendations endorse low-fat dairy products from the age of two years onwards, if growth is satisfactory (185). Also, the subscale would likely positively score high-milk consumers, beyond the three daily portion recommendations. Moreover, Tognon et al. has questioned the aggregation of dairy product items in epidemiological studies, as fat from milk and cheese products seemed to affect total mortality differently in a follow-up sample of 70-year-old Swedes (186). Cheese consumption was not explored as part of the maternal NND-score, however, separately investigating the intake of non-fermented milk, fermented milk products, and cheese as a part of the Nordic diet throughout the life course could be of future interest as the fermentation process may serve for health benefits through the biochemically altered composition of the food (186, 187). The sustainability aspects of dairy products are subject to discussion as meat and dairy products contribute to almost half of the climate impact of diet in Nordic countries (22). Still, it should also be emphasized that milk production in the Nordic is more climate efficient compared to production in for example sub-Saharan Africa, as more milk can be produced with the same emission of GHGs from the cows (188). As for meat consumption, addressing meat intake would have covered a significant aspect of sustainability and can be considered as shortcomings of the scores.

From the median cut-point for fish intake in the subscales, we can observe a scoring that nearly corresponds with the official guidelines of consuming fish 2-3 times a week. However, the weekly frequency of consuming fish spread should probably have been downscaled to 1/6 (0.17) rather than 1/4 (0.25), as the national recommendations count six spread portions equal to one dinner portion (189). Fish and seafood are sources of high-quality protein, vitamin B12, iodine and selenium and fatty fish is additionally a major dietary source of EPA, DHA and vitamin D (22). Although there have been concerns about possible adverse effects from contaminants in fish, specifically regarding fetal neurodevelopment,

the benefits of the recommended fish intake seem to outweigh the potential negative effects (190).

The other subscales of the scores, such as consuming potatoes relative to rice and pasta, choosing water over sweetened beverages, eating oats, whole grains, peas and beans, and fruits and vegetables of both Nordic and possibly non-Nordic origin, can be considered as parts of a health-promoting diet, as rationalized in Paper I and in earlier work (28, 118, 127). Despite the fact that these food items theoretically can have an environmentally friendly potential, there is no possibility to establish which kind of fruit and vegetable intake the non-specified subscales at 18 months and 3 years comprises of. Moreover, the sustainability aspects of fruits and vegetables of typical Nordic identity, such as apples, pears and root vegetables, may be compromised if they are imported or not consumed in season.

Healthy diet as a data-driven concept

Furthermore, although the scores have been conceptualized a-priori to capture a healthy diet based on previous knowledge, it is a limitation that cohort-specific medians in the subscales are used to allocate the participants into their respective ranking, and also in determining the cut-offs into low, medium and high adherence groups. As such, having a *healthy* diet becomes a data-driven concept that varies from sample to sample. Nevertheless, it should be noted that the scores were never intended to capture the healthiest diet possible, but to rank and categorize the participants into groups that would be able to distinguish participants according to adherence to a healthier and potentially more sustainable dietary pattern with Nordic characteristics.

Future directions for sustainable child diets

Ideally, conceptualization of a sustainable diet in children would also include aspects of food waste and parental consumer behaviour, such as buying or harvesting foods that are locally produced and choosing fruits and vegetables that are in season. Also, for children attending kindergartens, the approach towards sustainability in food preparation and serving in the kindergarten would additionally be a contributing factor of the total diet, as many children spend much of the day and eat several meals there. Preparing and serving homemade food could be a contributor to more food waste at all ages, but particularly in

children who are weaning or when food neophobia sets in. Mazzochi et al. (13) have proposed four practical advice to parents to promote more sustainable behaviour in a transition towards more sustainable nutrition from an early age: “ (1) prefer foods produced close to home, especially fruits, vegetables and legumes; (2) choose non-processed foods and with a very small amount of added ingredients; (3) prefer non-packaged meals; (4) plan accurately the shopping of the foods necessary for weekly meals.” (p.8) (13). Hence, aspects of consciously making sustainable food-related choices should be included in future studies when assessing a sustainable diet.

4.2.2 Characteristics of the high adherers

In paper I, we described certain parental and child characteristics according to adherence group. The strong parental educational patterning observed across the diet scores was as expected and in line with previous studies (191, 192).

Moreover, the high adherers tended to have mothers who were older at the time of delivery. This amplifies the current knowledge that not only are those with higher education likely to have a higher health literacy, but could also be high-income holders who can afford a dietary pattern based on the NND (193). The NND has been demonstrated to be 24-25% more expensive compared to an average Danish diet (194).

Paper II further described that the children who were scored to be high adherers at 7 years, also had a higher mean diet score at all other time points. This could suggest a tracking of a healthy and potentially sustainable dietary pattern from fetal life through childhood, although this observation should be interpreted cautiously. These children were also taller, and their parents were less likely to be overweight or obese pre-pregnancy. These particular characteristics could partly explain why there was no evidence of an association between diet quality as expressed by the diet scores and child weight status, which is discussed in more detail below.

4.2.3 Child overweight and obesity – the complexity.

We found no evidence for an association between high adherence to the Nordic diet from fetal life throughout childhood and weight status at 8 years in adjusted analyses in Paper II. This could be due to methodological concerns as formerly discussed, or that the potential association is stronger driven by other factors that were not included or thoroughly explored in our study.

The literature is ambiguous regarding the relationship between child dietary patterns and overweight/obesity. Summarizing studies report difficulties in comparing the findings, as there is a great heterogeneity in the methods applied (78, 195). This includes different approaches in how the diet is recorded (FFQ, 24-hours recall, 3-days food diary), how dietary patterns are derived from the data (mostly *á posteriori* through principal component analysis, cluster analysis or factor analysis), at which age point in life diet and overweight/obesity is assessed, and also how overweight/obesity is defined (varying pre-defined BMI cut-offs and percentiles, BMI Z-score, and abdominal adiposity) (78, 195). Two systematic reviews have concluded that children who followed a dietary pattern characterized by “obesogenic” energy-dense foods, being high-fat and low in fibre, were more likely be obese, however, both these reviews were predominantly based on cross-sectional studies (78, 195). One prospective study investigated dietary patterns derived *a priori* and *a posteriori* at the age of 1 year with body composition at 6 years and found that healthy dietary patterns composed by a high intake of fruit, vegetables, vegetable oils, and grains, were not associated with fat mass, but with higher fat-free mass (196). Additionally, they identified a dietary pattern associated with a higher fat mass index, fat-free mass index and body fat percentage, defined by a high intake of foods such as refined grains, potatoes, soups and sauces, meat, fish, and sugared beverages (196). The findings of the mentioned study highlight the complexity of the diet/overweight relationship, and how dietary patterns may affect body composition differently, which may not be captured when applying BMI as a measure for overweight. Moreover, the latter described dietary pattern also consisted of a high intake of potatoes and fish – foods that are positively scored in our study, but which were associated with increased body fat in 6-year-old children.

There are several factors that may explain the null findings in paper II. First, as mentioned above and discussed in an earlier chapter, the usability of assessing overweight in children using BMI as a tool may be limited. Second, the timing of assessing overweight could be of relevance, however, data from the ALSPAC cohort has shown that there is a period of faster than-average weight gain from child age 7 years to 11 years, whereas the lowest BMI trajectory could be observed prior to age 7 years, with an incline after age 7 until before 9 years of age (197). The children in our study were in the range of 7 years to 9.5 years at the time of participation, indicating a potentially beneficial time frame to capture child overweight. Third, we identified the high NND adherers at 7 years to be taller at 8 years compared to the children in the low and medium adherence categories. There was no evidence for a difference in weight status across the categories, yet the highest mean height and weight were observed in the high adherence category. This could imply that a high diet score is related to a higher energy intake, and/or growth in children, but it could also be a result of parental education level, as height is related to educational attainment (198), and a strong educational gradient across the adherence categories was observed in Paper I. Fourth, the overall prevalence of overweight including obesity was low in our sample (14.2%) compared to in another Norwegian study (20.2%) (199), and the original MoBa participants were not representative of the general population (121). Fifth, there is a possibility that carrying excess body weight could promote a shift in dietary behavior from an early age. A Norwegian population-based longitudinal study found that the risk of being overweight at 8 years was predicted by birth weight and by BMI increase particularly from 2 years and onwards (199). Reverse causation could be involved if a child is overweight from an early age and parents provide a healthy diet for that reason. This would increase the likelihood of overweight children being categorized with high NND-score. Sixth, since the diet scores were not energy-adjusted and were derived from FFQs, there is no possibility to ascertain the portion sizes and the amount consumed of the different foods, only the frequency of consumption. Thus, being in the low adherence group could also reflect a diet generally low in energy-intake, simply from eating less frequently or having a food variety in the diet that is not fully captured by the scores, and not necessarily a poor diet quality. A high score may only capture our definition of a healthy diet in the current study and having more of these items in the diet. Low diet quality, per se, would likely be better captured by the consumption of fat quality, ultra-processed foods, snacks,

cakes, biscuits, chocolates as discussed earlier (chapter 4.2.1). In the relationship to overweight and obesity, it is possible that the assessment of these foods in children's diet are more predictive and more closely associated with the development of overweight/obesity. Additionally, if some of the subscales or specific components of a subscale, indeed are associated with overweight/obesity, but the others are not, a potential relationship could be diluted and obscured within the total score (107). However, the purpose of applying a dietary pattern approach is to investigate the diet as a whole in a way that embodies the complex interactions, synergies and antagonists between nutrients and foods (107).

Maternal prepregnant weight status was one of the factors in addition to educational attainment that explained the unadjusted inverse association observed with the score at 6 months and overweight at 8 years (Paper II). If epigenetic programming from fetal life is one of the main underlying drivers of the obesity epidemic, which could even have a transgenerational impact, the individual responsibility of maintaining a healthy weight status in an environment that promotes unhealthy choices becomes even more challenging. The sensitivity analysis showed that the preterm infants in the sample were affecting the association additionally. This could suggest that breastfeeding and breastfeeding duration and/or the timing of complementary feeding could be of more importance in preterm children. However, the literature is unclear of whether the timing of complementary feeding in preterm infants is related to later overweight and obesity (200, 201), whereas this association seems evident in full term infants if introducing solid foods before 4 months or later than 6-7 months of age, with a stronger association present in formula-fed children as compared to breastfed children (202). The score at 6 months likely captures important aspects of later overweight risk in infants, but the overall multifactorial complexity of overweight/obesity risk is possibly too comprehensive to understand by dietary assessment through the developed scores only. For example, novel understanding of the gut microbiome in relation to the Nordic diet and associated health outcomes could be of interest for future research (203, 204). Moreover, the composition of meals, how frequent and how they are eaten throughout the day, and at what times meals are consumed could also be relevant to include when examining Nordic dietary patterns in relation to overweight and obesity in children.

4.2.4 Healthy child development as a result of diet quality

The demonstrated evidence for a positive association between a healthy and potentially sustainable Nordic diet from fetal life and early childhood with child communication, motor and language development, points towards that aspects of diet quality indeed are encompassed by the child diet scores (*Paper III*). Our relatively consistent findings in a healthy Norwegian sample confirms that a healthy diet from fetal life into early childhood is important for optimal development, even in developed countries.

Regarding *prenatal diet*, our findings are in line with a systematic review that indicated that diet quality during pregnancy was positively associated with child neurodevelopment, albeit the effect size being small (87). This was also confirmed in a recent similar study in the MoBa cohort, where a prenatal diet quality score was developed and the association with language, motor and internalizing/externalizing behaviour at child age 18, 36 and 50 months was estimated (205). This study additionally adjusted for child diet quality as expressed by frequency of vegetable intake and found an inverse association between prenatal diet and developmental outcomes, but the strength of association was concluded to be low and uncertain.

In terms of *postnatal diet*, dietary patterns and diet quality in infancy and childhood have been associated with measures of later neurocognitive development in a number of studies (81, 90, 91, 206, 207). Smithers et al. found that a breastfeeding pattern at 6 months and a *home-prepared contemporary* dietary pattern characterized by herbs, legumes, nuts, raw fruits, vegetables, cheese and juices at 15 and 24 months were positively associated with IQ at 8 years in the ALSPAC study (90). On the other hand, a *discretionary* pattern consisting of unhealthy foods such as crisps, chocolates, sweets, sugared drinks, snacks and biscuits was negatively associated with IQ. Moreover, a *home-made traditional* pattern (meat, cooked vegetables, desserts) at 6 months was associated with better IQ scores at 8 years, but not at 15 and 24 months. Also, a pattern of ready-prepared baby foods at 6 and 15 months was associated with poorer IQ. The patterns identified in this study correspond reasonably with the scoring of the subscales in our NND-scores at 6 months and 18 months.

In the same ALSPAC-cohort, a processed dietary pattern at 3 years was inversely associated with IQ at 8.5 years of age, and higher scores on a healthy dietary pattern at 8.5 years was associated with higher IQ at the same time point, indicating both a longitudinal effect of diet, as well as an immediate impact on development (91). This finding was also evident in our study at most time points (Paper III).

Still, the findings described above were derived a posteriori with other methods than what was applied in our study, and less studies have examined the association with a priori-based dietary indices. A small, but recent study (n=54), suggested that high adherence to a Mediterranean diet score was associated with higher performance scores in preschool children, but not with other cognitive domains (208). The Baltic Sea Diet Score, the Healthy Eating Index, the DASH score and the Finnish Children Healthy Index have all shown positive associations with aspects of cognition and academic achievement in children (209). However, these associations were predominantly assessed cross-sectionally, or were limited to school-age years if assessed prospectively.

In one of the few comparable prospective studies, Mahmassani et al. demonstrated evidence for an association between better diet quality during pregnancy, as measured by a pregnancy-modified Mediterranean Diet Score in a US sample, and offspring visual spatial skills in early childhood (median age 3.2 y, range: 2.8-6.2 y), and intelligence and executive function mid-childhood (median 7.7 y, range 6.6-10.9 y) (210). Nonetheless, this study investigated diet during pregnancy only, where our study adds a valuable contribution to this field with its a priori approach and by assessing diet quality as an exposure all the way from fetal life into early childhood. Yet, there is a clear limitation in our study compared to others (210), as we did not control for maternal cognition or intelligence, which may be the strongest predictor of child cognitive performance while also being predictive of diet quality (81). Although maternal educational level was accounted for, there is a possibility for the demonstrated effect sizes to have been attenuated if this variable was included in adjusted models.

Moreover, it should be remarked that the risk of developmental delay with low vs high NND-adherence varied across the measure points and we did not observe an association with maternal diet and language development at 5 years and the diet score at 6 months and motor development at 5 years. Other factors than pregnancy and infant diet, as operationalized by our scores, could be of more importance for these developmental measures by this age. The higher odds for developmental delay with low NND adherence at 18 months and 3 years could indicate particularly vulnerable phases where diet quality and healthy eating habits have a significant impact for optimal development.

The NND has earlier been associated with improved school performance, reading comprehension and EPA + DHA status in a randomized controlled study in 8-year-old Danish children (32). Fish intake during pregnancy and childhood is likely one of the important contributors to the association between diet and child development, independent of breastfeeding, socio-economic factors and the adverse effects of mercury concentration (81). Moreover, high scoring on maternal and child NND-scores seem to embody a high-quality diet consisting of foods and nutrients that are important for both future and immediate development. A healthy and varied diet during pregnancy and beyond is also important for other reasons, among others that maternal nutrition interventions alone have not shown clear evidence to improve child cognitive function (211). Also, there are interesting findings regarding maternal prenatal gut microbiota composition being able to predict child behaviour in novel research (212).

Lastly, Borge et al. have earlier argued for and encouraged that postnatal diet should be controlled for if the outcome of interest is the direct effect of maternal diet on child development, but not if the total effect of the association is being explored (87). Other studies have included past diet as a potential confounder to address the correlation between diet at multiple measure points when assessing the relationship to development during childhood (90). No such procedure was undergone when we examined the relationship. Although this approach could isolate the independent contribution of the diet on child development at specific time points, it could also introduce collinearity (91). As discussed by Smithers et al. (90), child diet undergoes a substantial transition during the first years of life, which challenges modelling it as a repeated measure. To calculate estimates that were somewhat comparable across measured timepoints in the linear regression

model in our study, the numeric exposure and outcome measures were computed to percentages of maximum scoring in Paper III. However, even when standardizing the scores, they may not be comparable at all due to their differing composition and conceptualization. More sophisticated methods to examine child diet longitudinally would include modelling trajectories that integrate the individual changes in diet over time (91). Still, the current approach applied in this paper aimed to address adherence to a certain dietary pattern and its relationship to child development from a lifecourse perspective, which also likely embodies the cumulative impact of the diet over time.

4.3 Public health relevance and final remarks

Our diet can be understood as the fundamental source for maintaining life and promoting a healthy development and well-being throughout the life course, as well as being a large part of our daily lives in terms of palatability, planning, purchasing or collecting, preparing and consuming the foods. To most people the social, cultural, traditional, and religious aspects of food are deeply rooted, whether it is expressed through breakfast habits, the home-packed lunch enjoyed with co-workers or classmates, or Sunday family dinners with freshly collected mushrooms and berries. When applying a holistic approach in nutrition, the whole is taken into consideration, conceptualized through dietary patterns and further operationalized by diet scores. In the current project we aimed to develop NND-scores for use in infancy and childhood, however, it would be more correct to acknowledge that the scores conceptualize a healthy and potentially sustainable child diet *based* on the Nordic diet and the principles of the NND.

Despite the crude way of scoring sustainability and Nordic aspects of a child diet from fetal life until 7 years of age, the scores are of public health relevance as they link two of the major challenges in our times; that is, human health and planetary health. Optimal and healthy development from conception throughout childhood is crucial for future healthy generations, and also for preventing the consequences of unfavourable weight development and suboptimal neurodevelopment due to a poor diet. Current times require these perspectives to be maintained while simultaneously enforcing a more sustainable way of life. The global call for a transition towards healthier diets from sustainable food systems is becoming more urgent over the years, but the responsibility for a shift can hardly be placed on the individual alone.

The transgenerational impact of epigenetics on overweight/obesity is of concern in a long-term public health perspective. Making healthy choices in an environment that is consumer-based where children are exposed to products and foods of poor nutritional quality from a very early age is challenging, and particularly if one already is genetically predisposed to overweight. More systematic and structural changes will be needed to address both the obesity and climate challenges, especially in terms of making healthy and sustainable choices more available and affordable for all, regardless of any socio-economic position.

It should also be stressed that although we did not find evidence for the NND to be protective of child overweight in our study, diet is still an important determinant of overweight and obesity.

How likely is it for the observed findings of NND adherence on child development to be causal effects? When applying Bradford's Hills viewpoints for assessing causality in epidemiology, we can acknowledge that the *strength* of the association is there, there is *consistency* with other studies, a *dose-response* relationship is observed with higher estimates for low vs high compared to medium vs high adherence, it is *plausible* for such an association to exist, there is *coherence* with existing theory and there are associations observed between *analogous* exposures, such as other diet scores (213). The prospective nature of the MoBa cohort data also allows for *temporality*, which is considered fundamental to causality as the exposure must precede the outcome. There is, however, no *experimental* design and the *specificity* of the association may be compromised due to residual or unmeasured confounding, which are limitations of our study. Moreover, our results are limited to the dietary components included in the five scores and to a presumably healthier sample than the general population.

Dietary research will always be flawed to some degree, and the complexity and challenges of assessing dietary intake and understanding how they truly affect our health will continue to demand advances in the field. In a review from 2007, Jacobs et al. argue that “ Food, not nutrients, is the fundamental unit in nutrition”, rationalized by the synergetic and antagonistic effects of nutrients within foods (214). Dietary pattern analysis has thus been widely applied in nutritional epidemiology in the last decades. However, the novel insight in the role of gut microbiome on physical and mental health, as well as the known role of *nutrigenomics* (the body's response to diet at the genomic scale) and *nutrigenetics* (the individual predisposition to respond differently to the same foods) (215) calls for more sophisticated methods of studying dietary patterns at a population level combined with the individual human variability of diet response. Hence, the symbiotic relationship of holistic and reductionist perspectives is of utmost importance to truly understand the underlying health benefits of an environmentally friendly Nordic diet, and how the underlying mechanisms work. This is particularly of interest when addressing diet from a lifecourse perspective,

given the cumulative effect of diet and dietary exposure in vulnerable phases, when epigenetic programming or alterations may occur.

It should also be remarked that in the current project, we have used cohort data collected in a certain time period to explore a concept that may be more identifiable with recent years. Although cohort studies at one point are dynamic and are measured over time, it is still limited to the time period the assessment was made, whereas food culture, trends, habits, awareness of sustainability, and conscious dietary behaviour may change rapidly in prospective parents and thus affect the exposure on their offspring. In the Norwegian National Public Health Survey of 2020, 62% of the participants reported that they had made some dietary changes over the past three years to achieve a more sustainable and environmentally friendly diet (216). Hence, future studies should emphasize on the eating habits and health outcomes in young people today and their potential offspring, as they have been largely exposed to a society debating the tremendous consequences of climate change and the urgent need for sustainable diets and environmentally friendly consumer-behaviour.

How can the findings from our study be applied to potentially improve public and global health? Beyond the importance of maternal nutrition for fetal development, research also shows that the child's sensory experience and acceptance programming already starts within the womb (58). Taste, repeated exposure and palatability are important determinants of child diet, which can be shaped through maternal diet, breastfeeding, serving homemade food and a varied diet during childhood (13). We can only assume a tracking of dietary patterns in our study based on what previous studies have shown, as this was not a part of our research aims. Still, given that our diet scores were associated with child development at almost all measured timepoints, there are indications that a high adherence to the NND can benefit aspects of child development as well as potentially being environmentally friendly throughout childhood. The public investment in child health through sustainable food programs should be considered of high value, given the potential burden of non-communicable diseases and climate changes on the national economy and welfare systems.

5 Conclusion

In this thesis, we aimed to develop New Nordic Diet (NND) scores reflecting adherence to a healthy, territorial and potentially sustainable Nordic diet during infancy and up to school-age, and to investigate potential associations with weight status and neurodevelopment in children. The developed child scores that were based on the previously developed pregnancy NND-score, did not reflect NND-adherence to the same degree, as there was limited dietary information in the child questionnaires. Nevertheless, we believe that the scores capture aspects of diet quality, whereas the sustainability properties are less clear and should be interpreted with caution.

Adhering to the NND, as defined by our scores, did not protect against overweight or obesity at 8 years of age, which is in line with other studies assessing the diet/weight status-relationship, but also in contrast to others. This relationship is complex and multi-factorial and also prone to several sources of bias. The null findings should not, however, downplay the otherwise importance of a healthy and potentially sustainable diet during pregnancy and throughout childhood. This argument is upheld by the other finding in this thesis; namely that higher adherence to the NND from pregnancy and beyond is associated with beneficial child language and motor development at several timepoints until 5 years of age. Despite the shortcomings of the developed child diet scores, the current finding should encourage further research on sustainable diets as an investment for future healthy generations on a healthy planet.

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Paper I

Development and description of New Nordic Diet scores across infancy and childhood in the Norwegian Mother, Father and Child Cohort Study (MoBa)

Development and description of New Nordic Diet scores across infancy and childhood in the Norwegian Mother, Father and Child Cohort Study (MoBa)

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Abstract

In recent years, examining dietary patterns has become a more common way of investigating potential associations between diet and adverse health outcomes. The New Nordic Diet (NND) is a potentially healthy and sustainable dietary pattern characterized by foods that are locally available and traditionally consumed in the Nordic countries. The diet has been typically examined in adult populations, and less is known about compliance to the NND from infancy throughout childhood. In the current study, we therefore aimed to develop and describe child age-specific NND scores. This study is based on the Norwegian Mother, Father and Child Cohort Study (MoBa) and uses data from the Medical Birth Registry of Norway (MBRN). We have previously developed a NND score for the maternal diet during pregnancy, and the development of the child diet scores was based on the rationale of this score. Food frequency data from $n = 89\,715$ at child age 6 months, $n = 76\,432$ at 18 months, $n = 58\,884$ at 3 years, and $n = 35\,978$ at 7 years were used to construct subscales in accordance with the maternal diet score. Subscales were composed of responses to a selection of food and drink items or other questions and were dichotomized by the median, yielding four age-specific diet scores where the possible scoring ranged from 0 to 6 at 6 months and 3 years and from 0 to 9 at 18 months and 7 years. The developed scores will be used to examine associations with childhood overweight and cognitive and mental development in future studies.

KEYWORDS

child, diet scores, MBRN, MoBa, New Nordic Diet

1 | INTRODUCTION

Within the last decades, there has been an increased focus on the relationship between dietary patterns and adverse health outcomes (Hu, 2002). Compared to examining health effects of single nutrients and foods, addressing dietary patterns may hold an

advantage as it can encompass the complexity of different components in the diet and potential interaction between foods and nutrients (Waijers, Feskens, & Ocke, 2007). Compliance to a defined healthy dietary pattern is quantified through scores or indices and measures exposure to certain foods or nutrients (Kant, 2004).

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Although health-related associations with the Mediterranean diet have been thoroughly examined in various populations, the literature on other regional dietary patterns remains less extensive. The New Nordic Diet (NND) is a theoretically defined dietary pattern with foods that are traditionally consumed and locally available in the Nordic countries. In addition to encompassing foods that carry a Nordic identity and potential health-promoting properties, the sustainability potential of the diet is also addressed in the NND (Bere & Brug, 2009; Mithril et al., 2012, 2013). The dietary composition consists of foods such as oats, rye, cabbages, root vegetables, apple, pears, berries, fish and game (Bere & Brug, 2009; Mithril et al., 2012).

Whereas employment of various Nordic diet scores and their relation to health-associated outcomes has been more commonly examined in adult populations (Adamsson et al., 2011; Adamsson, Cederholm, Vessby, & Risérus, 2014; Enget Jensen et al., 2018; Hillesund, Bere, Haugen, & Øverby, 2014; Olsen et al., 2011; Poulsen, Crone, Astrup, & Larsen, 2015; Skreden et al., 2018), less is known regarding this dietary pattern in paediatric populations. In a systematic review from 2014, 80 diet quality indices were identified that were designed for use in paediatric populations (Marshall, Burrows, & Collins, 2014). None of these was from any Nordic countries.

A randomized controlled cross-over trial, the OPUS Study, was conducted in Denmark, where the effects of serving school meals based on the NND to children aged 8–11 years were investigated (Andersen et al., 2015). As a result of increased intake of dietary fibre and protein and reduced intake of fat, the NND school meal resulted in improved blood pressure, insulin sensitivity and plasma triacylglycerol (Andersen et al., 2014). However, a small increase in waist circumference was also found, which was positively associated with potato consumption (Damsgaard et al., 2016). The OPUS intervention lasted for 6 months, and evidence of the health effects of early exposure and high compliance to the NND over time is as yet unclear.

Assessment of diet during infancy and in early childhood is important, as an adequate nutritional status during childhood is essential for proper child growth and development, with the first years of life being described as a crucial period for mental and physical development (Baidal et al., 2016; Pietrobelli, Agosti, & Group, 2017). Furthermore, the foundation of future dietary patterns has been suggested to be laid early in life (Robinson et al., 2007) and to track from infancy (Robinson et al., 2007) into childhood (Bjelland et al., 2013; Northstone & Emmett, 2008), as described by Lioret et al. (Lioret et al., 2015). Moreover, dietary behaviour in childhood may persist into adulthood (Hovdenak et al., 2019; Mikkilä, Räsänen, Raitakari, Pietinen, & Viikari, 2005), thus be early predictors of later health (Marshall et al., 2014).

We have previously developed a NND-adherence diet score based on maternal dietary data in The Norwegian Mother, Father and Child Cohort Study (MoBa), aiming to embrace a combined health and sustainability perspective on a diet (Hillesund et al., 2014). The NND is a qualitative dietary pattern shown to be associated with better diet quality and higher adherence to dietary recommendations (Bjørnara et al., 2016; Hillesund, Bere, et al., 2014).

Key messages

- What we eat is critical for human and planetary health; thus, identifying healthy and sustainable diets is important
- Dietary scores are used to explore diet–health associations. Few dietary scores are developed to assess child diet.
- We developed age-specific child dietary scores to assess compliance with a healthy and potentially sustainable diet using data from the MoBa.
- The scores will be used in further studies to investigate their associations with childhood health outcomes.

Similar diet scores aiming to reflect NND compliance among children have, however, not yet been developed. In the current study, we aimed to develop and describe child diet scores reflecting NND compliance at child age 6 months, 18 months, 3 years, and 7 years, in line with rationale for the maternal NND score developed in MoBa.

2 | MATERIALS AND METHODS

2.1 | Study design and sample

The data used in this study were derived from MoBa, which is a population-based pregnancy cohort study conducted by the Norwegian Institute of Public Health (Magnus et al., 2016). Participants were recruited from all over Norway from 1999 to 2008. The women consented to participation in 41% of the pregnancies. The cohort now includes 114 500 children, 95 200 mothers and 75 200 fathers. The current study is based on version 8 of the quality-assured data files released for research in February 2014.

The mothers responded to three questionnaires during pregnancy and the father to one. Follow-up of the participants has been conducted through questionnaires forwarded at a regular intervals, clinical sub-studies and linkage to national health registries. Data collection is still ongoing.

Child diet at ages 6 months and 3 years was assessed with identical questions throughout the data collection; however, a few questionnaire items for child diet at 18 months and 7 years of age were changed during the data collection period. In the 18-month questionnaire, response options differed to such a degree that inclusion of data from the first 5008 respondents was not possible to include in the construction of the diet score. In the 7-year questionnaire, the assessment of consumption of Nordic fruits was hampered by grapes being grouped with apples and pears in some versions of the questionnaire. We used the available dietary data from all respondents at each time point except at 18 months for a reason described above.

2.2 | METHODS

The dietary items included in the MoBa questionnaires, referred to as child food frequency questionnaires (FFQs) assessed the frequency of intake of breast milk, porridges, baby foods, dairy products, bread, fish, meat, fruits, vegetables, sweetened beverages and sweets and snacks, with the selection of questions adapted to child age in the respective questionnaires. The MoBa child FFQs did not cover the whole diet and have not been validated against other dietary assessment methods. However, a previous study in the same dataset showed fair to moderate tracking of fruit, vegetable and sugar-

sweetened beverage intakes from 18 months to 7 years in MoBa (Bjelland et al., 2013). The number of FFQ items included in the construction of each NND score is detailed below and in Figure 1.

The 6-month questionnaire comprised 28 food and drink items, of which 23 were used to construct the 6-month score. In addition, breastfeeding duration and frequency were assessed with two questions. Mothers ticked off whether the child was breastfed at each consecutive month between 0 and 6 months (seven categories) and reported frequency of breastfeeding with response alternatives ranging from 'never/seldom' to 'at least once a day'. Exclusive breastfeeding duration, that is, for how long the infant received breast

Maternal NND score	6 months (0-6 points)	18 months (0-9 points)	3 years (0-6 points)	7 years (0-9 points)
	N = 89 715	N = 71 424	N = 58 884	N = 35 978
1. Meal pattern Frequency of eating breakfast, lunch, dinner and evening meal	Not available	Not available	Not available	Not available
2. Nordic fruits Apples, pears, plums and strawberries	1 HM fruit puree (1) relative to CP fruit/berry puree (0) Median/cut-off: 0.01	1 Fruits (not specified) Median/cut-off: 10.5 (0/1)	1 Fruits (not specified) Median/cut-off: 7 (0/1)	1 Apple, pear and grapes Median/cut-off: 3.5 (0/1)
3. Root vegetables Carrots, rutabaga, various types of onions	2 HM dinner (1) from: - Potato/vegetable puree - Fish and vegetables/potato - Meat and vegetable/potato relative to CP meals (0) from: - Vegetables - Vegetables and meat Median/cut-off: 0.01	2 Vegetables - Boiled vegetables - Raw vegetables Median/cut-off: 5.50 (0/1)	2 Vegetables - Boiled vegetables - Raw vegetables, salad Median/cut-off: 5 (0/1)	2 Carrot Median/cut-off: 1.5 (0/1)
4. Cabbages Kale, cauliflower, broccoli, brussels sprouts	Not available	3 Peas and beans Median/cut-off: 5 (0/1)	Not available	3 Cabbage, cauliflower, broccoli Median/cut-off: 1.5 (0/1)
5. Potatoes relative to rice and pasta	Not available	4 Potatoes (1) relative to Rice/pasta (0) - Pasta - Rice Median/cut-off: 0.7	3 Potatoes (1) relative to Rice/pasta (0) - Pasta, spaghetti, noodles - Rice Median/cut-off: 0.65	4 Potatoes (1) relative to Rice/pasta (0) - Spaghetti, rice and pasta Median/cut-off: 0.94
6. Whole grains relative to refined bread	Not available	Not available	Not available	5 No reported consumption of refined bread (1) Else (0)
7. Oatmeal porridge	3 HM porridge from (0): - Wheat flour (whole/defined) rusk, semolina, rolled oat - Iron enriched wheat flour - Helios flour - Millet relative to CP porridge (1) from: - Rice/corn porridge - Oatmeal, different types - Wheat porridge, all types, rusk porridge Median/cut-off: 0.01	5 HM porridge/baby cereal (1) relative to CP porridge/baby cereal (0) Median/cut-off: 0.84	Not available	6 Müsli/oatmeal Median/cut-off: 1.5 (0/1)
8. Wild fish, game and berries Foods from the wild countryside	Not available	6 Fish - Fish, fish balls, fish pudding - Bread with fish *0.25 Median/cut-off: 2.13 (0/1)	4 Fish - Fat fish (salmon, herring) - Lean fish (cod, pollock) - Fish spread (mackerel, caviar) *0.25 Median/cut-off: 2.12 (0/1)	7 Fish - Fat fish (salmon, mackerel, herring) - Other fish (cod, pollock) - Fish spread (incl. caviar) *0.25 Median/cut-off: 2 (0/1)
9. Unsweetened milk relative to fruit juice	4 Exclusive breastfeeding for at least 4 months (1), else (0) 5 Breastfeeding at 6 months Yes (1), No (0)	7 Milk (1) - Whole milk - Low fat milk - Extra low fat milk - Skimmed milk relative to Juice (0) Median/cut-off: 7.38	5 Milk (1) - Whole milk - Low fat and skimmed milk relative to Juice (0) Median/cut-off: 4.01	8 Milk (1) - Whole milk - Low fat and skimmed milk relative to Juice (0) Median/cut-off: 6.5
10. Water relative to sweetened beverages	6 Water (1) - Boiled water - Tap water - Bottled water relative to Sweetened beverages (0) - Squash, sugared drinks, bottled - Other sweet beverages - Squash, artificially sweetened - Juice Median/cut-off: 20	8 Water (1) - Tap water - Bottled water relative to Sweetened beverages (0) - Squash, sugared - Squash, artificially sweetened - Soda - Light soda Median/cut-off: 15.63	6 Sweetened beverages - Squash, nectar, soda (sugared) - Squash, soda, sweet drinks (art. sweetened) Median/cut-off: 2.50 (1/0)	9 Water (1) relative to Sweetened beverages (0) - Squash with sugar - Squash, artificially sweetened - Soda with sugar - Soda, artificially sweetened - Nectar Median/cut-off: 3.4
Other (elements not part of the maternal score)		9 Is your child served mostly homemade dinners (1) or commercially prepared baby food (0)?		

FIGURE 1 Details of the construction of the child New Nordic Diet (NND) scores based on the previously developed maternal NND score (Hillesund, Bere, et al., 2014). Abbreviations: CP = commercially prepared, HM = homemade. The table shows the items included in constructing the subscales of the child scores. Subscales of the maternal score are shown on the left, and corresponding child subscales at each age stage are shown accordingly. Coding/scoring of the subscales is in the brackets. The direction of scoring above or below the median is indicated by the following: (0/1 = Weekly consumption above the median is given 1 point; 1/0 = Weekly consumption below the median is given 1 point.) Deviations and differences in the scores are due to the limited dietary assessment in the child questionnaires from the Norwegian Mother, Father and Child Cohort Study

milk with no supplementary milk and/or solid food, was calculated from the question of duration of breastfeeding and/or other types of milk feeding and the question about the time of introduction to various types of solid food. For fruit puree, dinner and porridge, the questions differentiated between homemade and commercially produced foods.

At 18 months, the questionnaire food list comprised 39 food items, of which 23 were used in the construction of the diet score. Frequency of intake was assessed with seven response categories ranging from 'never' to 'five times or more a day' for drinks and from 'never' to 'three times a day or more'. One question asked if the child was mostly served homemade dinners or commercially prepared baby food, with five response alternatives ranging from 'only homemade' to 'only commercially prepared'.

In the questionnaire at 3 years, the questionnaire food list comprised 37 items, of which 14 were used in the construction of the score. Seven response options were available, ranging from 'seldom/less than once a week' to 'four times or more a day' for spreads, drinks, sweets and snacks and from 'once a month or less' to 'five times a week or more' for whole foods or dinner items.

At 7 years, the questionnaire food list comprised 47 food and drink items, of which 19 were used in the construction of the score. Frequency of intake was assessed with six response categories ranging from 'never/seldom' to 'once a day or more' for foods and from 'never/seldom' to 'four glasses a day or more' for drinks. All response options were recoded to reflect weekly consumption of a given food or drink item.

2.3 | The rationale

We intended to develop child NND scores that could capture similar dietary aspects as the previously developed maternal NND score (Hillesund, Overby, et al., 2014), however, accepting that some of the dietary elements might not be available in the child questionnaires. The rationale of the maternal score was to include food items and dietary habits considered to be both healthy and possibly sustainable, by focussing on local foods with a potential Nordic identity, their tradition or importance as a food source in Nordic countries and their health potential in comparison to similar foods within the same food group (Hillesund, Overby, et al., 2014). Based on this, a score comprising 10 subscales was developed. The subscales of the maternal NND score in MoBa are presented below:

1. Meal pattern: combined frequency of eating breakfast, lunch, dinner and evening meal
2. Nordic fruits: frequency of eating apples, pears, plums and strawberries
3. Root vegetables: frequency of eating carrots, rutabaga and various types of onions
4. Cabbages: frequency of eating kale, cauliflower, broccoli and Brussels sprouts
5. Potatoes: frequency of eating potatoes relative to rice and pasta

6. Whole grain breads: frequency of consuming whole grain breads relative to refined breads
7. Oatmeal porridge: frequency of eating oatmeal porridge
8. Foods from the wild countryside: frequency of eating game, fish, seafood and native berries
9. Milk: frequency of consuming unsweetened milk relative to fruit juice
10. Water: frequency of consuming water relative to sweetened beverages.

2.4 | Construction of the child diet scores

For each age, relevant diet-related variables from the questionnaires were selected to construct subscales as similar as possible to the subscales in the maternal NND score. All respondents at each age assessment were included for development of the scores and in determining the subscale cutoffs for scoring ($n = 89\ 715$ at 6 months, $n = 76\ 432$ at 18 months, $n = 58\ 884$ at 3 years and $n = 35\ 978$ at 7 years). This was done to maximize data use and for representativeness.

For any reported consumption of spreads included in a subscale, the frequency was multiplied by 0.25 to down weight spreads to a quarter of whole foods given that spreads are generally eaten more frequently, but in smaller amounts. In the subscales where consumption of a food group/beverage was compared to the consumption of another food group/beverage (e.g., water relative to sweet beverages), a formula was used to get a relative measure of consumption. To avoid zero in the denominator in cases where unhealthy foods were reported to be consumed never or seldom (0), 0.1 was added in the denominator as presented in the formula below:

$$\frac{(\text{Healthy food 1} + \text{Healthy food 2} + \dots)}{((\text{Unhealthy food 1} + \text{Unhealthy food 2} + \dots) + 0.1)}$$

Missing was defined as having incomplete data on all food items included in the construction of each child diet score. This was the case for $n = 284$ (0.3%) at 6 months, $n = 257$ (0.4%) at 18 months, $n = 1076$ (1.8%) at 3 years and $n = 343$ (1.0%) at 7 years. For the remaining missing food items, an assumption of null intake was made in accordance with recommendations by Cade, Thompson, Burley, and Warm, (2002). These items were recorded to 0 (*never/seldom*) to avoid losing all dietary information for respondents with incomplete data for a given item.

Most subscales were dichotomized by the median (frequency of weekly consumption) [31] and coded to give either 0 or 1 point, where receiving 1 point acknowledged a healthier food choice or consumption above the median. Three subscales (still breastfeeding at 6 months, offering homemade vs. commercial baby foods at 18 months, and no reported consumption of refined bread at 7 years) were based on single questionnaire responses only and were scored according to having the behaviour or not. The sum of the subscales was further computed to yield a continuous NND child score.

2.5 | Characteristics according to NND scoring

Child gender and maternal age at delivery were derived from the Medical Birth Registry of Norway (MBRN), a national health registry containing information about all births in Norway. Parental educational attainment, measured by highest completed educational level, was derived from the MoBa baseline questionnaire (Q1). We collapsed education categories into a variable with three categories corresponding to ≤ 12 , 13–16, and ≥ 17 years of education. We further grouped participants as having low, medium or high NND score at each respective stage, with cutoffs chosen to yield approximately equal proportion in high and low NND categories (see Figure 1 for details). We present maternal age, parental education and child gender across categories of low, medium and high NND scoring at each time point. The Statistical Package for the Social Sciences (IBM SPSS Statistics, version 24.0) was used to analyse and handle the data.

2.6 | Ethical considerations

The establishment of MoBa and initial data collection was based on a licence from the Norwegian Data Protection Agency and approval from The Regional Committees for Medical and Health Research Ethics. The MoBa cohort is now based on regulations related to the Norwegian Health Registry Act. The current study was approved by The Regional Committees for Medical and Health Research Ethics (Reference 2019/339).

3 | RESULTS

Age-specific NND scores were developed according to the presented rationale for ages 6 and 18 months and 3 and 7 years. Due to variations in the collected dietary data in the respective questionnaires, each diet score was built from available dietary components resembling as far as possible the ones included in the maternal score. Figure 1 shows details about the dietary variables included in each subscale, cutoffs for scoring and how each subscale was scored.

3.1 | NND score at 6 months

In the NND score at 6 months, we included breastfeeding and homemade versus commercially produced food as elements of a healthy and sustainable diet. From the perspective of sustainability, breastfeeding is recommended as it leaves less environmental burden compared to feeding the infant with formula milk or other breast milk substitutes (Nasjonalt råd for ernæring, 11/2017). Furthermore, the wide range of health benefits of breastfeeding is well known (Lagström, Lande, & Thorsdottir, 2013). Norwegian health authorities recommend exclusive breastfeeding for at least 4 months and for 6 months if possible for mother and child, which deviates somewhat from World Health Organization (WHO) recommendations of

6 months (Helsedirektoratet, 2016). A very low proportion of mothers reported exclusive breastfeeding until child age 6 months. In the 6-month score, infants were therefore given one point for being exclusively breastfed for at least 4 months. Another point was given for still being breastfed when completing the 6-month questionnaire (mean age for the sample: 6.4 months; 196 days, SD: 15.1 days). Three out of six subscales in this score address homemade relative to commercially prepared food. The six subscales are presented below.

1. Consuming homemade fruit puree more frequently than commercially prepared fruit puree
2. Consuming homemade dinners more frequently than commercially prepared dinners
3. Consuming homemade porridge more frequently than commercially prepared porridge
4. Being exclusively breastfed for at least 4 months
5. Still being breastfed at the time of responding to the 6-month questionnaire
6. Drinking water far more frequently than sweetened beverages (see Figure 1).

The subscales were summarized into a 6-month NND score ranging from 0 to 6 points, with median score 3 (interquartile range, IQR 2–4).

3.2 | NND score at 18 months

The score at 18 months consists of nine subscales (listed below), with one subscale assessing what degree homemade porridge was served compared to commercially prepared porridge and another addressing consumption of homemade dinners relative to commercially prepared baby dinner. Three subscales are in line with subscales in the maternal NND score, addressing consumption of potatoes, milk and water. One subscale addresses the consumption of peas and beans, and two of the subscales measure fruit and vegetable consumption, although not specifically of Nordic origin. The nine subscales are presented below with their respective cutoff for scoring. See Figure 1 for detailed information on food items included in each subscale.

1. Fruits: eating fruits more than 10.5 times a week
2. Vegetables: eating vegetables more than 5.5 times a week
3. Peas and beans: eating peas and beans more than five times a week
4. Potatoes: eating more potatoes relative to rice and pasta
5. Porridge: eating more homemade porridge/baby cereal relative to commercially prepared porridge/baby cereal
6. Fish: eating fish more than 2.13 times a week
7. Milk: drinking more milk relative to fruit juice
8. Water: drinking more water relative to sweetened beverages
9. Homemade food: eating more homemade dinners relative to commercially prepared baby food.

Summarizing the subscales, the NND diet score at 18 months could take values from 0 to 9 points, with median score 4 (IQR 3–5).

3.3 | NND score at 3 years

The score at 3 years consists of six subscales (listed below). The questions regarding child diet in the questionnaire at 3 years were not as extensive as in the questionnaires at 6 months, 18 months and 7 years. There was no question addressing water intake, and subscale 6 in this score was therefore constructed to score respondents with consumption of sweetened beverages below the median and not as a relative measure as was done in the other scores. The item estimating whole-grain bread consumption was unfortunately poorly constructed and yielded large amounts of missing data (12.7%); we therefore chose to exclude the variable. There was also no information on specific fruits or vegetables. The six subscales are presented below, with the cutoff for scoring in each subscale. See Figure 1 for detailed information on subscale construction.

1. Fruits: eating fruits more than seven times a week
2. Vegetables: eating vegetables or salad more than five times a week
3. Potatoes: eating more potatoes relative to rice and pasta
4. Fish: eating fish more than 2.12 times a week
5. Milk: drinking more milk relative to fruit juice
6. Sweetened beverages: drinking sweetened beverages less than 2.5 times a week.

After summarizing the subscales, the NND score at 3 years ranged from 0 to 6 points, with median score 3 (IQR 2–4).

3.4 | NND score at 7 years

The score at 7 years consists of nine subscales (listed below). The 7-year questionnaire provided the most detailed information of child diet, and this score is thus the most similar to the maternal NND score (Figure 1). The item assessing bread consumption had many missing due to how the question was constructed. Mothers reported how many slices of bread the child ate daily, distinguishing between white bread, semi-white bread, whole grain bread and crispbread. We collapsed the white bread category with semi-white bread and chose to score respondents with no consumption of white/semi-white bread. The item that was included for measuring the consumption of potential local fruits in subscale 1 was a grouped item where grapes were also included with apples and pears. The nine subscales are presented below with cutoff for scoring in each subscale. See Figure 1 for detailed information on subscale construction.

1. Local fruits: eating apple, pear and grapes more than 3.5 times a week

2. Root vegetables: eating carrots more than 1.5 times a week
3. Cabbages: eating kale, cauliflower and broccoli more than 1.5 times a week
4. Potatoes: eating more potatoes relative to rice and pasta
5. Whole grain bread: reporting no consumption of white bread
6. Oatmeal: eating muesli or oatmeal more than 1.5 times a week
7. Fish: eating fish more than two times a week
8. Milk: drinking more milk relative to fruit juice (Figure 1)
9. Water: drinking more water relative to sweetened beverages (Figure 1).

After summarizing the subscales, the NND score at 7 years score ranged from 0 to 9 points, with median score 4 (IQR 3–6).

3.5 | Parental and child characteristics according to NND scoring

To assess potential patterning by parental characteristics, we compared parental educational attainment, maternal age and child gender across low, medium and high NND scoring at each dietary assessment time point (Table 1). Compared to low and medium NND scores, high NND score at any assessment time point was associated with a substantially higher proportion of both mothers and fathers with high educational attainment pre-pregnancy. High NND score was also associated with slightly higher maternal age at delivery except at 7 years and a slightly higher proportion of girls at 6 months and 3 years (Table 1).

4 | DISCUSSION

We developed four child diet scores to capture a healthy and potentially sustainable diet at various stages throughout childhood, largely in line with the previously developed NND score for pregnancy diet in MoBa (Hillesund, Bere, et al., 2014). To our knowledge, these are the first scores that have been developed to assess adherence to a healthy and potentially sustainable diet in Norwegian children across infancy and into childhood. Despite some variation across questionnaires in child diet questions, we aimed to keep each child score as true to the original maternal score as possible. This was, however, challenging as not all elements were available at the different measure points. There were also limited data regarding food variety in the child questionnaires. In addition, options were aggregated including both Nordic and non-Nordic food (i.e., grapes) reducing the applicability to reflect a potentially sustainable diet.

Despite these limitations, most of the subscales are largely in line with the corresponding maternal NND subscales, with an exemption of the score at 6 months, where the only similar subscale was the relative measure of water versus sweetened beverages. In this score, we chose to value breastfeeding as an obvious healthy and sustainable feeding practice (Myr, 2008) and homemade versus commercially produced baby foods as a potentially healthy and sustainable dietary

TABLE 1 Parental and child characteristics according to NND scoring (low, medium and high score)

Characteristics	NND scoring ^a		
	Low	Medium	High
6-month score			
Scoring ^b	0–2	3–4	5+
% of participants in each category	28.1	54	17.8
Child gender (% girls)	47.6	48.9	50.3
Maternal education ^c			
17 + years (%)	16.8	27.0	35.5
Paternal education ^c			
17 + years (%)	16.3	25.1	31.6
Maternal age ^d	29.6 (4.8)	30.4 (4.4)	30.7 (4.3)
18-month score			
Scoring	0–3	4–5	6+
% of participants in each category	33.7	43.1	23.2
Child gender (% girls)	48.0	49.1	49.6
Maternal education ^c			
17 + years (%)	21.7	28.0	32.8
Paternal education ^c			
17 + years (%)	20.4	25.3	30.1
Maternal age ^d	30.0 (4.5)	30.5 (4.4)	30.7 (4.4)
3-year score			
Scoring	0–1	2–3	4+
% of participants in each category	19.5	49.5	31.0
Child gender (% girls)	45.5	49.1	50.4
Maternal education ^c			
17 + years (%)	22.5	26.4	32.5
Paternal education ^c			
17 + years (%)	20.4	24.3	28.7
Maternal age ^d	29.9 (4.5)	30.4 (4.4)	30.8 (4.4)
7-year score			
Scoring	0–3	4–5	6+
% of participants in each category	28.2	43.4	28.4
Child gender (% girls)	48.2	48.7	48.7
Maternal education ^c			
17 + years (%)	19.3	24.2	28.5
Paternal education ^c			
17 + years (%)	17.9	23.3	27.8
Maternal age ^d	30.3 (4.5)	30.4 (4.4)	30.6 (4.4)

^aNND: New Nordic Diet.

^bDefined NND scoring for low, medium and high for 6-month score, 18-month score, 3-year score and 7-year score.

^cPercentage of mothers and fathers with the highest level of education pre-pregnancy, 17 years or more.

^dMaternal age at delivery, mean (SD).

choice. Homemade food was similarly valued in the 18-month score. According to a recent narrative review by Maslin and Venter (Maslin & Venter, 2017), there is a paucity on studies comparing the nutritional content and composition in homemade food with commercially prepared infant food. There is no clear consensus regarding either preparation method being superior to the other in terms of, for

example, micronutrient content. A randomized controlled intervention targeting parents of infants, aiming to enable parents to prepare homemade baby food, did show that serving the infant homemade porridge regularly was associated with higher high-density lipoprotein (HDL) concentration at 24 months of age (Overby, Hernes, & Haugen, 2017). Still, as commercially produced porridges are fortified

with iron and other nutrients, and at present are low in sugar (changed after early 2000), this may also be a healthy alternative. However, there is reason to believe that commercially produced baby foods could have a larger environmental impact than baby foods prepared at home, as, for example, more servings can be prepared in bulks at home with less packaging per meal. On the other hand, food waste could also be higher.

Meal frequency and consumption of foods from the wild countryside were not assessed in the child questionnaires; however, the latter subscale was substituted by scoring a weekly consumption of fish above the median. Although not fully in line with the maternal score, a plant-based diet with more calories from the sea is encouraged in the original NND (Mithril et al., 2012).

Whereas the score at 6 months and partly at 18 months may capture sustainability aspects to a larger degree, the score at 3 years may be more reflective of a generally healthy diet. At 7 years, characteristic Nordic fruits and vegetables, and muesli and oatmeal are incorporated in the subscales, resulting in a score comprising of more Nordic elements. It should be noted that the scores measure health and sustainability aspects of diet differently at the four time points due to how they are composed.

The developed diet scores include many of the food groups that are commonly consumed in a Nordic diet, and their relation to health outcomes was examined in a systematic review from 2013 (Åkesson et al., 2013). The review included potatoes, berries, whole grains, dairy products and red and processed meat. No conclusions could be drawn regarding the health effects of potatoes and berries, but there was evidence of a probable protective association between whole-grain intake and type 2 diabetes and coronary vascular disease risk. Potatoes are, however, regarded as a healthier option to rice and pasta because of their nutritional content, if not conventionally processed or fried (Camire, Kubow, & Donnelly, 2009) and are generally a more sustainable food choice in the Nordic countries (Hess, Chatterton, Daccache, & Williams, 2016).

Regarding dairy intake, there is suggestive evidence of a protective effect on type 2 diabetes and also an increased risk of prostate cancer (Åkesson et al., 2013). The NND guidelines by Mithril et al. does not elaborate on dairy products, other than that the diet follows the Danish food-based guidelines (Mithril et al., 2013). Among dairy products in the current developed scores, only milk consumption as a relative measure to consuming juice was included, in line with the rationale behind the maternal NND score, which was to recognize a healthier option within the same food group (milk vs. juice) (Hillesund, Overby, et al., 2014). Game is the only meat element included in the maternal NND score; however, it was not addressed in the child dietary questionnaires and the scores do not assess meat intake.

It has been reported that the Mediterranean diet and the NND have almost similar GHG emissions and both are regarded as environmentally friendly diets (Ulaszewska, Luzzani, Pignatelli, & Capri, 2017). This could likely be transferable to the developed child diet scores, although more knowledge on the sustainability potential of home-made food compared to commercially prepared baby meals is needed.

4.1 | Strengths and limitations

The data used for the development of the scores were derived from a large, prospective, population-based cohort study conducted in Norway, which is a major strength of the study. There are, however, limitations that need to be addressed. The participation rate in MoBa cohort study has been decreasing over the years, and the mothers who initially chose to participate in MoBa were mostly older, cohabitating, non-smokers and frequent users of multivitamin and folic acid supplement (Nilsen et al., 2009). This could have implications for the distribution of dietary intake in the MoBa sample and for the cutoffs that were derived from the data. Using the median to assess cutoff values in diet scores has been frequently debated, despite being widely used (Waijers et al., 2007). The method implies arbitrary cutoffs that may yield different results in populations with different diets. On the other hand, it does allow for a differentiation within a given sample or population (Waijers et al., 2007).

The questions regarding child diet were less detailed than those of maternal diet in MoBa, and not from validated FFQs. This may impact the validity of the child diet scores and their ability to capture the concept of the NND. In addition, the lack of detail may reduce the possibilities of identifying associations with health outcomes. However, we believe that the indices discriminate individuals according to beneficial dietary practices and are therefore valuable specifically in a dataset like MoBa with a high number of participants. Underpinning the value, our scores are comparable with the few other dietary scores developed in this age group. A British study from (Robinson et al., 2007) used principal component analysis of FFQ data to derive dietary patterns of infants at 6 months of age and identified a pattern characterized by a high frequency of consumption of vegetables, fruit, meat and fish and home-prepared foods, a greater consumption of breast milk and a lower intake of commercial baby foods in jars and formula milk. The authors suggested that this pattern complied with the infant guidelines in the United Kingdom. Mothers of infants with high scores had higher educational attainment and a higher prudent diet score. Further, the score at 6 months deviates substantially from the original idea of the NND score due to natural limitations regarding what 6-month-olds eat and because the dietary information was far less specific at this age. However, as previously asserted, breastfeeding should be regarded as a part of the NND. Despite that this score does not truly reflect the components of the maternal NND score, some aspects of diet quality and sustainability may still be covered by acknowledging breastfeeding and meals prepared at home. A limitation also relates to the assumed superior health effects of home-made porridge compared to commercially prepared porridge. The composition of commercially prepared porridges has changed since the start of the MoBa, and today, they may be just as healthy as homemade porridge.

The strong educational patterning across diet scoring may introduce bias in future analyses of diet–health associations and should be properly addressed and controlled. Another limitation is the lack of possibility to control for energy intake in the child datasets, as a high score in individual participants could partly reflect higher food intake

in addition to better diet quality (Hillesund, Overby, et al., 2014; Roswall et al., 2015). The diet scores do not capture meat intake, which is another shortcoming regarding sustainability. By including foods with a potential Nordic identity and a possibility for them to be locally grown, we attempted to include sustainability as an aspect of the scores. It is, however, impossible to know if true sustainability is addressed, as sustainability is a complex subject with many dimensions (Burlingame & Dernini, 2012).

As a result of assessing the NND through age-specific diet scores based on limited food variety in the dietary assessments, we may not have been able to fully capture the true exposure of the NND in the study population. It should be emphasized that the scores are not intended to reflect the healthiest diet possible.

5 | CONCLUSION

Child diet scores were developed in MoBa to measure compliance to the NND at child age 6 and 18 months and 3 and 7 years. Albeit the scores could not fully resemble the former developed maternal NND score in MoBa, aspects of a potentially healthy, local and sustainable diet are still maintained, although differently and to a varying degree at each age. Healthy and potentially sustainable eating in children should be addressed in more recent population studies as there has been increased attention in the general population on sustainability, regional foods and healthy eating. The developed scores will be used in further studies to investigate their associations with child and maternal characteristics, childhood obesity and cognitive and mental development within the MoBa.

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CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

CONTRIBUTIONS

NCØ, NA, EB and ERH contributed to the study conception and design. Data collection and data curation was managed by ALB. Material preparation and analysis were performed by NA, NCØ, AW, EB and ERH. The first draft of the manuscript was written by NA, and all authors commented on and revised following versions of the manuscript. All authors have read and accepted the final version of the manuscript.

DATA AVAILABILITY STATEMENT

The consent given by the participants does not open for storage of data on an individual level in repositories or journals. Researchers who

want access to data sets for replication should submit an application to datatilgang@fhi.no. Access to data sets requires approval from The Regional Committee for Medical and Health Research Ethics in Norway and an agreement with MoBa.

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Paper II

Childhood adherence to a potentially healthy and sustainable Nordic diet and later overweight: the Norwegian Mother, Father and Child Cohort Study (MoBa)



Childhood adherence to a potentially healthy and sustainable Nordic diet and later overweight: The Norwegian Mother, Father and Child Cohort Study (MoBa)

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Abstract

The New Nordic Diet (NND) is a potentially healthy and sustainable dietary pattern represented by locally available and traditionally consumed foods in the Northern countries. The diet has been commonly examined in adult populations, but less is known regarding its potential associations with overweight/obesity in children. We have previously developed child diet scores measuring compliance to the NND at child age 6 and 18 months and 3 and 7 years. In this study, we aimed to describe child and maternal characteristics and assess potential associations between the age-specific diet scores and child overweight at 8 years. This study is based on the Norwegian Mother, Father and Child Cohort Study (MoBa), including 14,989 mother-child pairs and uses data from the Medical Birth Registry of Norway (MBRN). The scores measured NND compliance as a total score and categorized into low, medium and high NND compliance at each age point. Using logistic regression models, we investigated the association between each age-specific score and the odds of overweight at 8 years. In crude analyses, adherence to the NND at 6 months was inversely associated with odds of overweight at 8 years in the continuous score (odds ratio = 0.95, 95% CI [0.91, 0.98]) and when comparing high versus low NND adherence (odds ratio = 0.81, 95% CI [0.70, 0.94]). The association was almost entirely attenuated in the adjusted models. In conclusion, child NND adherence up to 7 years of age was not associated with odds of overweight at 8 years in adjusted analyses.

KEYWORDS

barker hypothesis, birth cohort, child nutrition, childhood obesity, dietary patterns, MoBa MBRN

1 | INTRODUCTION

Between 1990 and 2016, the worldwide prevalence of overweight/obesity among children under 5 years increased from 32 to 41 million (World Health Organization, 2019). In Norway, more than 20% of the

8-year-olds were found to be overweight in the Norwegian Child Growth Study (Glavin et al., 2014). Despite an observed plateauing in some developed countries, overweight/obesity still remains one of the major public health challenges worldwide (Olds et al., 2011; Wabitsch, Moss, & Kromeyer-Hauschild, 2014), particularly as the

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prevalence of childhood obesity in developing countries continues to increase (Bauman, Rutter, & Baur, 2019). Early prevention is important as overweight/obesity in childhood and adolescence may track into adulthood and is associated with adverse health, such as premature mortality, diabetes, cardiovascular disease and asthma (Reilly & Kelly, 2010). Furthermore, the first years of life have been increasingly acknowledged as a crucial period for overweight/obesity prevention (Baidal et al., 2016; Pietrobelli & Agosti, 2017), and there is a growing evidence suggesting that dietary patterns laid early in life may shape later eating preferences and track into and beyond childhood (Lioret et al., 2015; Mikkilä, Räsänen, Raitakari, Pietinen, & Viikari, 2005). Despite this, dietary patterns in relation to health outcomes are less commonly explored in children, compared with adult populations. In a systematic review from 2014, 80 diet quality indices that had been used to investigate health-related outcomes among children and adolescents were reviewed (Marshall, Burrows, & Collins, 2014). The authors found that the most studied outcome was weight status, however, the findings were generally inconsistent.

In the mentioned review, none of the dietary indices assessing child diet were from Nordic countries, which signifies a gap in the current literature. The New Nordic Diet (NND) has been suggested as a regionally appropriate diet in the Nordic countries. It encompasses a concept of a potentially health-promoting and sustainable diet with foods that carry a Nordic identity and are locally available in the Northern countries such as oats, rye, cabbages, root vegetables, apple, pears, berries and fish (Bere & Brug, 2009; Mithril et al., 2012; Mithril et al., 2013).

The Nordic dietary pattern has been examined in various versions, albeit mostly in adult populations. Recent studies in adults have shown the diet to be associated with improved health (Adamsson et al., 2011; Adamsson, Cederholm, Vessby, & Risérus, 2014; Poulsen et al., 2014) and weight (Hillesund, Bere, Haugen, & Øverby, 2014; Poulsen et al., 2014; Poulsen, Crone, Astrup, & Larsen, 2015; Skredend et al., 2018) and lower total mortality (Olsen et al., 2011). In children, the effects of serving school meals based on the NND to children aged 8–11 years were investigated in the Danish OPUS School Meal Study, and the intervention lasting over 6 months showed an improved dietary and nutritional quality of the consumed food compared to the control period (Andersen et al., 2014) and improved metabolic markers due to the increased fish intake (Damsgaard et al., 2016). However, the school meals also led to an increased waist circumference, which was positively associated with potato consumption, but not with android/total fat mass. Despite numerous beneficial findings in adults, the evidence regarding child adherence to the NND and associated health outcomes remains inconclusive. For instance, child adherence to the Mediterranean diet has been shown to be inversely associated with childhood obesity in children aged 2–9 years in eight European countries (Tognon et al., 2014). Less is known regarding adherence to the NND from an early age and potential associations with overweight/obesity in observational studies.

We have previously developed age-specific child diet scores at age 6 and 18 months and 3 and 7 years, aiming to reflect NND compliance among children (Agnihotri et al., 2020). The scores were based on the rationale of the maternal NND score in The Norwegian

Key messages

- Dietary patterns established early in life may have an impact on later risk of childhood overweight/obesity.
- The New Nordic Diet is a potentially healthy and sustainable dietary pattern with foods from the Nordic countries. Little is known regarding compliance to the diet in early childhood and its association with later weight status in children.
- We could not demonstrate evidence for the New Nordic Diet to be protective against overweight at 8 years in our study.
- Future studies should assess adiposity with objective measurements.

Mother, Father and Child Cohort Study (MoBa; Hillesund et al., 2014). In the current study, the aims were (i) to describe child and maternal characteristics according to degree of compliance to the NND at 7 years and (ii) to investigate potential associations between the age-specific child NND scores and odds of being overweight at 8 years.

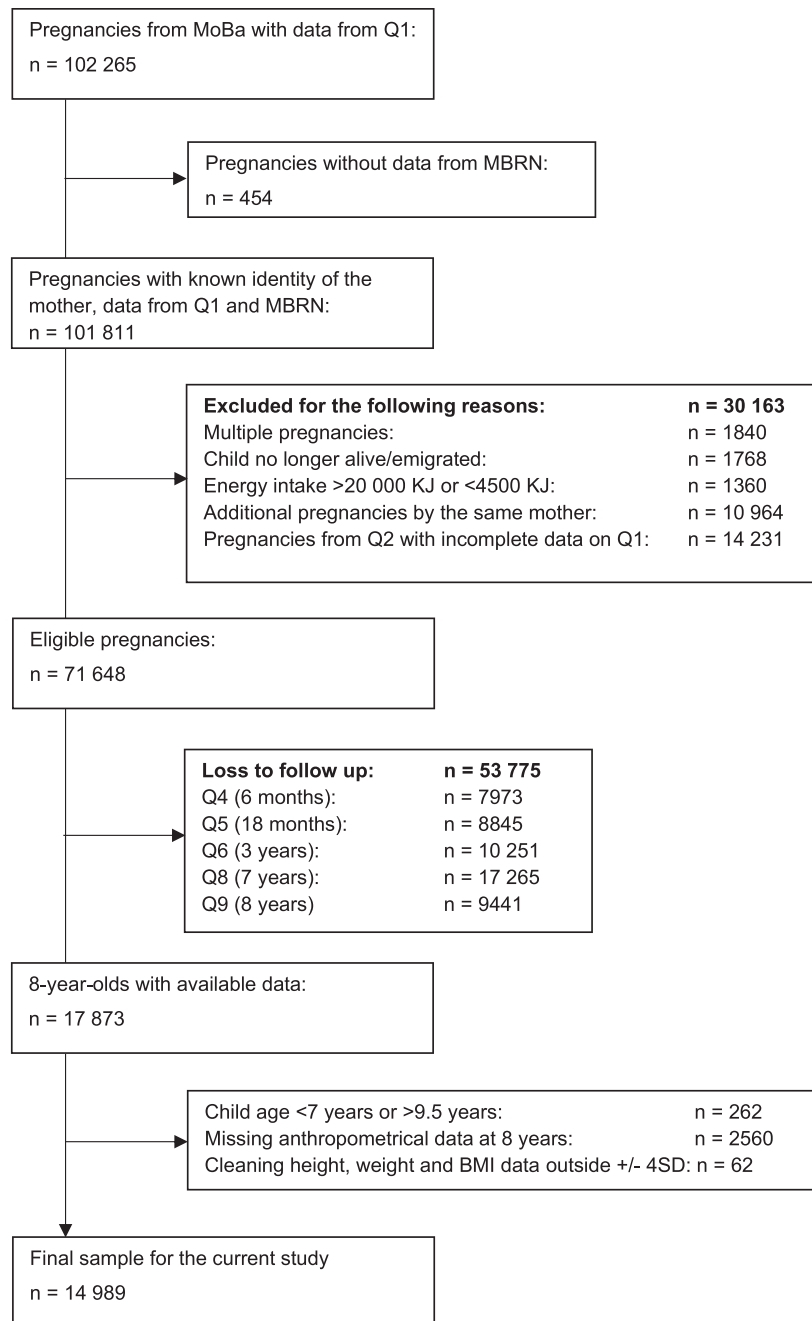
2 | MATERIALS AND METHODS

2.1 | Study design and sample

The data used in this study derive from MoBa which is a prospective, population-based pregnancy cohort study conducted by the Norwegian Institute of Public Health (Magnus et al., 2016). Pregnant women were recruited from all over Norway from 1999 to 2008. The women consented to participation in 40.6% of the pregnancies. The cohort now includes 114,500 children, 95,200 mothers and 75,200 fathers. The current study is based on version 8 of the quality-assured data files released for research in February 2014. Follow-up of the participants has been conducted through questionnaires at a regular interval and data collection is still on-going. For the present analyses, data from seven questionnaires from MoBa were used: Q1 (at baseline, week 13–20 of the pregnancy), Q2 (week 22), Q4 (child age 6 months), Q5 (child age 18 months), Q6 (child age 3 years), Q8 (child age 7 years) and Q9 (child age 8 years). The dataset was linked to relevant data from the Medical Birth Registry of Norway (MBRN), which is a national health registry containing information about all births in Norway. Data collection of the 8-year-olds were still not complete in version 8 of the file. In total, 19,946 (46.1%) mothers had responded to Q9 when the data file was released.

To be eligible for inclusion in the present study, MoBa participants had to have answered the baseline questionnaire (Q1) and be registered in the MBRN ($n = 101,811$). Figure 1 shows a flow chart of the sample selection.

FIGURE 1 Flow chart of sample selection from the Norwegian Mother, Father and Child Cohort study



MoBa: The Norwegian Mother, Father and Child Cohort study, MBRN: Medical Birth Registry of Norway.

We excluded multiple pregnancies ($n = 1840$), pregnancies where the child was no longer alive, or where the parents had emigrated ($n = 1768$), pregnancies with no dietary data ($n = 14,231$) and pregnancies with an implausible energy intake defined as $<4,500$ KJ or $>20,000$ KJ ($n = 1,360$) (Meltzer, Brantsaeter, Ydersbond, Alexander, & Haugen, 2008). The MoBa Food Frequency Questionnaire (FFQ) in Q2 was not taken into use before March 2002, and before that, the women answered to a different FFQ, covering diet during the year prior to pregnancy, which explains the many pregnancies without

dietary data. To avoid the use of multiple dependent observations, we included data from the first pregnancy for women participating in MoBa with more than one pregnancy, excluding $n = 10,964$ additional pregnancies by the same mother. In total, 71,648 mother-child pairs were considered eligible for the study. From these dyads, $n = 17,873$ had responded to the follow-up questionnaire at 8 years. Infants with birth weight $\pm 4SD$ ($n = 526$), participants lacking information on height and/or weight at 8 years were excluded ($n = 2034$) and additional $n = 62$ were excluded using a $\pm 4SD$ approach when

cleaning height, weight and BMI data. Children in the dataset who were <7 years (84 months) or >9.5 years (114 months) at the time of completing Q9 were also excluded ($n = 262$). The final sample used in this study thus included 14,989 mother and child pairs, which comprised 84% of the respondents with data from the 8-year questionnaire and 21% of the mothers initially considered eligible for the study.

2.2 | Main exposure

The primary exposure in this study was child adherence to the NND at 6 months, 18 months, 3 and 7 years of age assessed by previously developed child NND scores in MoBa (Agnihotri et al., 2020). These were developed with the intention to resemble the maternal NND score (Hillesund et al., 2014) and aimed to capture a potentially healthy and sustainable infant and child diet throughout childhood years. As the number of dietary variables in the child questionnaires was less specific and far less extensive than in the maternal FFQ, the developed child diet scores had to be adapted accordingly. Hence, the dietary components differ somewhat between the four child scores but is represented through their potential of contributing to a healthy, local or sustainable dietary pattern or dietary behaviours.

In brief, for each age, a variety of dietary variables from the questionnaires were selected to construct subscales as similar as possible to the subscales used in the maternal NND score. The mothers were mainly asked to respond to 'How often does your child usually eat/drink the following' with response alternatives varying slightly between questionnaires. All response options were recoded to reflect a weekly consumption. Missing was defined as having incomplete data on all food items that were included in construction of each child diet score. This was the case for $n = 118$ (0.8%) at 18 months, $n = 461$ (3.6%) at 3 years and $n = 153$ (1.2%) at 7 years within the final sample. For the remaining missing food items, an assumption of null intake was made in accordance with recommendations by Cade et al. (2002). These items were recoded to 0 (never/seldom) to avoid losing all dietary information for respondents with incomplete data for a given item. This was done for all scores, except for at age 6 months, as there were few missing items at this measure point. All respondents at each age assessment were included for development of the scores and in determining the cut-offs ($n = 89,315$ at 6 months, $n = 68,599$ at 18 months, $n = 57,911$ at 3 years and $n = 34,986$ at 7 years). This was done to utilize most of the data and to get as representative cohort-specific dietary information as possible. The cut-offs of the subscales used to construct the diet scores were thus derived from a larger sample than the final sample used in this study.

The subscales were mostly dichotomized by the median (frequency of weekly consumption) and coded to give either 0 or 1 point, where receiving 1 point acknowledged a healthier food choice or a consumption above the median. Some subscales were scored according to responding 'yes' or 'no' to a question, where 'yes' indicated the favourable health behaviour. The sum of the subscales was

further computed into a continuous NND child score. Finally, each score was divided into low, medium and high adherence groups with the intention to create as equally sized groups as possible. Where this was not possible, for example, where a certain cut-off resulted in substantially larger low or high adherence groups, cut-offs were chosen to yield the low and high adherence groups as equally proportioned as possible.

2.3 | NND score at 6 months

The NND score at 6 months included homemade versus commercially prepared food, as reported by the mother, and breastfeeding as parts of potentially healthy and sustainable dietary habits. This score mainly captures the sustainability prospects of the NND and not the Nordic elements due to the limited number of diet variables in the questionnaire. The subscales of the score and the included food items of each score is presented below.

1. Consuming homemade fruit puree more frequently than commercially prepared fruit puree;
2. Consuming homemade dinners more frequently than commercially prepared dinners;
3. Consuming homemade porridge more frequently than commercially prepared porridge;
4. Being exclusively breast-fed for at least 4 months;
5. Still being breastfed at the time of responding to the 6-month questionnaire;
6. Drinking water far more frequently than sweetened beverages.

The subscales were summarized into a total score (0–6 points) and were divided into low (0–1 point), medium (2–3 points) and high (4–6 points) NND adherence at 6 months.

2.4 | NND score at 18 months

The score at 18 months captures a potentially healthy diet and some prospects regarding locality/sustainability. The Nordic characteristics are mainly represented by potatoes, peas and beans, porridge and fish. The score at 18 months is briefly described as follows:

1. Fruits: eating fruits more than 10.5 times a week;
2. Vegetables: eating vegetables more than 5.5 times a week;
3. Peas and beans: eating peas and beans more than 5 times a week;
4. Potatoes: eating more potatoes relative to rice and pasta;
5. Porridge: eating more homemade porridge/baby cereal relative to commercially prepared porridge/baby cereal;
6. Fish: eating fish more than 2.13 times a week;
7. Milk: drinking more milk relative to fruit juice;
8. Water: drinking more water relative to sweetened beverages;
9. Homemade food: eating more homemade dinners relative to commercially prepared baby food.

After summarizing the subscales, the score values at 18 months ranged from 0 to 9 points and were further divided into low (0–3 point), medium (4–5 points) and high (6–9 points) NND adherence.

2.5 | NND score at 3 years

The score at 3 years mainly represents a generally healthy diet, as more specific dietary variables related to the NND were not available in this questionnaire. The score at 3 years is briefly described as follows:

1. Fruits: eating fruits more than seven times a week;
2. Vegetables: eating vegetables or salad more than five times a week;
3. Potatoes: eating more potatoes relative to rice and pasta;
4. Fish: eating fish more than 2.12 times a week;
5. Milk: drinking more milk relative to fruit juice;
6. Sweetened beverages: drinking sweetened beverages less than 2.5 times a week.

The 3-year score (0–6 points) was divided into low (0–1 point), medium (2–3 points) and high (4–6 points) NND adherence.

2.6 | NND score at 7 years

The score at 7 years captures a Nordic diet more specifically than the former scores, as the dietary questionnaire was more extensive at this age. The score at 7 years is briefly described as follows:

1. Local fruits: eating apple, pear and grapes more than 3.5 times a week;
2. Root vegetables: eating carrots more than 1.5 times a week;
3. Cabbages: eating kale, cauliflower and broccoli more than 1.5 times a week;
4. Potatoes: eating more potatoes relative to rice and pasta;
5. Whole grain bread: reporting no consumption of white bread;
6. Oatmeal: eating muesli or oatmeal more than 1.5 times a week;
7. Fish: eating fish more than 2 times a week;
8. Milk: drinking more milk relative to fruit juice;
9. Water: drinking more water relative to sweetened beverages.

The sum of the subscales at 7 years of age yielded a score ranging from 0 to 9 points, and it was further divided into low (0–3 points), medium (4–5 points) and high (6–9 points) NND adherence.

2.7 | Outcome variable

Child overweight was assessed from body mass index (BMI, kg/m²) computed from parent-reported child height and weight at 8 years. The distribution of weight and BMI was skewed and was therefore

logarithmically transformed before computing Z-scores. BMI cut-offs to assess overweight were age- and gender-specific as recommended by Cole et al. (2000).

2.8 | Covariates

Childhood overweight and obesity have been shown to be associated with many maternal and environmental factors (Trandafir & Temneanu, 2016). The following covariates were considered because of their potential association with the exposure and outcome: child sex, child birth weight (continuous), maternal educational attainment (12 years or less, 13–16 years, 17 years or more), maternal smoking during pregnancy (no/occasionally/daily), maternal age at delivery (years), parity (0–4 previous births), marital status (cohabitating/single), maternal prepregnant BMI from self-reported height and weight (BMI < 25 kg/m² vs. BMI ≥ 25 kg/m²) and maternal NND score. Child height, weight and BMI at 8 years (continuous) were included for descriptive purposes. Paternal BMI (BMI < 25 kg/m² vs. ≥ 25 kg/m²) calculated from height and weight reported by the mother was included for the same purpose and for further examination of the data. Data on child sex, birth weight, maternal age, parity and marital status at delivery were derived from the MBRN, child height and weight at 8 years were retrieved from Q8, and the remaining information was obtained from Q1. Most of the maternal data was collected during pregnancy.

2.9 | Statistical analysis

All statistical analyses were performed using the Statistical Package for the Social Sciences (IBM SPSS Statistics, version 24.0). Mother and child characteristics according to child NND adherence at 7 years are presented with proportions (%) for categorical variables and as means with standard deviations (SD) for continuous variables. Differences in means and proportions across the NND-adherence categories were tested using Pearson's chi-squared test and one-way analysis of variance (ANOVA), respectively. To examine the association between the age-specific NND scores and overweight at 8 years, we conducted separate binary logistic regression analyses with each of the NND scores, both in continuous and categorized form. This method was applied as the NND scores measured compliance to the NND differently at each time point across age, and a mixed effect model with the age-specific NND scores as a repeated measure would not be a valid way of modelling trajectories at the individual level. With the continuous diet scores, we assessed the effect of a one-point increase in diet score at each age, respectively, on odds of overweight at 8 years. In the categorized scores, low NND adherence was used as the reference group, and odds ratios (OR) for overweight for the medium and high adherence group were assessed with 95% confidence intervals (CI).

Crude and adjusted odds ratios were estimated in three models (crude, model A and model B), where the adjusted model (A) included child sex, maternal education, maternal age, parity, smoking during pregnancy, marital status, maternal prepregnant overweight and child

birth weight. The last model (B) additionally included the maternal NND score, to remove a potential independent effect of maternal diet during pregnancy. Maternal prepregnant BMI and child sex was investigated for interaction with the relationship between diet scores and odds of overweight, but no evidence for an interaction was found (data not shown). Last, we performed a sensitivity analysis excluding preterm births (birth prior to 37 completed weeks) to assess potential influence on the findings.

2.10 | Ethical considerations

The establishment of MoBa and initial data collection were based on a license from the Norwegian Data Protection Agency and the Regional Committee for Medical Research Ethics. The MoBa cohort is currently regulated by the Norwegian Health Registry Act. The current study was approved by The Regional Committees for Medical and Health Research Ethics (2019/339).

3 | RESULTS

Child and maternal characteristics are described for the whole sample and according to low (29.2%), medium (43.4%) and high (27.4%) child NND score at 7 years of age (Table 1).

Children categorized with high NND score at 7 years of age had higher mean NND score at all previous time points compared to the lower NND categories. They were also taller than the children who were in the lower NND-adherence categories. Mothers of children with high NND adherence at 7 years were more likely to have completed higher education, having fewer previous pregnancies and being older, and were less likely to be smoking during pregnancy or being overweight or obese pre-pregnancy. There was no evidence for differences between the NND-adherence groups regarding marital status, child sex, birth weight, child weight and BMI at 8 years or proportion with overweight at 8 years.

No differences in maternal NND score were observed between the mothers who were considered eligible for inclusion and the analysis sample (data not shown). There was, however, evidence for some differences in maternal and infant characteristics between the two groups. Compared with excluded mothers, mothers in the analysed sample were slightly younger, less likely to have smoked during pregnancy and more likely to have a prepregnant BMI ≥ 25 kg/m². The analysed sample had a lower proportion of mothers with low and high educational level and a higher proportion with a medium educational level, and their offspring were slightly heavier at birth.

3.1 | Regression analysis

Table 2 shows the association between a one-point increase in age-specific NND score and odds of overweight at 8 years. In the crude analysis, there was evidence for an association between NND-score

at 6 months and odds of being overweight at 8 years (Table 2, OR: 0.95; CI [0.91, 0.98] $p < 0.003$). This association was almost entirely attenuated in the adjusted model (OR: 0.99; CI [0.96, 1.03] $p = 0.773$). There was no evidence for an association between the individual NND scores and overweight at any of the other ages.

In Table 3, the association between the categorical age-specific NND-scores and odds of being overweight at 8 years according to medium and high adherence with low adherers as a reference group is presented. In the crude model, children with high NND adherence at 6 months had lower odds of overweight at 8 years (OR: 0.81; CI [0.70, 0.94] $p = 0.005$) but not in the adjusted model. Further examination of the data showed that the inverse association between the NND score at 6 months and overweight at 8 years was mostly explained by maternal education and pre-pregnant weight status (data not shown). No other evidence for an association between the age-specific NND scores and overweight at 8 years was found.

We included the maternal NND score in a model B (model A + maternal NND) to remove a potential confounding effect of maternal diet during pregnancy on the odds of overweight at 8 years (data not shown). This did not change the estimates in either direction.

We performed sensitivity analyses by rerunning all models with preterm births excluded ($n = 1,391$, 9.3%). A noticeable change in estimate was only seen at 6 months with the categorical score at medium vs low (crude: OR: 0.98; CI [0.87, 1.12] $p = 0.807$, adjusted: OR: 1.09; CI [0.96, 1.24] $p = 0.177$) and high versus low (crude: OR: 0.84; CI [0.72, 0.98] $p = 0.026$, adjusted: OR: 1.01; CI [0.86, 1.19] $p = 0.884$).

Post hoc analyses including paternal weight status as a covariate in the model did not impact the results distinctively (data not shown).

4 | DISCUSSION

Using data from a large prospective cohort study, we examined child NND adherence at 6 months, 18 months, 3 years and 7 years and their potential association with childhood overweight at 8 years. In unadjusted analyses, there was evidence for a protective association between higher diet score at 6 months (continuous and categorized) and overweight at 8 years; however, the observed associations were almost entirely removed after adjusting for potential confounders. The observed inverse association between NND score at 6 months and odds of overweight at 8 years in unadjusted results (Tables 2 and 3) was mostly explained by the educational level of the mother and maternal prepregnant weight status. Educational attainment is a commonly used indicator of socio-economic position and may be associated with health and obesity through a variety of factors, such as income, occupation, health literacy and health behaviours (Cohen, Rai, Rehkopf, & Abrams, 2013). Possible mechanisms that have been proposed relating maternal prepregnant weight status to child adiposity are among others epigenetic effects of the foetal environment predisposing the foetus to later overweight/obesity (Lillicrop & Burdge, 2010). This emphasizes the importance of preventing overweight/obesity preconceptionally as excessive pre-pregnant weight can affect the risk of overweight/obesity in future generations (Voerman et al., 2019).

TABLE 1 Child and maternal characteristics of the sample according to level of New Nordic Diet-adherence at 7 years

		Degree of NND adherence at 7 years (N = 12,704)									
		Whole sample		Low (0–3)		Medium (4–5)		High (6–9)		P value	
		N = 14,989		N = 3,665 (28.8%)		N = 5,544 (43.6%)		N = 3,495 (27.5%)			
		Mean or n	SD or %	Mean or n	SD or %	Mean or n	SD or %	Mean or n	SD or %		
Child overweight at 8 years	No	12,855	85.8	3,152	86.0	4,762	85.9	3,000	85.8		0.925
	Yes	2,134	14.2	513	14.0	782	14.1	495	14.2		
Child BMI at 8 years (mean, kg/m ²)		16.31	2.11	16.31	2.11	16.28	2.08	16.32	2.09	0.570	
Child height at 8 years (mean, cm)		132.1	5.9	131.9	5.9	132.0	5.9	132.4	5.8	0.001	
Child weight at 8 years (mean, kg)		28.6	5.0	28.5	5.0	28.5	5.0	28.7	4.9	0.085	
Child birth weight (mean, g)		3639.5	525.7	3632.8	528.2	3639.9	522.8	3641.0	528.0	0.517	
Child sex	Boy	7,541	50.3	1861	50.8	2,810	50.7	1738	49.7	0.463	
	Girl	7,448	49.7	1804	49.2	2,734	49.3	1757	50.3		
NND score at 6 months, 0–6 (mean)		2.5	1.3	2.3	1.2	2.5	1.3	2.7	1.3	<0.001	
NND score at 18 months, 0–9 (mean)		3.9	1.6	3.5	1.6	4.1	1.6	4.7	1.6	<0.001	
Mean NND score at 3 years, 0–6 (mean)		2.7	1.4	2.1	1.2	2.7	1.3	3.4	1.3	<0.001	
Mean NND score at 7 years, 0–9 (mean)		4.5	1.7	2.4	0.7	4.5	0.5	6.5	0.7	<0.001	
Maternal NND score, 0–10 (mean)		4.8	2.0	4.2	2.0	4.8	1.9	5.6	2.0	<0.001	
Maternal age at birth (mean)		30.4	4.4	30.3	4.3	30.4	4.3	30.7	4.3	0.001	
Maternal educational level (completed years)	≤12 years	4,405	30.0	1,241	34.6	1,561	29.2	801	23.7	<0.001	
	13–16 years	6,905	47.0	1,665	46.2	2,509	47.0	1,651	48.8		
	17 years or more	3,378	23.0	688	19.2	1,267	23.7	931	27.5		
Marital status	Cohabiting	14,602	97.4	3,569	97.4	5,412	97.6	3,418	97.8	0.443	
	Single	387	2.6	96	2.6	132	2.4	77	2.2		
Parity	0	6,645	44.3	1,529	41.7	2,510	45.3	1,626	46.5	<0.001	
	1	5,221	34.8	1,370	37.4	1,917	34.6	1,129	32.3		
	2	2,451	16.4	610	16.6	885	16.0	560	16.0		
	≥3	672	4.5	156	4.3	232	4.1	180	5.2		
Smoking during pregnancy	No	13,797	92.5	3,324	91.2	5,149	93.2	3,296	95.0	<0.001	
	Occasional	417	2.8	113	3.1	145	2.6	72	2.1		
	Daily	694	4.7	207	5.7	229	4.1	100	2.9		
Maternal prepregnant overweight (BMI > 25 kg/m ²)	No	9,910	67.8	2,326	64.8	3,689	68.2	2,440	71.5	<0.001	
	Yes	4,716	32.2	1,261	35.2	1,721	31.8	973	28.5		
Paternal overweight (BMI > 25 kg/m ²)	No	6,502	45.3	1,514	43.3	2,454	46.0	1,602	47.7	0.001	
	Yes	7,852	54.7	1,986	56.7	2,877	54.0	1,757	52.3		

Note. Chi-squared test for independence used for comparisons of categorical variables across adherence categories. One-way ANOVA used for comparisons of continuous variables across adherence categories.

Abbreviations: NND, New Nordic Diet; SD, standard deviation; BMI, body mass index.

TABLE 2 Associations between a one-point increase in the age-specific NND-scores and the odds of being overweight at 8 years

NND-score (continuous)	N	Crude	P value	Adjusted	P value
		OR (95% CI)		OR (95% CI)	
Maternal score	14,258	1.00 (0.98, 1.03)	0.843	1.02 (0.99, 1.04)	0.195
6 months	14,206	0.95 (0.91, 0.98)	0.003	0.99 (0.96, 1.03)	0.773
18 months	13,057	0.99 (0.96, 1.02)	0.470	1.00 (0.97, 1.03)	0.916
3 years	11,774	0.97 (0.94, 1.01)	0.127	0.99 (0.96, 1.03)	0.775
7 years	12,007	0.99 (0.96, 1.03)	0.697	1.02 (0.99, 1.05)	0.236

Note. Adjusted for child sex, maternal education, smoking during pregnancy, maternal age at birth, parity, marital status, maternal pre-pregnant overweight and child birth weight.

Abbreviations: NND, New Nordic Diet; OR, odds ratio; CI, confidence intervals.

TABLE 3 Associations between categorized age-specific NND-scores and odds of being overweight at 8 years

		Medium vs. low adherence	P value	High vs. low adherence	P value
		OR (95% CI)		OR (95% CI)	
Maternal score	(N = 14,258)				
	Crude	1.02 (0.90, 1.15)	0.797	0.99 (0.88, 1.11)	0.825
	Adjusted	1.07 (0.94, 1.21)	0.303	1.05 (0.93, 1.19)	0.408
6 months	(N = 14,091)				
	Crude	0.95 (0.85, 1.07)	0.401	0.81 (0.70, 0.94)	0.005
	Adjusted	1.05 (0.93, 1.16)	0.402	0.97 (0.83, 1.13)	0.724
18 months	(N = 13,057)				
	Crude	0.95 (0.85, 1.06)	0.345	0.94 (0.82, 1.08)	0.377
	Adjusted	0.96 (0.86, 1.08)	0.506	0.99 (0.86, 1.14)	0.883
3 years	(N = 11,774)				
	Crude	1.07 (0.94, 1.23)	0.303	0.94 (0.81, 1.09)	0.415
	Adjusted	1.10 (0.96, 1.26)	0.177	1.01 (0.87, 1.18)	0.887
7 years	(N = 12,007)				
	Crude	0.99 (0.88, 1.13)	0.935	1.00 (0.87, 1.15)	0.978
	Adjusted	1.05 (0.93, 1.20)	0.421	1.12 (0.97, 1.29)	0.117

Note. Adjusted for child sex, maternal education, smoking during pregnancy, maternal age at birth, parity, marital status, maternal pre-pregnant overweight and child birth weight.

Abbreviations: NND, New Nordic Diet; OR, odds ratio; CI, confidence intervals.

Results from the performed sensitivity analyses suggest that the unadjusted inverse association between the diet score at 6 months and overweight at 8 years was influenced by the premature infants in the sample. This finding could represent a stronger protective association with breastfeeding and breastfeeding duration in this group of children or timing of complimentary feeding. Future studies are encouraged to examine this finding further.

Two of the diet score subscales at 6 months addressed breastfeeding, and some studies have shown that breastfeeding can be one of many factors that are protectively associated with childhood overweight/obesity (Lagström, Lande, & Thorsdottir, 2013; Spatz, 2014). The body of literature does, however, indicate that the protective effect is mostly evident during childhood and adolescence and that long-term effects are unclear (Spatz, 2014). In a previous MoBa study, no evidence of a protective effect of full breastfeeding at

5 months, or breastfeeding beyond 1 year, was found on child weight development during the first 7 years of life, which is line with the findings in our study (Kristiansen et al., 2015). Another study has shown that breastfed infants provided with only homemade complementary food as compared to both homemade and commercially produced food had a significantly increased dietary diversity during the first year of life and lower levels of adiposity (Mok et al., 2017). As such, a combination of breastfeeding and serving exclusively homemade complementary food could be of particular benefit to the child's future weight status, although this could not be demonstrated in our data.

High NND adherers at 7 years had a higher mean NND score throughout childhood as seen from Table 1. Hence, an infant diet as captured by high NND score at 6 months could foster a healthier diet in later childhood, which has also been previously demonstrated in a MoBa study with other dietary indexes (Bjelland et al., 2013). Other

studies have also confirmed a moderate tracking of dietary patterns from infancy to childhood (Lioret et al., 2015) and from early childhood to later childhood (Northstone & Emmett, 2008).

In a review of child diet quality indices (Marshall et al., 2014), only eight out of 24 studies reported an association between dietary patterns and overweight/obesity. The authors argue that this may partly be explained by poor study design and that data is derived from studies which are not specifically designed for the intended research question (Marshall et al., 2014). This could also be an explanation for the lack of evidence of an association in our study. We would expect a lower prevalence of overweight/obesity in the high NND group, as the mothers of these children had higher education, were less often overweight/obese and followed a healthier diet during pregnancy. Moreover, the prevalence of overweight 8-year-olds in our sample was 14.2%, which is lower than what was found in another Norwegian sample (20.2%; Glavin et al., 2014). We know that the mothers who initially chose to participate in the MoBa were older, more often cohabitating, nonsmokers and frequent users of multivitamin and folic acid supplement (Nilsen et al., 2009). This could suggest that there is an underlying possibility of self-selection bias with a sample that is healthier than the general population and that child overweight is underrepresented (Nilsen et al., 2009). A potential association could have been attenuated due to this.

Furthermore, the children in the high NND-adherence group were taller than the children in the middle and the low NND categories (Table 1). There were no differences in weight status across the categories, which may imply that adhering to a healthy Nordic diet can be related to growth in children. However, it could also be explained by a parental educational factor and thus a heritable component, as height has been associated with educational attainment (Galobardes et al., 2012). A strong educational gradient across the developed child diet scores has also previously been demonstrated in our data (Agnihotri et al., 2020).

We may not have been able to truly identify the overweight and obese children, as BMI as a tool may not be precise enough for such identification. Despite using age and sex-specific BMI cut-off values for overweight in children (Cole et al., 2000), it has been suggested that the scaling power of height in paediatric populations should be closer to 3 instead of 2, due to the developmental phase where weight is influenced by height to a greater extent (Cole, 1986; De Lorenzo et al., 2019). This was well demonstrated in U.K. birth cohort where low diet quality during early childhood was found to be associated with adiposity at 6 years of age but not with BMI (Okubo et al., 2015). As BMI failed to demonstrate an association where DXA was able to, the authors suggest that BMI may be an insufficient measure to identify adiposity in early childhood. An association between diet quality and objectively acquired weight status was also demonstrated in a cross-sectional study of 1700 British children aged 9–10 years (Jennings, Welch, van Sluijs, Griffin, & Cassidy, 2011). Dietary quality was assessed using 4-day food diaries and three predefined healthy diet scores. Anthropometric data were acquired by measurement, and the results showed that two of the scores but not the Mediterranean diet score (MD) were independently associated with weight status, even after

adjustment for covariates known to be related to child overweight/obesity. The lack of an association between the MD and weight status was argued to be explained by the MD using the median to define adherence to the dietary pattern. As the sample followed a dietary pattern atypical to the MD, this may have resulted in some cut-off points being uncharacteristic of the MD, contributing to an attenuation of a possible association (Jennings et al., 2011). Despite of being a widely applied method, using the median to assess cut-off values has been largely debated, as it yields arbitrary cut-offs that may result differently when used in different populations (Waijers, Feskens, & Ocke, 2007). This may also have been a factor of impact in our study.

4.1 | Strengths and limitations

The data used in the current study derive from a large, prospective pregnancy-cohort study conducted in Norway. The large sample size may be considered a strength, as well as the possibility to control for many potential confounders and assessing dietary data prospectively. However, there are limitations to our study. First and foremost, the developed child diet scores may not have been fully able to capture a true exposure to the NND, as the food variety in the child dietary assessment was limited. This has been discussed in detail elsewhere (Agnihotri et al., 2020). Although the diet scores aimed to identify a potentially healthy and sustainable diet, ascertaining sustainability is a complex venture (Burlingame & Dernini, 2012). Nonetheless, the Nordic diet has been regarded as an environmentally friendly diet (Meltzer et al., 2019; Ulaszewska, Luzzani, Pignatelli, & Capri, 2017) with health-promoting prospects (Renzella et al., 2018).

Furthermore, most of the data were self-reported. Possible social desirability and reporting bias cannot be ruled out, especially considering the sensitive nature of reporting body height/weight and possible undesirable food choices. It has been shown that energy intake of overweight and obese children is likely to be underreported, which may obscure potential associations between diet and the outcome of interest (Burrows, Martin, & Collins, 2010). Misreporting of the true consumption may also occur, as parents may have incomplete knowledge of what the child eats throughout the day, for example, in kindergarten, school or with caretakers who live separately. Measurement errors resulting in misclassification of diet score category is likely in this case and may have limited our ability to detect potential true associations between NND adherence and later overweight biasing the results towards the null.

We were not able to control for energy intake in the analyses. Higher scores in Nordic diet indexes have been associated not only with higher diet quality but also with higher energy intake and a slightly higher consumption of meat and non-core foods, such as cakes and sweets (Bjørnarå et al., 2016; Hillesund et al., 2014; Roswall et al., 2015). Consequently, future scores should be energy adjusted to avoid potential confounding of associations by energy intake. However, as total energy intake is a suggested casual pathway to obesity, it has also been argued that such procedures may be an over-adjustment, which in turn can lead to an under-estimation of a true

association (Ambrosini, 2014). Last, data collection at 8 years was still not complete in the applied data file, resulting in a smaller sample size which could have had an impact on the outcome in our study.

5 | CONCLUSION

Children with high NND score at 7 years were on average taller, followed a pattern with a higher mean NND score throughout childhood, and were associated with a favourable socio-economic position of the mothers, compared with the children in the lower categories. Application of NND scores to child diet at 6 months, 18 months, 3 years and 7 years showed no evidence of being protective against overweight at 8 years of age. Although this could reflect true null findings, methodological bias cannot be ruled out. Nonetheless, local and regional diets, such as the Nordic diet, are encouraged from both a sustainability perspective and for their other health-promoting qualities and should be investigated in more detail in relation to other health outcomes.

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CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

CONTRIBUTIONS

ERH, NA, EB and NCØ contributed to the study conception and design. Data collection and data curation were managed by ALB. Material preparation and analysis were performed by NA, NCØ, AW, EB and ERH. The first draft of the manuscript was written by NA, and all authors commented on and revised following versions of the manuscript. All authors have read and accepted the final version of the manuscript.

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Paper III

Adherence to a healthy and potentially sustainable Nordic diet is associated with child development in the Norwegian Mother, Father and Child Cohort Study (MoBa)

RESEARCH

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Adherence to a healthy and potentially sustainable Nordic diet is associated with child development in The Norwegian Mother, Father and Child Cohort Study (MoBa)

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Abstract

Background: The rapid neurodevelopment that occurs during the first years of life hinges on adequate nutrition throughout fetal life and early childhood. Therefore, adhering to a dietary pattern based on healthy foods during pregnancy and the first years of life may be beneficial for future development. The aim of this paper was to investigate the relationship between adherence to a healthy and potentially sustainable Nordic diet during pregnancy and in early childhood and child development.

Methods: This study is based on the Norwegian Mother, Father and Child Cohort Study (MoBa) and uses data from the Medical Birth Registry of Norway (MBRN). In 83,800 mother-child pairs, maternal pregnancy diet and child diet at 6 months, 18 months and 3 years were scored according to adherence to the New Nordic Diet (NND). NND scores were calculated both as a total score and categorized into low, medium, or high adherence. Child communication and motor development skills were reported by parents at 6 months, 18 months, 3 and 5 years, using short forms of the Ages and Stages Questionnaire and the Child Development Inventory. Associations of NND adherence with child development were estimated with linear and logistic regression in crude and adjusted models.

Results: When examining the NND and child developmental scores as percentages of the total scores, we found positive associations between the NND scores (both maternal pregnancy diet and child diet) and higher scoring on child development (adjusted $\hat{\beta}$ s [95% confidence intervals] ranging from 0.007 [0.004, 0.009] to 0.045 [0.040, 0.050]). We further found that low and medium adherence to NND were associated with higher odds of later emerging developmental skills compared to high NND adherence at nearly all measured timepoints (odds ratios [95% CI] ranging from significant values 1.15 [1.03–1.29] to 1.79 [1.55, 2.06] in adjusted analyses).

Conclusions: Our findings support that adherence to a healthy and potentially sustainable diet early in life is important for child development every step of the way from pregnancy until age 5 years.

Keywords: New Nordic diet, Nordic diet, Child diet, Healthy diet score, Child development, MoBa, MBRN

Background

The rapid neurodevelopment that occurs during fetal life and the first years after birth represents a particularly vulnerable phase nutritionally [1]. Insufficient intake of micronutrients such as folic acid, choline, omega-3

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polyunsaturated fatty acids, vitamin B12, zinc, iron, and iodine during pregnancy and/or early infancy, have shown to be associated with impaired neurocognitive development in children [2, 3]. In addition to providing specific nutrients, healthy dietary patterns have been suggested to promote a healthy neurocognitive development through changes in cellular processes, neuroplasticity, or epigenetic mechanisms [4, 5]. There are also indications that an unhealthy diet could limit or delay typical development [3, 6]. The current literature increasingly focuses on the first 1000 days of life as a critical developmental period [1]. Maternal diet quality during pregnancy has previously been shown to be positively associated with child communication and motor development [7] and a causal association between breastfeeding and child cognition and intelligence has also been established [8]. A small, but positive association between a healthy dietary pattern during infancy and early childhood and subsequent child developmental outcomes and/or a negative association between “unhealthy” patterns and cognitive measures has been shown in a systematic review from 2016 [4]. However, as some parts of the brain continue to develop throughout childhood and adolescence [3], a deeper understanding of the overall role and impact of longer-term exposure of potentially healthy dietary patterns on child development is needed.

The health benefits of a Nordic diet have increasingly become an area of interest, as there is an increasing focus on regional and environment-friendly diets [9–12]. The theoretically defined concept of the New Nordic Diet (NND) encompasses foods that are locally available and traditionally consumed in the Nordic countries, and additionally considers the sustainability potential of the diet [9–11]. Previous studies have shown that the Nordic diet, in various forms, is associated with several health-related outcomes in adults [13–20], but the literature regarding children remains scarce. The Danish OPUS-study examined health-effects of offering school meals based on the Nordic diet to school children aged 8–11 years over 6 months [21], and the intervention improved reading comprehension compared to controls, but not concentration performance [22]. Being rich in healthy foods such as fish, oats, whole grain, and root vegetables, it is plausible that adhering to a healthy Nordic diet from pregnancy throughout early childhood could affect child development positively, with immediate as well as long-term impact [11, 23].

Maternal and child diet scores aiming to capture a potentially healthy, local, and traditional Nordic dietary pattern based on the NND have previously been developed in the Norwegian Mother, Father and Child Cohort Study (MoBa) [18, 24]. In the current study, we aim to examine associations between adherence to a healthy and

potentially sustainable Nordic diet during pregnancy and in early childhood and measures of child communication and motor development at different ages in preschool years (6 months, 18 months, 3 years and 5 years of age).

Material and methods

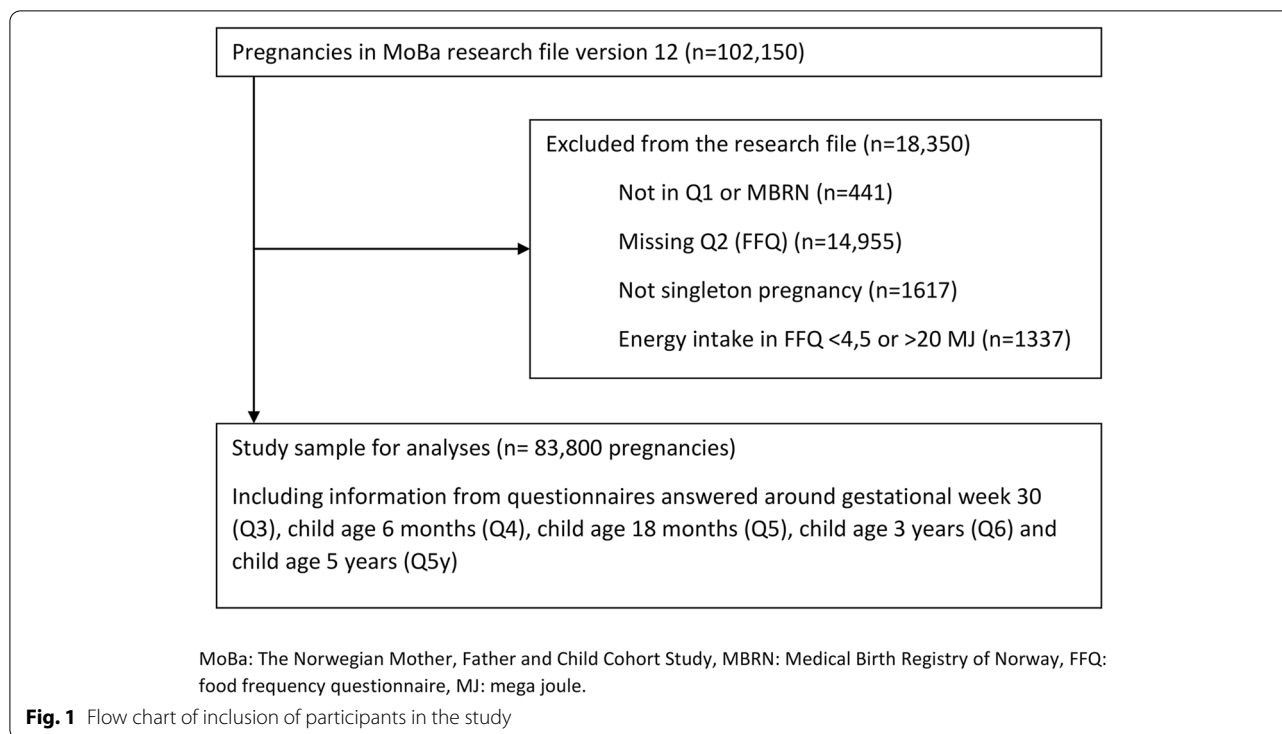
Study population

This study was conducted within MoBa, which is a population-based pregnancy cohort study conducted by the Norwegian Institute of Public Health [25]. Pregnant women were recruited from all over Norway from 1999 to 2008, and 41% of those invited consented to participate. The cohort now includes 114,500 children, 95,200 mothers and 75,200 fathers. The study also includes data from the Medical Birth Registry Norway (MBRN), a national health registry containing information about all births in Norway [26]. The two datasets are linked by using the Norwegian National security number which is available in all Norwegian National health registries. The linkage is performed by the MoBa data team and the research file contains an anonymous serial number. The MoBa cohort study is an ongoing longitudinal health study where data still is collected from participants. The current study is based on MoBa version 12 of the quality-assured data files released for research in January 2019. Response rate for the questionnaires answered during pregnancy (Q1–Q3) was between 91 and 95% with decreasing participation rate over time. When the child was 3 years and 5 years old the response rate was at 59 and 54% respectively [25].

We included participants who had responded to the baseline questionnaire (Q1) around gestational week 17, covering general health and sociodemographic information, the food frequency questionnaire (FFQ) (Q2) answered around gestational week 22 and participants who were registered in the MBRN with singleton births. We excluded women with calculated energy intakes outside the range 4.5–20 MJ/day. The final study population consisted of a baseline 83,800 mother-child pairs (Fig. 1).

Ethics

The establishment of MoBa and initial data collection was based on a license from the Norwegian Data Protection Agency and approval from The Regional Committees for Medical and Health Research Ethics. All MoBa participants provided written informed consent before enrolment into the study. The MoBa cohort is now based on regulations related to the Norwegian Health Registry Act. The current study was approved by The Regional Committees for Medical and Health Research Ethics (2019/339).



Main exposure

NND scores for maternal pregnancy diet and child diet at 6 and 18 months and 3 years have been developed and are described in detail in previously published papers [18, 24, 27]. A brief summary from these papers is presented here.

The child NND scores were developed under the rationale of being as similar as possible to a previously developed maternal NND score in MoBa [18]. Despite referring to the child diet scores as ‘child NND scores’ in this paper for simplicity reasons, it should be noted that they may not reflect the NND to the same extent as the maternal NND score. The NND scores and their corresponding subscales are presented in Table 1.

For each child score, dietary variables from the child questionnaires were selected to construct subscales based on the maternal NND subscales score. The questions assessing child diet were far less extensive and specific compared to the maternal FFQ, hence, the included dietary components differ to some degree from the maternal score and additionally differ between age-specific scores.

In the child dietary assessment, the mothers were mainly asked to respond to “How often does your child usually eat/drink the following” with response alternatives varying slightly between questionnaires. All responses were subsequently recoded to reflect a weekly consumption. We defined missing as having incomplete

data on all food items that were included in the construction of each child diet score. If information was missing for some food items only, an assumption of null intake was made in accordance with recommendations by Cade et al. [28]. These items were recoded to 0 (never/seldom) to avoid losing all dietary information for respondents with incomplete data for a given item. For the maternal score, all missing items were null-imputed.

Further, the included food or drink items were added together in the respective subscales, either to yield a subscale measuring frequency of weekly consumption or to generate a relative measure of consumption of one food group compared to another. The subscales were mostly dichotomized by the median and coded to give either 0 or 1 point, where receiving 1 point acknowledged a healthier food choice or a frequency of consumption above the median of a healthy food item. Some subscales were scored according to responding “yes” or “no” to a question, where “yes” indicated the favourable health behaviour.

The sum of the subscales was further computed into continuous age-specific NND scores. Finally, each score was divided into low, medium, and high adherence groups with the intention to create as equally sized groups as possible. Where this was not possible, cut-offs were chosen to yield the low and high adherence groups as equally proportioned as possible. The rationale for categorizing participants into low, medium, and

Table 1 Description of the New Nordic Diet scores

Maternal score	6-months score	18-months score	3-years score
Scoring range: 0–10 Categories: Low 0–3, medium 4–5, high 6–10	Scoring range: 0–6 Categories: Low 0–2, medium 3–4, high 5–6	Scoring range: 0–9 Categories: Low 0–3, medium 4–5, high 6–9	Scoring range: 0–6 Categories: Low 0–1, medium 2–3, high 4–6
1) Meal pattern: breakfast, lunch, dinner, and evening meal.	1) Consuming more HM^a fruit puree relative to CP^b fruit puree	1) Fruits: eating fruits more than 10.5 t/week	1) Fruits: eating fruits more than 7 t/week
2) Nordic fruits: apples, pears, plums, and strawberries.	2) Consuming more HM dinners relative to CP dinners	2) Vegetables: eating vegetables more than 5.5 t/week ^c	2) Vegetables: eating vegetables more than 5 t/week
3) Root vegetables: carrots, rutabaga, and various types of onions.	3) Consuming more HM porridge over CP porridge	3) Peas and beans: eating peas and beans more than 5 t/week	3) Potatoes: eating more potatoes over rice and pasta.
4) Cabbages: kale, cauliflower, broccoli, and Brussels sprouts.	4) Being exclusively breast-fed for at least 4 months (yes/no)	4) Potatoes: eating more potatoes over rice and pasta.	4) Fish: eating fish more than 2.12 t/week
5) Potatoes: eating more potatoes over rice and pasta	5) Any breastfeeding at 6 months (yes/no)	5) Eating more HM porridge/ baby cereal over CP porridge/baby cereal	5) Milk: drinking more milk over fruit juice
6) Whole grain breads: eating more whole grain breads over refined breads	6) Drinking more water over sweetened beverages	6) Fish: eating fish more than 2.13 t/week	6) Sweet beverages: drinking sweetened beverages less than 2.5 t/week
7) Oatmeal porridge: frequency of eating oatmeal porridge		7) Milk: drinking more milk over fruit juice	
8) Foods from the wild countryside: game, fish, seafood and native berries.		8) Water: drinking more water over sweetened beverages	
9) Milk: drinking more milk over fruit juice		9) Eating more HM dinners over CP baby food	
10) Water: drinking more water over sweetened beverages			

Overview of the diet scores and the corresponding subscales assessing adherence to a healthy and potentially sustainable New Nordic Diet (NND) during pregnancy and child age 6 months, 18 months and 3 years. Food/drink items or words marked in bold reflects the scored item or valued behavior

^a HM homemade

^b CP commercially prepared

^c t/week times a week

high adherence was to be able to compare high vs. lower adherence to the described dietary pattern. This was further used to explore associations between maternal and child diet and developmental outcomes in participating children.

Child developmental outcomes

Child communication skills and motor development at 6 and 18 months, 3 and 5 years, respectively, were assessed with short forms of Ages and Stages Questionnaires (ASQ) and Child Development Inventory (CDI) [29]. ASQ is a parent-completed questionnaire tool that is used to identify potential developmental delay compared to age-peers, in need for further assessment. It is a widely used developmental screening-tool validated for use in Norwegian populations [30, 31] and has been applied in previous MoBa studies of prenatal exposure through maternal diet and child development [32, 33]. In MoBa, the ASQ at 5 years only covers language development. At this age, we used the CDI, completed by the parents in the 5-year questionnaire to assess

motor skills and determine the child's developmental level based on skill-assessment at given ages throughout the first 2 years in life and upwards to six and half years [34].

Outcome dimensions were defined according to the respective instrument manuals [29, 30, 35]. The outcome data were calculated as sum scores as the basis for the analysis, with a lower score indicating fewer milestones achieved by the child at the time of measure. We used simple imputation for participants with less than 50% of items missing on total scores. The missing items were recoded to mean of total score. Participants missing more than 50% of items in a score were excluded at that timepoint of measure. Sensitivity analysis between excluding missing values and imputed values were conducted and there was no significant change in results.

The items used to measure developmental skills changed across age as the child grew older, thus, the measures are not directly longitudinally comparable. The range of the outcome measures across the five timepoints of data collections also differ.

Covariates

Covariates considered for inclusion in the models were baseline variables from questionnaires answered during pregnancy and at birth regarding maternal health and socioeconomic status identified as adjustment factors in previous studies investigating the relationship between diet and child development [32, 36]. The covariates included were parity, maternal age at delivery in four categories, maternal education, maternal pre-pregnancy body mass index (BMI) and marital status. Maternal symptoms of depression were additionally included as a covariate and was measured by a five-item short version of the Hopkins Symptom Checklist, psychometrically derived from the 25-item version [37]. Also included were child sex, gestational age (included in analysis with child NND scores), and age of the child when the questionnaire was answered.

Statistical analysis

Linear regression and logistic regression analysis with robust standard errors were employed to compute crude and adjusted estimates of associations of maternal and age-specific child NND scores with measures of child development from 6 months to 5 years. Both methods were applied to establish a potential positive linear association between the NND scores and child development scores, and to examine whether scoring in the low NND score-categories was associated with developmental delay as expressed by scoring 2 standard deviations (SD) below or lower than the mean developmental score. The given cut-off allows for identification of the lowest scoring individuals within the sample, although the cut-off is not clinically validated for assessment of a specific developmental delay. The distribution of child development scores was highly left skewed with more than 90% of the children scoring within the 90th percentile range at each timepoint. After carefully considering the consequences of comparing exposure and outcome measurements which both had a different number of items and showed different range and SD at the different timepoints, we concluded that longitudinal analysis methods would not be suitable for this study. Instead, we performed cross-sectional analyses on the relationship between exposure and outcome at each timepoint and investigated potential trends and patterns in the results.

In the linear regression model, the percentage of maximum scoring for the developmental outcome and NND scores were computed to give more comparable results across timepoints. For the logistic regression models, the child development scores were dichotomized with 2SD below the mean as cut-off. Developmental score values at -2SD of the mean score or lower were assigned the value 1 (poor outcome), and the rest given the value 0.

For these analyses, the values of the NND score categories (high/middle/low) were reversed with the low NND adherence group being assigned the value 2 and the high adherence was given the value 0 (reference group). More than 10% of the mothers participated more than once in the study and to correct for a possible impact of sibling covariance, we used robust cluster variance estimation in all analyses. The statistical programs, SPSS version 22 (SPSS, Inc., Chicago, IL, USA) and STATA/SE 16.1 were used for the analyses.

Results

Basic maternal and child characteristics of the study sample are described in [Supplementary Information](#) (SI). In previous research, we have shown that mothers with high NND adherence during pregnancy were older, more educated and of higher parity than those with low NND adherence [18]. They were less likely to smoke, more likely to be normal weight and to exercise compared to women with low NND adherence.

Number of participants included in the analyses and properties of the NND scores and child development scores are listed in [Table 2](#). The percentage of children scoring lower than the cut-off of 2SD below the mean developmental score ranged from 3.5% (18 months) to 5.2% (6 months).

When examining the NND and child developmental scores as percentages of the total scores, we found an overall positive association between the NND scores and higher scoring on child development. For maternal pregnancy diet, the $\hat{\beta}$'s and corresponding 95% CIs in the adjusted models ranged from $\hat{\beta}$: 0.012 (0.006, 0.017) (5 years, motor) to $\hat{\beta}$: 0.037 (0.033, 0.042) (developmental score at 18 months) ([Table 3](#)). For the child diet scores, $\hat{\beta}$'s ranged from 0.007 (0.004, 0.009) (NND score at 6 months with developmental score at 6 months) to the strongest level of association observed in a cross-sectional manner at child age 18 months (0.045 [0.040, 0.050]) ([Table 3](#)). NND child diet scores at 18 months and 3 years have a relatively similar level of association to child development at the measured timepoints.

We investigated the odds of scoring low on age-specific developmental measures with low or medium vs. high NND adherence category at any timepoint ([Table 4](#), [Figs. 2 and 3](#)).

Compared with high NND adherence, low and medium adherence categories were associated with higher odds of delayed development at almost all measure points (OR range within significant values in adjusted models: low vs. high: OR; 1.22 [1.06, 1.51] to 1.72 [1.51, 1.95] and medium vs. high: OR; 1.15 [1.04, 1.27] to 1.30 [1.1, 1.47]). We see sustained higher odds of delayed development with low vs. high NND categories, with an exception

Table 2 Description and distribution of the sample according to New Nordic Diet and child development scores

New Nordic Diet score	N	Mean NND score (SD)	Score range	Mean, % of total score	NND categories		
					Low %	Medium %	High%
Maternal pregnancy diet	83,800	4.9 (2.0)	0–10	49	26.1	35.2	38.7
Child diet 6 months	73,575	3.3 (1.3)	0–6	55	26.9	54.5	18.6
Child diet 18 months	62,601	4.2 (1.7)	0–9	47	33.4	43.2	23.3
Child diet 3 years	50,432	2.8 (1.4)	0–6	46	19.5	49.5	31.0
Child development measure tools ^{a,b}	N	Mean (SD)	Score range	Mean, % of total score	Below cut-off (<−2SD) N (%)		
Score 6 months	73,721	103.3 (8.7)	0–110	94	3845 (5.2)		
Score 18 months	63,065	117.0 (14.4)	0–130	90	2182 (3.5)		
Score 3 years	48,110	90.8 (10.1)	0–100	91	2200 (4.8)		
Score 5 years	33,742	66.1 (6.8)	0–70	95	1290 (3.8)		
Language development							
Score 5 years	35,027	11.0 (1.6)	0–12	92	1545 (4.1)		
Motor development							

Number of participants in the analyses and properties of New Nordic Diet (NND) scores (exposure) and child development outcomes at time of measure, such as number of participants, mean score, standard deviation (SD), and score range. Valid percent of participants in categories of low, medium and high adherence to the NND, and number and percentage of participants in the low score child development group (2SD below the mean)

^a Short forms of Ages and Stages Questionnaire (ASQ) and Child Development Inventory (CDI)

^b Developmental scores at 6 months, 18 months and 3 years are based on combining the communication and motor items

Table 3 Associations between the New Nordic Diet and child development examined as percentages of total score

Child development scores ^a		6 months	18 months	3 years	5 years, language	5 years, motor
NND score		$\hat{\beta}$ (95% CI)	$\hat{\beta}$ (95% CI)	$\hat{\beta}$ (95% CI)	$\hat{\beta}$ (95% CI)	$\hat{\beta}$ (95% CI)
Maternal score	Crude	0.020 (0.017, 0.023)	0.034 (0.029, 0.038)	0.027 (0.022, 0.031)	0.015 (0.010, 0.020)	0.028 (0.021, 0.035)
	Adjusted ^b	0.021 (0.018, 0.024)	0.037 (0.033, 0.042)	0.025 (0.020, 0.030)	0.012 (0.006, 0.017)	0.027 (0.020, 0.034)
6 months	Crude	0.010 (0.007, 0.013)	0.028 (0.024, 0.032)	0.018 (0.013, 0.022)	0.020 (0.015, 0.025)	0.015 (0.008, 0.021)
	Adjusted ^c	0.007 (0.004, 0.009)	0.021 (0.017, 0.025)	0.013 (0.009, 0.017)	0.013 (0.008, 0.018)	0.011 (0.005, 0.018)
18 months	Crude		0.063 (0.057, 0.069)	0.039 (0.033, 0.044)	0.025 (0.021, 0.029)	0.004 (0.003, 0.005)
	Adjusted		0.045 (0.040, 0.050)	0.036 (0.031, 0.042)	0.031 (0.025, 0.037)	0.030 (0.022, 0.038)
3 years	Crude			0.036 (0.032, 0.040)	0.016 (0.012, 0.019)	0.003 (0.003, 0.004)
	Adjusted			0.035 (0.031, 0.039)	0.019 (0.014, 0.024)	0.030 (0.023, 0.037)

Crude and adjusted linear regression of New Nordic Diet (NND) scores and child development scores, presented with $\hat{\beta}$ and 95% confidence intervals (CI)

^a Short forms of Ages and Stages Questionnaire (ASQ) and Child Development Inventory (CDI)

^b Adjusted for maternal age, marital status, maternal education, maternal BMI, maternal depression, parity, siblings included in the study population and child age at completion of questionnaire

^c Gestational age was additionally adjusted for in analysis of child diet

for the maternal NND score with language outcome at 5 years (OR; 1.07 [0.92, 1.24]) and child NND score at 6 months with motor developmental outcomes (OR 1.18 [0.99, 1.40]) reported at 5 years. Nearly the same tendency is seen for medium vs. high NND adherence.

Discussion

In this study, we report relatively consistent and robust findings that a healthy diet in early life is positively associated with measures of child development. The robustness of the results was confirmed by analyzing the data both as continuous and binary variables. Despite the

crude way of scoring healthy food intake in the diet score development, we found an overall positive association between higher NND score and scoring better on child development measures, including communication and motoric assessment in this cohort. We also found that being in the low NND adherence group yielded higher odds of delayed development (developmental scores <−2SD) compared to high NND adherence in a dose-response fashion. These associations were found at nearly all measured timepoints of dietary exposure from pregnancy to 6 months, 18 months and 3 years with development at 6 and 18 months and 3 and 5 years. The findings

Table 4 Associations between categorized age-specific New Nordic Diet scores and odds of delayed development

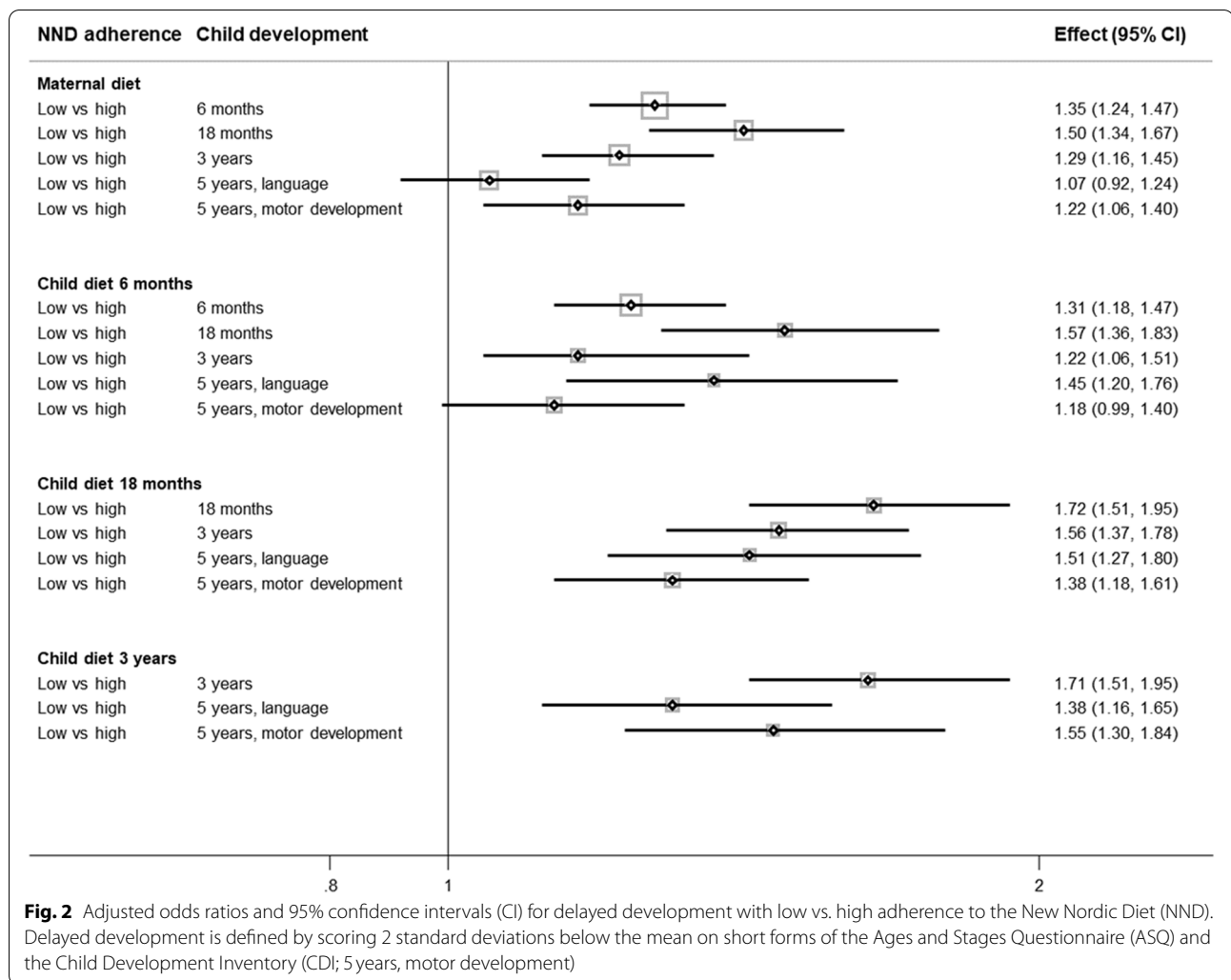
NND adherence categories	6 months			18 months			3 years			5 years, language			5 years, motor		
	Low	Medium	High (ref)	Low	Medium	High (ref)	Low	Medium	High (ref)	Low	Medium	High (ref)	Low	Medium	High (ref)
	OR (95% CI)			OR (95% CI)			OR (95% CI)			OR (95% CI)			OR (95% CI)		
Maternal pregnancy NND score, OR (95% CI)															
Crude	1.33*	1.21*	1	1.45*	1.24*	1	1.31*	1.16*	1	1.14 (0.99, 1.31)	1.00 (0.88, 1.14)	1	1.23*	1.13 (0.99, 1.28)	1
	(1.22, 1.45)	(1.12, 1.31)		(1.30, 1.61)	(1.12, 1.37)		(1.17, 1.45)	(1.05, 1.28)					(1.08, 1.41)		
Adjusted ^a	1.35*	1.22*	1	1.50*	1.25*	1	1.29*	1.15*	1	1.07 (0.92, 1.24)	0.97 (0.84, 1.11)	1	1.22*	1.10 (0.95, 1.23)	1
	(1.24, 1.47)	(1.12, 1.32)		(1.34, 1.67)	(1.12, 1.39)		(1.16, 1.45)	(1.03, 1.29)					(1.06, 1.40)		
Child NND score 6 months, OR (95% CI)															
Crude	1.54*	1.31*	1	1.79*	1.39*	1	1.40*	1.21*	1	1.65*	1.22*	1	1.22*	1.18*	1
	(1.39, 1.71)	(1.19, 1.44)		(1.55, 2.06)	(1.21, 1.58)		(1.22, 1.60)	(1.07, 1.37)		(1.39, 1.97)	(1.04, 1.44)		(1.03, 1.44)	(1.02, 1.37)	
Adjusted ^b	1.31*	1.15*	1	1.57*	1.26*	1	1.22*	1.14 (0.99, 1.27)	1	1.45*	1.21*	1	1.18 (0.99, 1.40)	1.18*	1
	(1.18, 1.47)	(1.04, 1.27)		(1.36, 1.83)	(1.10, 1.45)		(1.06, 1.51)	(1.02, 1.27)		(1.20, 1.76)	(1.02, 1.44)		(1.01, 1.38)	(1.01, 1.38)	
Child NND score 18 months, OR (95% CI)															
Crude	1.76*	1.31*	1	1.76*	1.31*	1	1.61*	1.27*	1	1.68*	1.32*	1	1.38*	1.06 (0.91, 1.22)	1
	(1.56, 2.00)	(1.16, 1.48)		(1.56, 2.00)	(1.16, 1.48)		(1.42, 1.83)	(1.12, 1.44)		(1.43, 1.99)	(1.12, 1.55)		(1.19, 1.60)	(1.08, 1.42)	
Adjusted	1.72*	1.30*	1	1.72*	1.30*	1	1.56*	1.26*	1	1.51*	1.26*	1	1.38*	1.07 (0.92, 1.24)	1
	(1.51, 1.95)	(1.10, 1.47)		(1.51, 1.95)	(1.10, 1.47)		(1.37, 1.78)	(1.11, 1.43)		(1.27, 1.80)	(1.07, 1.49)		(1.18, 1.61)	(1.07, 1.49)	
Child NND score 3 years, OR (95% CI)															
Crude	1.77*	1.33*	1	1.77*	1.33*	1	1.77*	1.33*	1	1.50*	1.20*	1	1.50*	1.24*	1
	(1.56, 2.00)	(1.19, 1.48)		(1.56, 2.00)	(1.19, 1.48)		(1.56, 2.00)	(1.19, 1.48)		(1.27, 1.79)	(1.04, 1.39)		(1.28, 1.77)	(1.08, 1.42)	
Adjusted	1.71*	1.30*	1	1.71*	1.30*	1	1.71*	1.30*	1	1.38*	1.13 (0.97, 1.32)	1	1.55*	1.29*	1
	(1.51, 1.95)	(1.16, 1.44)		(1.51, 1.95)	(1.16, 1.44)		(1.51, 1.95)	(1.16, 1.44)		(1.16, 1.65)	(1.07, 1.49)		(1.30, 1.84)	(1.12, 1.49)	

Odds ratios (OR) and 95% confidence intervals (CI) of association between New Nordic Diet (NND) adherence categories (low, medium, high) and delayed child development (scoring 2 standard deviations below the mean)

^a Adjusted for maternal age, civil status, maternal education, maternal BMI, maternal depression, parity, siblings included in the study population and child age at completion of questionnaire

^b Gestational age was additionally adjusted for in analysis of child diet

* P-value <0.05

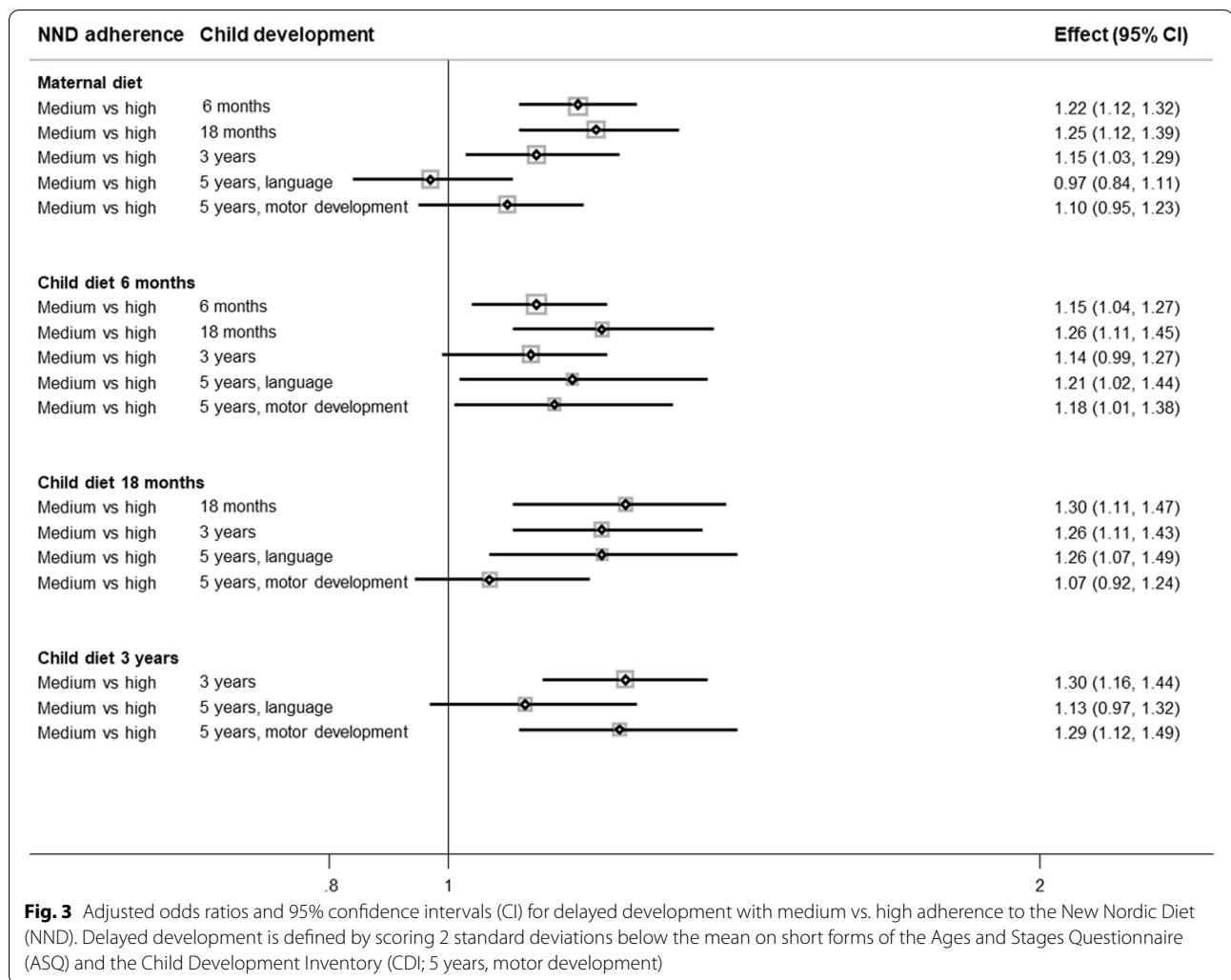


are in line with other European studies which have found that higher adherence to healthy dietary patterns is associated with improved school performance [24] and higher childhood IQ [38]. We did not observe an association at 5 years (language) with high vs. low or medium maternal NND adherence, which could imply that other factors than maternal diet during pregnancy may be of more importance for language development by this age.

Previous studies in MoBa have shown that maternal diet quality described by various measures of a healthy diet, is associated with a decrease in ADHD symptoms and diagnosis at 8 years [39], and that higher maternal intake of unhealthy foods during pregnancy predict emotional problems among children at the age of five [40]. However, our study is, to our knowledge, one of few that has explored associations between both maternal and child dietary patterns and child communication and motor development at multiple timepoints. Showing robust associations with measures of diet quality

over time from the fetal life in the womb until 5 years of age, reinforces the importance of overall diet quality, and probably specific nutrients, on child communication and motor development. This is corroborated by current knowledge that healthy dietary patterns may promote child neurocognitive development through changes in cellular processes, neuroplasticity, or epigenetic mechanisms, as stated by Tandon et al. [4, 5].

It should be noted that the observed associations showing higher development scores with healthier diet are found in a presumably healthy Norwegian population with no lack of access to healthy food, most parents able to afford a healthy diet for their child, and with dietary guidelines easily accessible. This finding shows that a suboptimal diet can potentially provide limitations on a child's cognitive development and is not confined only to developing countries [6, 41], but also holds for developed countries. A nation's prosperity and health rely on the healthy development of their younger generations.



Therefore, a larger focus on how to provide a healthy diet, is important in early childcare. Health authorities should take note that a healthy diet is important not only for short- and long-term health, but presumably for early cognitive and motor development as well. The diet scores applied in these analyses were constructed to capture potentially sustainable aspects of diet. Given the recent increased attention on the necessity of having more sustainable diets [12], the beneficial associations of higher diet scoring with aspects of child development have additional benefits that should also be conveyed to the public.

Strengths and limitations

The strengths of the present study include the large sample size and prospective analyses linking diet and cognitive development at multiple timepoints from pregnancy throughout early childhood. Additionally, several potential confounders known to be associated with maternal and child diet and cognitive development were accounted

for in the adjusted models. Nonetheless, there are several limitations to consider. Although the child diet scores were developed on the rationale of capturing a healthy, local, and potentially sustainable Nordic diet, the dietary assessment in the child questionnaires were not as comprehensive as in the maternal FFQ. This may have limited the child scores’ ability to truly reflect a sustainable diet with Nordic characteristics as intended. This is discussed thoroughly elsewhere [24].

The NND scores are constructed to capture adherence to a healthy Nordic diet by measuring frequency of intake of some key healthy food items in the diet. As the diet scores do not measure unhealthy food items directly, a low score is characterized by having less of the healthy food items and therefore primarily reflects the consequence of not having these healthy food items in the diet. Moreover, the method chosen to define cut-offs for the NND categories may have contributed to misclassifications due to the arbitrary approach. On the other hand,

the normal distribution of the scores was carefully interpreted when deciding the cut-off values. Furthermore, the use of median values as cut-off in most subscales of the age-specific diet scores were also data-driven based on dietary intake in the MoBa cohort, which may not be representative for the rest of the population. The mothers participating in MoBa were older (>25), more often cohabitating and more frequent users of multivitamin and folic acid supplements compared to non-participating mothers in Norway [42]. Smokers and mothers with more than two previous births were underrepresented. Hence, self-selection bias and residual confounding cannot be ruled out. Also, with self/parent-reported dietary data, the possibility of misclassification to the score categories due to social desirability bias cannot be excluded.

The shortened ASQ subscales used in the MoBa holds another potential limitation. The MoBa questionnaires covered a multitude of developmental and mental health measures and provided limited space. The child's age at completion of the questionnaires varied and the selected items would therefore be adequate for somewhat younger/older aged children as well. To account for this, the age at completion of the questionnaire was used as a covariate in the analyses.

The ASQ is regarded as an effective diagnostic tool of developmental delay and/or deviance [30, 35]. Yet, the shortened instrument used in the current study is limited to ascertain associations between differential diet quality and severely poor scoring (<-2SD) or higher scoring on ASQ. The findings would translate to whether the child is reaching developmental milestones slower or faster than expected for the child's given age. A low score (<-2SD) on the shorter ASQ is not necessarily reflecting a clinically defined developmental delay impacting the child's daily functioning. For such a conclusion to be made, a more complete assessment would be necessary with broader developmental scales and parent-completed questionnaires on child impairment.

Furthermore, both exposure and outcome variables examined in this study, differed from one-another at each timepoint, preventing us from assessing the relationship between a healthy and potentially sustainable Nordic diet and child development with repeated measures methods. The heterogeneity within the NND scores and the shortened ASQ limits the possibility to compare effect sizes across age-specific analyses, as they capture the NND and child development differently at each timepoint.

Finally, as the current study has data derived from an observational study, any causal interpretation cannot be ascertained. Still, it should be noted that although the effect size for most associations were small, they were remarkably consistent and perhaps likely to be of relevance in a public health perspective.

Conclusion

We found a robust association between a healthy and potentially sustainable diet early in life and child communication and motoric development in the Norwegian Mother, Father and Child Cohort Study. This association was found at several timepoints, from maternal diet during pregnancy to child diet at age 3 years. Our results highlight diet quality as a prerequisite for optimal development and reaching your potential, which is also relevant in developed countries, such as Norway. A higher focus on the relevance of diet for communication and motoric development beyond physical health and growth seems warranted.

Abbreviations

ASQ: Ages and Stages Questionnaire; BMI: Body mass index; CDI: Child Development Inventory; CI: Confidence interval; FFQ: Food frequency questionnaire; MBRN: Medical Birth Registry of Norway; MoBa: The Norwegian Mother, Father and Child Cohort Study; NND: New Nordic Diet; OR: Odds ratio; SD: Standard deviation.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12937-022-00799-5>.

Additional file 1: Supplementary Information 1. Summary statistics for maternal and child characteristics.

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Authors' contributions

NA, ERH, EB and NCØ contributed to the study conception and design and developed the original diet scores. The preparation of the diet score material was done by NA and ERH. Current data set preparation was performed by KV, and analyses were performed by KV with statistical guidance by MLB. The first draft of the manuscript was written by KV, NA and NCØ. SS was responsible for the conceptualisation and interpretation of the ASQ and other development scores. All authors commented on and revised following versions of the manuscript. The authors read and approved the final manuscript.

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Availability of data and materials

The consent given by the participants does not open for storage of data on an individual level in repositories or journals. Researchers who want access to data sets for replication should submit an application to datatilgang@fhi.no. Access to data sets requires approval from The Regional Committee for Medical and Health Research Ethics in Norway and an agreement with MoBa.

Declarations

Ethics approval and consent to participate

The establishment of MoBa and initial data collection was based on a license from the Norwegian Data Protection Agency and approval from The Regional Committees for Medical and Health Research Ethics. The MoBa cohort is now

based on regulations related to the Norwegian Health Registry Act. The current study was approved by The Regional Committees for Medical and Health Research Ethics (2019/339). All MoBa participants provided written informed consent before enrolment into the study.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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Appendix A

Invitation to participate in MoBa

den norske *Mor & barn undersøkelsen*



Dere har svarene

Vårt ønske for fremtiden er
god helse for mor og barn
– men da må vi vite mer.
Det kan dere hjelpe oss med.



Invitasjon

til deg som skal bli mor og til deg som skal bli far

- Invitasjonen går til gravide og deres partnere som skal til ultralyd i 17. - 19. svangerskapsuke.
- Til dere som har deltatt tidligere: Vi håper dere blir med igjen. Data om søsken er viktig for å belyse samspillet mellom arv og miljø.

Hensikten med Den norske mor og barn undersøkelsen er å få mer kunnskap om årsaker til sykdom og helseskader. Bedre kunnskap gir nye muligheter til bedre forebygging og behandling. Forskning viser at forhold i svangerskapet kan ha større betydning for barnets fremtidige helse enn man tidligere har vært klar over. Betydningen av fars helse, leve-

vaner og arbeidsmiljø har også fått økt oppmerksomhet.

Undersøkelsen vil gå over lang tid og følge barnet fra mors mage og inn i voksen alder. Dette gir unike muligheter til å finne ut hvordan forhold tidlig i livet virker inn på senere helse. For å studere årsaker til sjeldne sykdommer, som for eksempel medfødte misdannelser og barnekreft, må vi ha så mange som 100 000 deltakere.

Undersøkelsen har tre hovedtemaer:

- **BARNET I MORS LIV.** Mye av grunnlaget for barnets senere helse legges i denne perioden. Heldigvis er barnet godt beskyttet, men helt isolert er det likevel ikke. Kontakten med omverden går gjennom mor. Spørsmålene er mange: Hvilken betydning har mors kosthold og

levevaner? Hvorfor fødes noen barn for tidlig? Hvorfor fødes noen barn med hjertefeil eller leppe/ganespalte?

- **BARNETS SENERE HELSE.** Vi mangler kunnskap om årsaker til sykdommer som allergi, astma, diabetes, kreft, leddgikt eller andre lidelser som kan oppstå hos barn. Vi vet heller ikke nok om årsaker til psykiske vansker og atferdsproblemer. Vi spør også hvordan amming og kosthold i første leveår påvirker barnets helse senere. Hvilken betydning har samspillet mellom arv og miljø for utvikling av sykdom?

- **KVINNEHELSE.** Svangerskapet er for mange forbundet med større eller mindre plager, og vi vet lite om årsakene. Hvorfor plages så mange gravide med kvalme eller med bekkenløsning? Hvorfor får noen depresjoner i forbindelse med svangerskap og fødsel? Hva kan

være årsaker til svangerskapsforgiftning? Kan vi finne ut mer om risiko og beskyttelsesfaktorer for kroniske sykdommer som muskel-skjelettlidelser og kreft?

Deltakelsen er frivillig. Mors deltakelse er uavhengig av om far vil være med, men fars deltakelse forutsetter at mor er med. Vi håper du/dere velger å delta.

Hva ber vi mor gjøre?

SAMTYKKE: Les nøye denne brosjyren og den vedlagte samtykkeerklæringen. Undertegn samtykket og returner det i den frankerte konvolutten sammen med spørreskjemaet, helst før du skal til ultralydundersøkelsen. Kopi av samtykke til mor står på baksiden av brosjyren.

SPØRRESKJEMAER: Du svarer på spørreskjemaer som gjelder spørsmål om helse, sykdom og levevaner både hos deg og barnet ditt. Du får tilsendt tre spørreskjemaer i løpet av svangerskapet. Senere får du et spørreskjema når barnet er 6 måneder, og videre med ett til to års mellomrom til barnet er 7 år.

Resultatene fra ultralydundersøkelsen vil også bli lagret.

BLODPRØVER: Det blir tatt en blodprøve og en urinprøve av deg når du kommer til ultralydundersøkelsen i 17.-19. svanger-

skapsuke, samt en blodprøve like etter fødselen. Det blir også tatt en blodprøve av barnets navlesnor etter at den er klippet og skilt fra barnet.

Hva ber vi far gjøre?

SAMTYKKE: Les nøye brosjyren og den vedlagte samtykkeerklæringen som ligger i mappen til far. Undertegn samtykket og returner det i den frankerte konvolutten sammen med spørreskjemaet. Ta vare på kopien av samtykket. Da kan du til enhver tid se hva du har skrevet under på.

SPØRRESKJEMAER: Du fyller ut det vedlagte skjemaet til far.

BLODPRØVE: Det blir tatt én blodprøve av deg i forbindelse med ultralydundersøkelsen.

Alle disse opplysningene lagres ved Nasjonalt folkehelseinstitutt i Oslo og Bergen. Det kan også bli innhentet opplysninger om mor og barn fra helseregistre, slik som Medisinsk fødselsregister og fra andre kilder.

Hva har dere igjen for å delta?

Deres bidrag er avgjørende fordi dere hjelper til med å fremskaffe kunnskap som i fremtiden vil komme gravide kvinner og deres barn til gode. Dere vil være viktige støttespillere for forskningen

knyttet til mor og barns helse. Dere får førstehåndsinformasjon om funn fra undersøkelsen i årlige nyhetsbrev og på våre web-sider.

Hver gang vi passerer 10 000 nye deltakere, trekker vi en gevinst på kr 10 000. Kanskje blir du den heldige?

Personvernet står sterkt

Bare i anonymisert form vil dataene bli tilgjengelig for forskerne. Navn og personnummer fjernes fra alle spørreskjemaene, blod- og urinprøvene lagres med et deltakernummer. Koblingen til navn og fødselsnummer oppbevares slik at bare få personer med spesiell tillatelse har tilgang til koblingen. Resultatene fra undersøkelsen vil bli analysert og presentert på gruppenivå slik at verken du eller barnet vil kunne gjenkjennes. Det vil heller ikke bli gitt noen tilbakemelding om laboratorieundersøkelsene av deg eller barnet. Den norske mor og barn undersøkelsen har konsesjon fra Datatilsynet, og Regional etisk komité har vurdert undersøkelsen. Dersom det skal gjøres en kopling til andre helseregistre, eller dersom blod- og urinprøvene blir gjenstand for analyser, må det søkes Datatilsynet og Regional etisk komité i hvert enkelt tilfelle. Prøvene vil kunne bli analysert både i Norge og i andre land. Materialet vil utelukkende bli brukt til forskning.

Klart vi er med

Kristine Skagestad Akervold (32)



sivilingeniør, Nesttun
Har to gutter. Deltar i undersøkelsen med begge guttene.

Det er interessant og spennende å være med i et forskningsprosjekt som kan forbedre forholdene for mor og barn, og det er gøy å svare på spørsmålene. Jeg er blitt mer bevisst – både på hva jeg spiser og på barnas utvikling. Dessuten er det veldig motiverende å få nyhetsbrevene fra undersøkelsen der vi får tilbakemelding og nyheter. Jeg ønsker meg et barn til og da skal jeg selvsagt delta igjen. Jeg må bare overtale mannen min først...

Terese Jenssen (23) hjelpepleier,



Svolvær
Har ei jente.

Jeg var ikke i tvil om at jeg ville være med, selv om flere av dem som fikk barn samtidig ikke ville. Jeg tenkte at det kan komme noen til gode seinere, og det er nå ikke så mye arbeid heller. Det er jo flott at mine erfaringer kan bli til nytte for en god sak. Jeg har hatt et bra svangerskap, en lett fødsel og fått en fin unge. Kanskje blir det flere barn. Da skal jeg være med igjen.

Geir Stavran (27) sykepleier,



Asker
Har en gutt.

Jeg er med fordi jeg har stor tro på forebyggende helsearbeid, og Mor og barn undersøkelsen vil bidra til å finne risikofaktorer for sykdom. Det blir bare mer og mer aktuelt å vite hva man gjør i forhold til forurensning, kosthold og livsstil. Det er flott om vi finner ut hvordan vi kan unngå å utsette oss og barna for unødig risiko – kanskje med enkle grep. Arbeidet med skjemaet mitt var helt overkommelig, og samboeren min er ivrig på å følge opp. Får vi et barn til, blir vi med igjen.



KOPI AV SAMTYKKE FRA MOR

Jeg har lest informasjonsbrosjyren om Den norske mor og barn undersøkelsen og er kjent med at opplysningene jeg gir vil bli behandlet strengt fortrolig. Jeg er informert om at undersøkelsen er vurdert av Regional komite for medisinsk forskningsetikk og godkjent av Datatilsynet.

Deltakelse i Den norske mor og barn undersøkelsen innebærer følgende:

- at jeg fyller ut spørreskjemaer, under og etter svangerskapet, om min egen og barnets helse og levekår.
- at jeg gir en blodprøve og en urinprøve i svangerskapet og en blodprøve etter fødselen, og at det tas en blodprøve fra barnets navlesnor etter fødselen.
- at blodprøvene/urinprøven fra meg, og blodprøven fra mitt barn lagres i en biobank på Nasjonalt folkehelseinstitutt. Prøvene blir aidentifisert og lagres med et prøvenummer. Blod/urinprøver skal kun benyttes til forskning i forbindelse med årsaker til sykdom, herunder samspill mellom arvelige faktorer og miljøpåvirkninger. Dette vil bli gjort i laboratorier i Norge og i andre land, etter at den aktuelle bruken av blodprøven er vurdert av Regional etisk komite og godkjent av Datatilsynet.
- at resultatet fra ultralydundersøkelsen i svangerskapet blir stilt til rådighet for prosjektet.
- at blodprøven som blir tatt av barnet til undersøkelse på Føllings sykdom kan stilles til disposisjon for prosjektet.
- at det ikke meldes noen resultater tilbake til meg om min eller mitt barns helse, heller ikke resultater fra blodprøvene.
- at opplysninger om meg og barnet kan hentes fra andre kilder, slik som Medisinsk fødselsregister og sykehusregistre, etter Datatilsynets godkjennelse.
- at jeg kan bli spurt om å bli med i undersøkelser som innebærer innsamling av nye opplysninger (herunder prøver). Slike delprosjekter vil separat bli vurdert av Datatilsynet og Regional etisk komite. Deltakelse er frivillig, og er ikke nødvendig for videre deltakelse i hovedprosjektet.
- at det ikke er satt noen tidsbegrensning for hvor lenge opplysningene og blodprøvene kan lagres. Prosjektet er langvarig og kan også inkludere årsaker til sykdom som oppstår i voksen alder. Mitt barn vil bli informert om prosjektet ved 15-års alder og vil bli spurt om samtykke til fortsatt deltakelse når han eller hun er 18 år.
- at ingen opplysninger eller prøver stilles til rådighet for forskere uten at navn og fødselsnummer er fjernet.
- at jeg på et hvilket som helst tidspunkt kan trekke meg fra videre deltakelse ved å skrive eller ringe til Den norske mor og barn undersøkelsen. I tillegg kan jeg be om at innsamlede opplysninger og blodprøver blir slettet/destruert, uten å oppgi noen grunn.

TA VARE PÅ BROSJYREN. DA KAN DU TIL ENHVER TID SE HVA DU HAR SKREVET UNDER PÅ.



Kontakter

Mor og barn undersøkelsen
Nasjonalt folkehelseinstitutt
Oslo: Postboks 4404 Nydalen, 0403 Oslo
tlf.: 23 40 82 12
Bergen: Kalfarveien 31, 5018 Bergen
tlf.: 53 20 40 40
morbarn@fhi.no
Prosjektleder Per Magnus, tlf 23 40 82 11
per.magnus@fhi.no

www.fhi.no/tema/morogbarn

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Denne brosjyren er produsert av:
Avdeling for informasjon og kommunikasjon
Nasjonalt folkehelseinstitutt

Appendix B

Consent forms for participation in MoBa

Samtykke fra mor

Jeg har lest informasjonsbrosjyren om Den norske mor og barn undersøkelsen og er kjent med at opplysningene jeg gir vil bli behandlet strengt fortrolig. Jeg er informert om at undersøkelsen er vurdert av Regional komité for medisinsk forskningsetikk og godkjent av Datatilsynet.

Deltakelse i Den norske mor og barn undersøkelsen innebærer følgende:

- at jeg fyller ut spørreskjemaer, under og etter svangerskapet, om min egen og barnets helse og levekår.
- at jeg gir en blodprøve og en urinprøve i svangerskapet og en blodprøve etter fødselen, og at det tas en blodprøve fra barnets navlesnor etter fødselen.
- at blodprøvene/urinprøven fra meg, og blodprøven fra mitt barn lagres i en biobank på Nasjonalt folkehelseinstitutt. Prøvene blir aidentifisert og lagres med et prøvenummer. Blod-/urinprøver skal kun benyttes til forskning i forbindelse med årsaker til sykdom, herunder samspill mellom arvelige faktorer og miljøpåvirkninger. Dette vil bli gjort i laboratorier i Norge og andre land, etter at den aktuelle bruken av blodprøven er vurdert av Regional etisk komité og godkjent av Datatilsynet.
- at resultatet fra ultralydundersøkelsen i svangerskapet blir stilt til rådighet for prosjektet.
- at blodprøven som blir tatt av barnet til undersøkelse på Føllings sykdom kan stilles til disposisjon for prosjektet.
- at det ikke meldes noen resultater tilbake til meg om min eller mitt barns helse, heller ikke resultater fra blodprøvene.
- at opplysninger om meg og barnet kan hentes fra andre kilder, slik som Medisinsk fødselsregister og sykehusregistre, etter Datatilsynets godkjennelse.
- at jeg kan bli spurt om å bli med i undersøkelser som innebærer innsamling av nye opplysninger (herunder prøver). Slike delprosjekter vil separat bli vurdert av Datatilsynet og Regional etisk komité. Deltakelse er frivillig, og er ikke nødvendig for videre deltakelse i hovedprosjektet.
- at det ikke er satt tidsbegrensning for hvor lenge opplysningene og blodprøvene kan lagres. Prosjektet er langvarig og kan inkludere årsaker til sykdom som oppstår i voksen alder. Mitt barn vil bli informert om prosjektet ved 15-års alder, og vil bli spurt om samtykke til fortsatt deltakelse når han eller hun er 18 år.
- at ingen opplysninger eller prøver stilles til rådighet for forskere uten at navn og fødselsnummer er fjernet.
- at jeg på hvilket som helst tidspunkt kan trekke meg fra videre deltakelse ved å skrive eller ringe til Den norske mor og barn undersøkelsen. I tillegg kan jeg be om at innsamlede opplysninger og blodprøver blir slettet/destruert, uten å oppgi noen grunn.

Jeg har lest informasjonen ovenfor og samtykker i å delta i Den norske mor og barn undersøkelsen.

Navn: _____

Fødselsnr. (11 sifre): _____

Dato: _____ Underskrift: _____

Min adresse på invitasjonsbrevet er feil, den korrekte adressen er:



SAMTYKKE FRA FAR

Jeg har lest informasjonsbrosjyren om Den norske mor og barn undersøkelsen og er kjent med at opplysningene jeg gir vil bli behandlet strengt fortrolig. Jeg er informert om at undersøkelsen er vurdert av Regional komité for medisinsk forskningsetikk og godkjent av Datatilsynet.

Deltakelse i Den norske mor og barn undersøkelsen innebærer følgende:

- at jeg fyller ut spørreskjema om min egen helse, livsstil og arbeidsmiljø
- at jeg gir en blodprøve ved ultralydundersøkelsen
- at blodprøven fra meg lagres i en biobank på Nasjonalt folkehelseinstitutt. Prøven blir aidentifisert og lagres med et prøvenummer. Blodprøven skal kun benyttes til forskning i forbindelse med årsaker til sykdom, herunder samspill mellom arvelige faktorer og miljøpåvirkninger. Dette vil bli gjort i laboratorier i Norge og i andre land, etter at den aktuelle bruken av blodprøven er vurdert av Regional etisk komité og godkjent av Datatilsynet
- at det ikke meldes noen resultater tilbake til meg om min helse, heller ikke resultater av blodprøven
- at opplysninger om meg kan hentes fra andre kilder, slik som Medisinsk fødselsregister og sykehusregistre, etter Datatilsynets godkjennelse
- at jeg kan bli spurt om å bli med i undersøkelser som innebærer innsamling av nye opplysninger (herunder prøver). Slike delprosjekter vil separat bli vurdert av Datatilsynet og Regional etisk komité. Deltakelse er frivillig, og er ikke nødvendig for videre deltakelse i hovedprosjektet
- at det ikke er satt noen tidsbegrensning for hvor lenge opplysningene og blodprøven kan lagres
- at ingen opplysninger eller prøver stilles til rådighet for forskere uten at navn og fødselsnummer er fjernet
- at jeg på et hvilket som helst tidspunkt kan trekke meg fra videre deltakelse ved å skrive eller ringe til Den norske mor og barn undersøkelsen. I tillegg kan jeg be om at innsamlede opplysninger og blodprøve blir slettet/destruert, uten å oppgi noen grunn.

Jeg har lest informasjonen ovenfor og samtykker i å delta i Den norske mor og barn undersøkelsen.
(Vennligst skriv tydelig med STORE BOKSTAVER.)

Navn: _____

Fødselsnr (11 sifre): _____

Adresse: _____ Postnr _____

Partners navn: _____

Partners fødselsnr (11 sifre): _____

Dato: _____ Fars underskrift: _____

Appendix C

Questionnaire Q1 in MoBa (week 15)

Questionnaire 1

This questionnaire will be processed by a computer. It is therefore important that you follow these instructions:

- Please use a blue or black ballpoint pen.
 - Put a cross in the box that is most relevant like this:
 - Should you put a cross in the wrong box correct it by
 - In the large green boxes write a number or a capital
- It is important that you only write in the white area of

Please do not use this questionnaire. Contact us at morbarn@fhi.no or phone + 47 53 20 40 40 if you need a questionnaire.

Number:

Letter:

- When filling in a single figure in boxes containing two or more squares, please use the square to the right. Example:
- A number of questions in this questionnaire concern the week of pregnancy. For example, fill in week 5 for something that occurred 5 weeks after your last period.
- Specific information concerning, for example, medication or profession should be written in the boxes or on the lines provided. Please write clearly in CAPITAL LETTERS.
- Remember to provide the date when you completed the questionnaire.

Please return the completed questionnaire in the stamped addressed envelope provided.

Date on which the questionnaire was completed

Day

Month

Year

(write the year with 4 numbers, e.g. 2000)

Menstruation

1. How old were you when you had your first menstrual period?

Years

2. How many days are there usually between the first day in your menstrual period and the first day in your next menstrual period?

Days

3. Are you usually depressed or irritable before your period?

- No Yes, noticeably
 Yes, but just slightly Yes, very much

4. If yes, does this feeling disappear after you get your period?

- No
 Yes

5. Were your periods regular the year before you became pregnant?

- No
 Yes

6. During the last year before you became pregnant, did you lose your period for more than three months?

- No
 Yes, due to an earlier pregnancy
 Yes, for other reasons

7. Date of first day of last menstrual period.

Day Month Year

8. Did your last menstrual period come at the expected time?

- No
 Yes

9. Are you certain about the date of first day of last menstrual period?

- Certain
 Uncertain

10. Describe the duration, amount of bleeding and menstrual pains of your last period ?

	As usual	More than usual	Less than usual
Duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amount of bleeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Menstrual pains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contraception and pregnancy

11. Have you/your partner at any time during the last year used the following methods to avoid becoming pregnant? (Fill in all that apply.)

- Condom
 Diaphragm
 IUD
 Hormone IUD
 Hormone injection
 Mini pill
 Pill
 Spermicides (foam, suppositories, cream)
 Safe period
 Withdrawal
 No such methods
 Other _____

12. If you have used the pill/mini-pill, how long altogether have you used them?

	Pill	Mini-pill
Less than one year	<input type="checkbox"/>	<input type="checkbox"/>
1-3 years	<input type="checkbox"/>	<input type="checkbox"/>
4-6 years	<input type="checkbox"/>	<input type="checkbox"/>
7-9 years	<input type="checkbox"/>	<input type="checkbox"/>
10 years or more	<input type="checkbox"/>	<input type="checkbox"/>

13. If you have used the pill/mini-pill, how old were you when you first used it?

Years old

14. Were you taking the pill/mini-pill during the last 4 months before this pregnancy?

- No
 Yes

15. If yes, how long before your last menstrual period did you stop taking the pill/mini-pill?

Weeks

16. Was this pregnancy planned?

- No
 Yes

17. If yes, how many months did you have regular intercourse without contraception before you became pregnant?

- Less than 1 month
 1-2 months
 3 months or more

Number of months if more than 3

18. Did you become pregnant even though you or your partner used contraceptives?

- No (proceed to question 21)
 Yes

19. If yes, which type? (Fill in all that apply.)

- Condom
 Diaphragm
 IUD
 Hormone IUD
 Hormone injection
 Mini pill
 Pill
 Spermicides (foam, suppositories, cream)
 Safe period
 Withdrawal
 Other _____

20. If you became pregnant while using an IUD, has it now been removed?

- No
 Yes

21. How long have you and the baby's father had a sexual relationship?

months or years

22. How often did you have sexual intercourse during the four weeks before you became pregnant and during the last four weeks?

	Before	Now
Every day	<input type="checkbox"/>	<input type="checkbox"/>
5-6 times a week	<input type="checkbox"/>	<input type="checkbox"/>
3-4 times a week	<input type="checkbox"/>	<input type="checkbox"/>
1-2 times a week	<input type="checkbox"/>	<input type="checkbox"/>
1-2 times every two weeks	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1-2 times every 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>

23. Have you ever been treated for infertility?

- No
 Yes

24. If yes, was it in connection with this pregnancy or an earlier pregnancy and what type of treatment did you have? (Fill in all that apply.)

	Earlier Pregnancy	This Pregnancy
Fallopian tube surgery	<input type="checkbox"/>	<input type="checkbox"/>
Other surgery	<input type="checkbox"/>	<input type="checkbox"/>
Medication for endometriosis	<input type="checkbox"/>	<input type="checkbox"/>
Hormone treatment	<input type="checkbox"/>	<input type="checkbox"/>
Insemination (injection of sperm)	<input type="checkbox"/>	<input type="checkbox"/>
IVF (test tube) method	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

25. Have you been given information about having an amniocentesis performed?

- No
 Yes

26. What was your blood pressure at your first antenatal visit? (Check your medical card.)

/ E.g. 150 / 95

27. What did you weigh at the time you became pregnant and what do you weigh now (in kilograms)?

When I became pregnant : kg Now: kg

28. How tall are you?

cm

29. How tall is the baby's father?

cm

30. How much does the baby's father weigh (in kilograms)?

kg

Previous pregnancies

31. Have you been pregnant before? (Include all pregnancies that ended in abortion, miscarriage or stillbirth as well)

- No (proceed to question 36)
 Yes

32. If yes, fill in for all earlier pregnancies. Include all pregnancies that ended in abortion, miscarriage or stillbirth as well as ectopic pregnancies. State the year the pregnancy began, how many kilos you gained during the pregnancy and the number of months you breast-fed each baby. State whether or not you smoked during earlier pregnancies.

Pregnancy Number	Year pregnancy started	Live infant born	Spontaneous abortion/stillbirth	Termination of pregnancy	Ectopic pregnancy	Week of pregnancy for abortion/still birth	Number of months breast feeding	Weight gain during pregnancy (in kg)	Smoked during pregnancy
1	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
2	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
3	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
4	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
5	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
6	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
7	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
8	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
9	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
10	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>

33. Have you had any of the following problems during previous pregnancies? (Fill in all that apply.)

- | | No | Yes |
|---|--------------------------|--------------------------|
| 1. Pelvic girdle pain requiring medical leave | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Pelvic girdle pain requiring bed rest | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Serious nausea and vomiting | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Pre-eclampsia during pregnancy | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Pregnancy diabetes | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Sugar in urine | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Problems with incontinence | <input type="checkbox"/> | <input type="checkbox"/> |

34. If you had pelvic girdle pain in a previous pregnancy that led to bed rest or medical leave, when did the pain start?

months after start of pregnancy

35. When did the pain stop?

months after pregnancy

still have pain

Illnesses and health problems during this pregnancy

36. Have you had bleeding from the vagina once or more during this pregnancy?

- No
 Yes

37. If yes, describe the first and last bleeding. Give the date the bleeding started, how many days the bleeding lasted and how much you bled.

	Date when bleeding started	No. of days variation	(Enter a cross in a box indicating the amount of blood (trace blood means a few drops) Amount
First bleeding	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/> Trace of blood <input type="checkbox"/> More than just a trace <input type="checkbox"/> Clots
Last bleeding	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/> Trace of blood <input type="checkbox"/> More than just a trace <input type="checkbox"/> Clots
	Day Month Year		

If more than two episodes of bleeding write in the number of times

38. Have you experienced any of the following illnesses or problems during this pregnancy? If you have used medication in connection with these problems give the name of the medicine, the weeks you took the medicines and how many days you took them. (Include all types of medication, both prescription and over the counter medicines in addition to alternative and herbal remedies. Do not include vitamins and dietary supplements as these are discussed elsewhere.)

Illness/health problem	Illness/health problem during this pregnancy				Name of medicine taken	Use of medication during this pregnancy				Number of days taken		
	Week of pregnancy					Week of pregnancy						
	0-4	5-8	9-12	13+		0-4	5-8	9-12	13+			
1 Pelvic girdle pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2 Abdominal pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3 Back pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4 Neck and shoulder pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5 Nausea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6 Nausea with vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7 Vaginal thrush	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8 Vaginal catarrh/unusual discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9 Pregnancy itch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10 Constipation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11 Diarrhoea/gastric flu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12 Unusual tiredness/sleepiness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
13 Sleeping problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14 Heartburn/reflux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15 Oedema	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
16 Fever with rash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
17 Fever over 38.5 C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18 Common cold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19 Throat infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20 Sinusitis/ear infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
21 Influenza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
22 Pneumonia/bronchitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
23 Sugar in urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
24 Protein in urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

52. Did you have an extra job (with or without salary) when you became pregnant? (For example, accountant, hair dresser, singer in a dance band, club leader)

- No
- Yes, describe _____

53. Have you been absent from your usual work more than two weeks altogether during this pregnancy?

- No
- Yes

54. Are you absent from your work at the present time?

- No
- Yes

55. If yes, what is the reason for your absence? (Fill in one or several boxes.)

- Medical leave
- Leave of absence
- Sick child
- Other _____

56. The usual number of paid working hours a week before you became pregnant and at present.

Before the pregnancy: Hours

During the pregnancy: Hours

(Questions about current work situation to be answered by anyone in paid employment, even if they are temporarily absent due to illness, being on leave or for similar reasons.)

57. Describe the type of work carried out at your and the baby's father's place of work as accurately as possible.

(Write for example, hospital department for children with cancer, body shop at a garage for diesel vehicles, farming with grain and swine, work in the home.)

	You	Baby's Father

58. Occupation/title at this workplace?

(Write for example, staff nurse, mechanic, foreman, lecturer, student, cleaning assistant, housewife/at home.)

59. Indicate the appropriate answer for each of the following questions concerning your present work situation. (Fill in only one box in each line.)

	Yes every day more than half of the working day	Yes every day less than half of the working day	Yes, periodically but not daily	Seldom or never
Do you sometimes have so much to do that your work situation becomes taxing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have to turn or bend many times in the course of an hour?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you work with your hands up at shoulder level or higher?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you work standing or walking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can you choose to work a little faster some days and a little slower on other days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are you subjected to a lot of uncomfortable background noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are you subjected to a lot of background noise that makes you have to raise your voice when talking to others, even at a distance of one metre?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

60. How do the following statements describe your work situation? (Fill in only one box in each line.)

	Agree	Agree mostly	Disagree mostly	Disagree completely
I have physically heavy work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work is very stressful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I learn a lot at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work is very monotonous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work demands a lot of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am able to decide how my work is to be carried out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a good team spirit at my place of work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I enjoy my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

61. When are your working hours? (Fill in one or several boxes.)

- Permanent day work
- Permanent afternoon or evening work
- Permanent night work
- Shift work or shift rotations
- No set times (extra help, extra shifts, temporary employment, etc.)
- Other

62. During your pregnancy do you lift anything that weighs more than 10 kg (10 kilos is the equivalent of a full bucket of water.)

	At Home	At Work
Seldom or never	<input type="checkbox"/>	<input type="checkbox"/>
Yes, less than 20 times a week	<input type="checkbox"/>	<input type="checkbox"/>
Yes, more than 20 times a week	<input type="checkbox"/>	<input type="checkbox"/>
Yes, 10-20 times a day	<input type="checkbox"/>	<input type="checkbox"/>
Yes, more than 20 times a day	<input type="checkbox"/>	<input type="checkbox"/>

63. How often have you worked with radio transmitters or radar after becoming pregnant?

- Seldom/Never
- A few times a week
- Daily
- On average more than an hour daily

64. How often do you talk on a cell phone?

- Seldom/Never
- A few times a week
- Daily
- On average more than an hour daily

65. Do your cell phone calls last more than 15 minutes?

- Never
- Seldom
- Often

66. How often have you worked with a computer monitor, laser printer or copying machine (at a distance of less than two metres) after you became pregnant?

	Computer monitor	Laser printer	Copying machine
Seldom/Never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A few times per week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On average more than an hour daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

67. How often have you worked with X-ray equipment (at a distance of less than two metres) after you became pregnant?

(This does not include treatment as a patient)

- Seldom/Never
- A few times a week
- Daily
- On average more than an hour daily

68. Have you been in contact with any of the following substances either at work or in your leisure time during the last six months? (Fill in each line.)

	No	Yes	If Yes, number of days the last 6 months (daily = 180 days)	Fill in if you have used a hood for gases or breathing protection	Fill in if you have used protective gloves
1 Lead vapours, lead dust, lead particles or lead alloys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Chrome, arsenic, cadmium or combinations of these	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Gasoline or exhaust (does not apply to filling gasoline in your own car)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Mercury vapours, mercury or work with amalgam fillings (does not apply to your own dental treatment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Disinfectants, vermin poisons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Weed killers, insecticides, fungicides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Oil-based paint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Water-based or latex paint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Paint thinner, paint-lacquer-glue remover or other solvents (e.g. lynol, turpentine, toluene, carbon tetrachloride)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Industrial dyes or ink	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Motor oil, lubrication oil or other types of oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Photographic chemicals (fixatives or developers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Substances used in welding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Substances used in soldering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Formalin/formaldehyde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Chemotherapeutic substances/chemotherapy treatment (does not apply to your own medical treatment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Laughing gas or other anaesthetic gases (does not apply to your own treatment as a patient)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 Other substances and conditions, describe _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

69. How often have you been to a discotheque since you became pregnant?

- 1-2 times a week
- Less often
- Never

70. Are you in contact with animals either at work or in your leisure time?

- No
- Yes

71. If yes, what sort of animals and how often are you in contact with them on a weekly basis?

	Daily	3-6 times a week	1-2 times a week	Less than 1 time a week
1 Dog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Cat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Guinea pig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Hamster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Rabbit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Canary or other bird	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Aquarium fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Cow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Pig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Sheep, goat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Horse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Poultry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Housing and household

72. With whom do you live? (Fill in one or several boxes.)

- Spouse/partner
- Parents
- Parents-in-law
- Children
- No one
- Other describe _____

73. How many people including you live in your home?

Number of people over 18 years	<input type="text"/>	<input type="text"/>
Number of people between 12 - 18 years	<input type="text"/>	<input type="text"/>
Number of people between 6 - 11 years	<input type="text"/>	<input type="text"/>
Number of people under 6 years	<input type="text"/>	<input type="text"/>

74. How many children are at nursery school/day care?

children

75. Do you or the baby's father have a mother tongue other than Norwegian?

- No
- Yes

76. If yes, which language?

	You	Baby's Father
Sámi	<input type="checkbox"/>	<input type="checkbox"/>
Urdu	<input type="checkbox"/>	<input type="checkbox"/>
English	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

If other, which? _____

77. Do your parents or the baby's father's parents have a mother tongue other than Norwegian?

- No
- Yes

78. If yes, which language?

	Your Mother	Your Father	Mother of the child's father	Father of the child's father
Sámi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urdu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If other, which? _____

79. What is your and the baby's father's yearly gross income? (Include child support, unemployment benefits and other allowances.)

Your gross income	Child's father's gross income
<input type="checkbox"/> No income	<input type="checkbox"/> No income
<input type="checkbox"/> Under 150.000 NOK	<input type="checkbox"/> Under 150.000 NOK
<input type="checkbox"/> 150-199.999 NOK	<input type="checkbox"/> 150-199.999 NOK
<input type="checkbox"/> 200-299.999 NOK	<input type="checkbox"/> 200-299.999 NOK
<input type="checkbox"/> 300-399.999 NOK	<input type="checkbox"/> 300-399.999 NOK
<input type="checkbox"/> 400-499.999 NOK	<input type="checkbox"/> 400-499.999 NOK
<input type="checkbox"/> over 500.000 NOK	<input type="checkbox"/> over 500.000 NOK
	<input type="checkbox"/> Don't know

80. Is it possible for your household to manage financially without your income?

- No
- Yes, but with difficulty
- Yes, without difficulty

81. What type of house do you live in?

- Detached house
- Farm
- Semi detached
- Four-flat house
- Maisonette
- Terraced flat
- Basement flat
- Apartment building
- Townhouse/tenement
- Which floor?
- Other _____

82. Has there been damp damage, visible signs of fungus/mildew or a smell of mildew in your home in the past 3 months? (Fill in one or several boxes.)

- No
- Yes, damp damage
- Yes, signs of fungus and mould
- Yes, a smell of mildew

83. Where does your drinking water come from?

- Public or private water company
- Water from a local source (e.g. own well)

84. How many times have you moved in the last 3 years?

times

85. Has anyone in your home had influenza, a prolonged cough, childhood disease or an illness with fever and a rash after you became pregnant?

- No
- Yes

86. If yes, which illness? (fill in one or several boxes)

- German measles
- Chicken pox
- Measles
- Roseola infantum
- Other fever with rash
- Influenza
- Prolonged cough
- Tuberculosis
- Hand, foot and mouth disease
- Other

Living habits

87. Did your mother smoke when she was pregnant with you?

- No
- Yes
- Don't Know

88. Are you exposed to passive smoking at home?

- No
- Yes

89. If yes, how many hours a day are you exposed to passive smoking?

hours per day

90. Are you exposed to passive smoking at work?

- No
- Yes

91. If yes, how many hours a day are you exposed to passive smoking?

hours per day

92. Did the baby's father smoke before you became pregnant?

- No
- Yes

93. Does he smoke now?

- No
- Yes

94. Have you ever smoked?

- No (proceed to question 104)
- Yes

95. Do you smoke now (after you became pregnant)?

- No
- Sometimes cigarettes per week
- Daily cigarettes per day

96. Did you smoke during the last 3 months before you became pregnant this time?

- No
- Sometimes cigarettes per week
- Daily cigarettes per day

97. How old were you when you started to smoke on a daily basis?

Years

98. Have you stopped smoking completely?

- No
- Yes

99. If yes, how old were you when you stopped smoking?

Years

100. If you stopped smoking after you became pregnant, in which week of pregnancy did you stop?

week of pregnancy

101. How long after you get up in the morning until you light your first cigarette?

- 5 minutes
- 6-29 minutes
- 30-60 minutes
- More than one hour

102. Do you smoke when you are ill?

- No
- Yes

103. Do you smoke more often during the first few hours after you wake up than you do during the rest of the day?

- No
- Yes

104. If you have used other kinds of nicotine indicate which and when you used them.

	Before pregnancy	During pregnancy
Chewing tobacco/snuff	<input type="checkbox"/>	<input type="checkbox"/>
Nicotine chewing gum	<input type="checkbox"/>	<input type="checkbox"/>
Nicotine adhesive patch	<input type="checkbox"/>	<input type="checkbox"/>
Nicotine inhaler	<input type="checkbox"/>	<input type="checkbox"/>

105. What was your fluid consumption (number of cups/glasses) per day before and during pregnancy? (1 mug = 2 cups, 1 small plastic bottle (0.5 litre) = 4 cups, 1 large plastic bottle (1.5 litres) = 12 cups)

	Number of cups/glasses		Decaffeinated (Enter a cross)
	Before pregnancy	Now	
1 Filter coffee	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
2 Instant coffee	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
3 Boiled coffee	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
4 Tea	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
5 Herbal tea	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
6 Coca Cola/Pepsi etc.	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
7 Other fizzy drinks	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
8 Diet Coca Cola/Pepsi	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
9 Other diet fizzy drinks	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
10 Tap water	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
11 Bottled water	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
	Before pregnancy	Now	Ecological (Enter a cross)
12 Juice/squash	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
13 Diet juice/squash	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
14 Milk (skim, low fat, whole)	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
15 Yogurt, all types	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
16 Yogurt/active Lactobacillus	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
17 Other type of cultured milk - Kefir	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>
18 Other	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>

106. Have you used any of the following substances?

	Never	Previously	Last month before pregnancy	During pregnancy
1 Hash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Amphetamine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Ecstasy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Cocaine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Heroin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

107. Have you ever consumed alcohol?

- No (proceed to question 117)
 Yes

Alcohol units are used to compare the different types of alcoholic beverages. 1 alcohol unit (= 1.5 cl. pure alcohol) is equivalent to:

- 1 bottle/can energy drink or cider
- 1 glass (1/3 litre) of beer
- 1 wine glass red or white wine
- 1 sherry glass sherry or fortified wine
- 1 snaps glass spirits or liqueur

108. How often did you consume alcohol in the 3 months before you became pregnant and how often do you consume alcohol during the pregnancy?

	Last 3 months before pregnancy	During pregnancy
1 Approximately 6-7 times a week	<input type="checkbox"/>	<input type="checkbox"/>
2 Approximately 4-5 times a week	<input type="checkbox"/>	<input type="checkbox"/>
3 Approximately 2-3 times a week	<input type="checkbox"/>	<input type="checkbox"/>
4 Approximately once a week	<input type="checkbox"/>	<input type="checkbox"/>
5 Approximately 1-3 times a month	<input type="checkbox"/>	<input type="checkbox"/>
6 Less than once a month	<input type="checkbox"/>	<input type="checkbox"/>
7 Never	<input type="checkbox"/>	<input type="checkbox"/>

109. What type of alcohol do you usually drink? (Fill in one or several boxes.)

- 1 Light beer
- 2 Beer
- 3 Red wine
- 4 White wine
- 5 Low alcohol sodas
- 6 Fortified wines (sherry, port, Madeira)
- 7 Spirits (vodka, gin, snaps, cognac, whisky, liqueur)

110. Did you drink 5 units or more at least once during the last 3 months before pregnancy or during pregnancy?

	Last 3 months before pregnancy	During pregnancy
1 Several times per week	<input type="checkbox"/>	<input type="checkbox"/>
2 Once a week	<input type="checkbox"/>	<input type="checkbox"/>
3 1-3 times a month	<input type="checkbox"/>	<input type="checkbox"/>
4 Less than once a month	<input type="checkbox"/>	<input type="checkbox"/>
5 Never	<input type="checkbox"/>	<input type="checkbox"/>

111. How many units of alcohol do you usually drink when you consume alcohol?

	Last 3 months before pregnancy	During pregnancy
10 or more	<input type="checkbox"/>	<input type="checkbox"/>
7-9	<input type="checkbox"/>	<input type="checkbox"/>
5-6	<input type="checkbox"/>	<input type="checkbox"/>
3-4	<input type="checkbox"/>	<input type="checkbox"/>
1-2	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1	<input type="checkbox"/>	<input type="checkbox"/>

112. How many units of alcohol do you have to drink before you feel any effect?

units

113. Have other people irritated you or hurt your feelings by criticising how much you drink?

- No
 Yes

114. Have you ever felt that you ought to drink less alcohol?

- No
 Yes

115. Have you ever drunk alcohol in the morning to calm your nerves or to get rid of a hangover?

- No
 Yes

116. Have you ever experienced any of the following problems during the last year in relation to your alcohol consumption?

	Never	Once	Several times
Argued with or had negative feelings for a family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suddenly found yourself somewhere without knowing how you got there	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Been absent from work or school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fainted or passed out suddenly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Had a sad period	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Weight and weight control

117. Do you think you were overweight just before this pregnancy?

- Yes, a lot
 Yes, a little
 No

118. Are you worried about putting on more weight than necessary during this pregnancy?

- Yes, very worried
 Somewhat worried
 No, not especially worried

119. Has anyone said that you were too thin while you felt that you were overweight during the last 2 years?

- Yes, often
 Yes, occasionally
 No

120. Have you ever felt that you lost control while eating and were not able to stop before you have eaten far too much?

	Last 6 months before this pregnancy	Now
No	<input type="checkbox"/>	<input type="checkbox"/>
Infrequently	<input type="checkbox"/>	<input type="checkbox"/>
Yes, at least once a week	<input type="checkbox"/>	<input type="checkbox"/>

121. Have you ever used any of the following methods to control your weight?

	Last 6 months before this pregnancy		Now	
	At least once a week	Seldom/ Never	At least once a week	Seldom/ Never
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laxatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard physical exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

122. Is it important for your self-image that you maintain a certain weight?

- Yes, very important
 Yes, quite important
 No, not especially important

128. Do you have anyone other than your husband/partner you can ask for advice in a difficult situation?

- No
- Yes 1-2 people
- Yes more than 2 people

129. How often do you meet or talk on the telephone with your family (other than those you live with) or close friends?

- Once a month or less
- 2-8 times a month
- More than twice a week

130. Do you often feel lonely?

- Almost never
- Seldom
- Sometimes
- Usually
- Almost always

131. Have you been bothered by any of the following during the last two weeks? (Enter a cross for each line.)

	Not bothered	A little bothered	Quite bothered	Very bothered
Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervousness or shakeiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

132. Have you ever in your adult life been slapped, hit, kicked or bothered in any way physically? (fill in one or several boxes)

	During this pregnancy	Last 6 months before pregnancy	Earlier
No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't remember	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

133. Have you ever been pressured or forced to have sexual intercourse? (Fill in one or several boxes.)

	During this pregnancy	Last 6 months before pregnancy	Earlier
No, never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes, pressured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes, forced with violence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes, raped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

134. How do you feel about yourself? (Enter a cross for each line.)

	Agree completely	Agree	Disagree	Disagree completely
I have a positive attitude toward myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel completely useless at times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I do not have much to be proud about	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I am a valuable person, as good as anyone else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

135. Have you ever experienced the following for a continuous period of 2 weeks or more? (Fill in each line.)

	No	Yes
Felt depressed, sad	<input type="checkbox"/>	<input type="checkbox"/>
Had problems with appetite or eaten too much	<input type="checkbox"/>	<input type="checkbox"/>
Been bothered by feeling weaker or a lack of energy	<input type="checkbox"/>	<input type="checkbox"/>
Really blamed yourself and felt worthless	<input type="checkbox"/>	<input type="checkbox"/>
Had problems with concentration or had problems making decisions	<input type="checkbox"/>	<input type="checkbox"/>
Had at least 3 of the problems named above simultaneously	<input type="checkbox"/>	<input type="checkbox"/>

136. If you have had 3 or more of these problems at the same time, how many weeks did the longest period last?

weeks

137. Was there a particular reason for this?

- No, no particular reason
- Yes (e.g. death, divorce, miscarriage, accident)

We would be grateful if you would write anything else you would like to tell us about this pregnancy or previous births/pregnancies that are not addressed in this questionnaire on the next page.

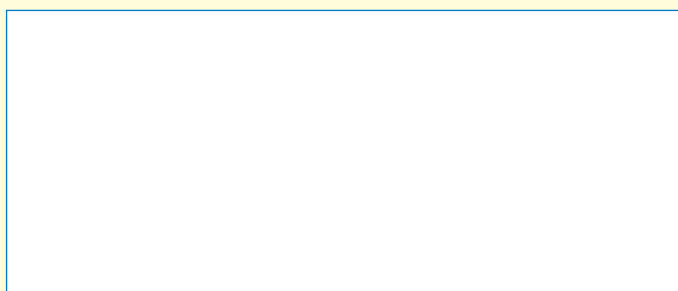
Comments

Have you remembered to fill in the date on which you completed the questionnaire on page 1?

Thank you very much for your help!

Please return the completed questionnaire in the stamped addressed envelope provided.

Avd. for medisinsk fødselsregister
Kalfarveien 31
5018 Bergen



Appendix D

Questionnaire QFather in MoBa (week 15)

den norske *Mor & barn undersøkelsen*

+

Questionnaire FATHER

+

This questionnaire will be processed by a computer. It is therefore important that you follow these instructions:

- Please use a blue or black ballpoint pen
- Put a cross in the box that is most relevant like this:
- Should you put a cross in the wrong box correct it by filling in the box completely like this:
- In the large green boxes write a number or a capital letter

It is important that you only write in the white area of each box like this:

Number:

- Datobokser er delt opp i tre deler, den første for dag i må. skrives slik:

day month year

- When filling in a single figure in boxes containing two or more squares, please use the square to the right. Example:
- Specific information concerning, for example, medication or profession should be written in the boxes or on the lines provided. Please write clearly in CAPITAL LETTERS.

Please return the completed questionnaire in the stamped addressed envelope provided.

Thank you in advance

Give the date you filled in the questionnaire

day

month

year

(Write the year with 4 digits, e.g. 2005)

1. Date of birth?

day

month

year

+

2. Marital status?

- Married Divorced/separated
- Co-habiting Widower
- Single Other

3. How tall are you?

cm

4. What weight are you?

kg

+

5. What is the heaviest you have weighed since you were 18 years old

kg

6. What is the lightest you have weighed since you were 18 years old

kg

7. Have you ever dieted or limited your food intake?

No Yes

8. If yes, how old were you the first time you dieted or limited your food intake?

years

9. Are you the type of person who can eat as much as you want without gaining weight?

No Yes

+

Education and work

10. What level of education do you have?

(only tick for the highest level of education you have completed and any ongoing education you are taking.)

+

Education	Completed	Ongoing
Secondary education	<input type="checkbox"/>	<input type="checkbox"/>
Further education 1-2 years	<input type="checkbox"/>	<input type="checkbox"/>
Further education - vocational	<input type="checkbox"/>	<input type="checkbox"/>
Further education 3 years – (general studies, sixth form)	<input type="checkbox"/>	<input type="checkbox"/>
Higher Education (university/college), up to and including 4 years	<input type="checkbox"/>	<input type="checkbox"/>
Higher Education (university/college), over 4 years	<input type="checkbox"/>	<input type="checkbox"/>
Other education	<input type="checkbox"/>	<input type="checkbox"/>

+

11. What is your work situation now? (tick all that apply.)

- | | |
|---|---|
| 1. <input type="checkbox"/> Pupil/student | 7. <input type="checkbox"/> Employed in public sector |
| 2. <input type="checkbox"/> At home | 8. <input type="checkbox"/> Employed in private sector |
| 3. <input type="checkbox"/> Intern/apprentice | 9. <input type="checkbox"/> Self-employed |
| 4. <input type="checkbox"/> Military service | 10. <input type="checkbox"/> Family member without steady income in family company (e.g. Farming, business) |
| 5. <input type="checkbox"/> Unemployed/laid off | 11. <input type="checkbox"/> Other _____ |
| 6. <input type="checkbox"/> Rehabilitation/disabled | |

12. Describe the business at your place of work/service as accurately as possible.

(e.g. farming of grain and pigs, body shop at garage for diesel cars, insurance company, college).

13. Job title at this workplace?

(e.g. panel beater, foreman, lecturer, student, cleaning assistant, farmer, homemaker/at home).

14. How many hours of paid labour do you do per week?

 hours

+

15. What was your gross income (before tax) last year?

(Incl. child benefit, unemployment benefit, cash support etc)

1. No income
2. Under 150.000 kr.
3. 150.000–199.999 kr.
4. 200.000–299.999 kr.
5. 300.000–399.999 kr.
6. 400.000–499.999 kr.
7. Over 500.000 kr

16. In the last 12 months have you been on sick leave?

No Yes

- Without medical certificate (self-notification)
- With medical certificate from doctor

17. If yes, how long in total?

- | Less than
1 week | 1-2
weeks | 2-8
weeks | More than
8 weeks |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

+

18. Are you currently receiving any of the following benefits?

If yes, from when?

	No	Yes	Month	Year
Sick pay/ rehabilitation money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Benefits for vocational rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Disability pension/ limited disability pension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Social security payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Unemployment benefit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Other benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

19. Could you/your household cover an unexpected expense of 10,000 kroner in the course of a month without having to take out a loan or ask for financial help?

(including use of saved funds)

- No
- Yes
- Don't know

+

20. Have you been exposed to any of the following in the six months before your partner became pregnant?
(during work and leisure) (Tick every line)

Chemicals, gases etc	+	No	Yes	If yes, no. of days (daily = 180 days)	Tick if you have used extractor fan or breathing protection	Tick if you have used protective gloves
1. Lead vapours, lead dust, lead particles or lead alloys		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Chromium, arsenic, cadmium or combinations of these		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Petrol/gasoline or exhaust fumes (not including filling your own car)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Mercury vapours, mercury or work with amalgam-fillings (not including treatment as a patient)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Disinfectants, vermin poison		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Plant care substances (weedkiller, insecticides fungicides, rodent poison)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Oil-based paint		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Water-based or latex paint		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Paint thinner, paint-, varnish/lacquer- or glue-remover or other solvents (e.g. Lynol®, white spirit, toluene, carbon tetrachloride)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Industrial dyes or inks		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Motor oil, lubricating oil or other types of oil		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Photographic chemicals (fixatives or developers)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Substances used in welding		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Substances used in soldering		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Formalin/formaldehyde		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Chemotherapy substances/ treatments (not including your own medical treatment)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Chemotherapy (taken in treatment as a patient)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Nitrous oxide (laughing gas) or other anaesthetic gases (not including your own medical treatment)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Other substances and conditions, describe: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. How often have you worked with radio transmitters or radar in the last six months before your partner became pregnant?

- Seldom/never
 Few times per week
 Daily
 On average more than 1 hour per day

+

22. How often have you worked with X-ray equipment in the last six months (less than 2 metre's distance) before your partner became pregnant?

(Not including treatment as a patient)

- Seldom/never
 Few times per week
 Daily
 On average more than 1 hour per day

+

23. Do you use a mobile phone? Nei Ja

24. If yes, how old were you when you got your first mobile phone? years

25. Do you use "hands-free"? Seldom/never Only for longer conversations As a rule

26. If/when you use "hands-free", where is the phone usually during the conversation? In front trouser pocket On a belt in front of the body Other places on the body Away from the body

27. How often did you talk on a mobile phone in the six months before your partner became pregnant? Less than once a week 1-2 times per week 3-6 times per week 1-4 times per day More than 5 times per day

28. How long on average do you talk in total on the days you use your mobile phone? Less than 1 minute 1-10 minutes 11-30 minutes 31-60 minutes More than 60 minutes

29. How often did you work with a computer, laser printer or copying machine (at a distance of less than two meters) in the six months before your partner became pregnant? (tick every line)

	Seldom/never	Few times per week	Daily	On average more than 1 hour per day
1. Computer screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Laser printer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Copying machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Illnesses and health problems

30. Do you have, or have you had any of the following illnesses or health problems?

	<input type="checkbox"/>	If yes, tick	If yes, do you remember how old you were at the first sign of illness/ problem?	If you became well or the problem stopped, at what age did this happen?
1. Hay fever, pollen allergy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
2. Urticaria (hives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
3. Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
4. Atopic dermatitis (childhood eczema)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
5. Psoriasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
6. Other eczema/skin problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
7. Chlamydia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
8. Herpes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years

Question continues next page

+	If yes, tick	If yes, do you remember how old you were at the first sign of illness/ problem?	If you became well or the problem stopped, at what age did this happen?
9. Genital warts	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	+ <input type="text"/> <input type="text"/> years
10. Gonorrhoea	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
11. Migraine	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
12. Other frequent headaches	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
13. Constant aches or discomfort in the upper abdomen	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
14. Crohn's disease/ulcerative colitis (diarrhoea, constipation intermittent pain	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
15. Sleep problems	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
16. Diabetes	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
17. Cancer	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
18. Cardiovascular disease	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
19. Epilepsy	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	+ <input type="text"/> <input type="text"/> years
20. Repeated neck and shoulder pain	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
21. Lower back pain	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
22. Prolonged muscle pain	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
23. Bechterew's disease/rheumatoid arthritis	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
24. High blood pressure	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
25. ADHD	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
26. Anorexia/bulimia/eating disorders	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
27. Manic depressive illness	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
28. Schizophrenia	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
29. Other long-term mental illnesses or health problems	<input type="checkbox"/>	<input type="text"/> <input type="text"/> years	<input type="text"/> <input type="text"/> years
30. Other long-term physical illnesses or health problems	<input type="checkbox"/>	+ <input type="text"/> <input type="text"/> years	+ <input type="text"/> <input type="text"/> years
If other long-term illnesses, please describe:			
<hr/>			

+

31. Do you have a congenital malformation/birth defect? No Yes +

32. If yes, which? _____

33. Did you use medicines in the six months before your partner became pregnant? No Yes

34. If yes, please give the name of the medicine(s)

Name of medicine (e.g. Valium, Rohypnol, Paracetamol)

How long did you use the medicine?

	Less than 1 week	1 week – 1 month	More than 1 month
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

35. Did you have any X-rays taken in the six months before your partner became pregnant? No Yes

36. If yes, what were the X-rays taken of, and how many times?

1. Teeth times
2. Lungs times
3. Pelvis/stomach/back times
4. Arms and legs times
5. Other times

37. How many children do you have from before?

38. How many of these are with your present partner? +

Diet and eating habits

BREAD / CRISPBREAD / BISCUITS

39. How many slices of bread do you eat on average every day? ? (Combine all meals)

1. White bread (incl. bread rolls, baguettes, pitta, ciabatta and similar)
2. Medium coarse-grain bread (incl. rolls)
3. Coarse-grain bread
4. Crispbread/biscuits

40. Do you use butter, margarine or oil on bread?

- No, almost never
- Yes, sometimes
- Yes, daily

+

+

41. How often do you add these to bread? (Tick per line)

+

+	Seldom/ never	1-2 times per week	3-4 times per week	5-7 times per week	Several times per day
1. Reduced fat cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Regular cheese (yellow/brown)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Prawns/Italian salad or similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Lean meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Savelat sausage, salami or similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Liver pate or similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Preserves (jam/jelly), other sweet spreads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Egg (boiled, fried, scrambled)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

DRINK

42. How often do you drink the following? (Tick each line)

	Seldom/ never	1-6 glass per week	1 glass per day	2-3 glass per day	4 glass or more per day
1. Whole milk, buttermilk, yoghurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Low-fat and skimmed milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Fruit juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Coca Cola/Pepsi with sugar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Coca Cola/Pepsi sugar-free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Other sugar-free fizzy drinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Energy drinks, Battery or similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Filter- and instant coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Boiled/Cafetiere coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Other coffee, espresso or similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Tea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DINNER

43. How often do you eat these meals? (Tick each line)

	Seldom/ never	1-2 times per month	3-4 times per month	2-3 times per week	4 times or more per week
1. Sausages, hamburger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Kebab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Pizza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Meals with minced meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Pure meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Chicken/turkey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Lean fish (cod, pollock, haddock etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Fatty fish (trout, salmon, mackerel, herring)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Fish balls/fish cakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Vegetarian meals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

+

VEGETABLES / FRUIT

+

44. How often do you eat vegetables and fruit? (Tick per line)

+	Seldom/ never	1-3 times per month	1-2 times per week	3-4 times per week	5 times or more per week
1. Raw vegetables/salads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Cooked vegetables in stews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cooked vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EATING PATTERNS

+

45. How often do you eat food bought from these places? (Tick per line)

	Seldom/ never	1-3 times per month	1-4 times per week	5-7 times per week	Several times per day
1. Canteen/cafeteria/lunch bar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Restaurant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Kiosk/snack bar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Petrol/gasoline station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. McDonalds, Burger King etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

46. How would you describe your diet?

1. I have a varied diet	<input type="checkbox"/>
2. I do not eat fish	<input type="checkbox"/>
3. I do not eat meat	<input type="checkbox"/>
4. I am a vegetarian	<input type="checkbox"/>

47. Do you use any form of dietary supplement?

 No Yes

48. If yes, which type? (Tick all that apply)

1. Multivitamin-/mineral supplement	<input type="checkbox"/>
2. Cod-liver oil/fish oil	<input type="checkbox"/>
3. Protein supplement	<input type="checkbox"/>

Lifestyle

49. Have you ever smoked?

- No (go to question 53)
 Yes

50. Did you smoke in the six months before your partner became pregnant?

- No
- Yes, sometimes Number cigarettes/week
- Yes, daily Number cigarettes/day

+

51. Do you smoke now after your partner became pregnant?

- No
- Yes, sometimes Number cigarettes/week
- Ja, daglig Number cigarettes/day

52. If yes, where do you smoke?

- Only outside
 Both inside and outside
 Only inside

+

53. Have you ever used smokeless/chewing tobacco ("snus")?

- No (go to question 57)
- Yes

+

54. If yes, did you use smokeless /chewing tobacco in the six months before your partner became pregnant?

- No
- Yes, daily
- Yes, many times per week, but not daily
- Less often than weekly

55. What type of smokeless/chewing tobacco do you usually use?

- Normal (loose)
- Pouches
- Mini-pouches
- About the same of each type

+

56. How much smokeless /chewing tobacco do you use per week?

- Whole box
- Half box
- Quarter box
- Less than a quarter box



Number of boxes

57. Have you ever used any of the following narcotic substances? (Tick for every line)

	+	Never	Earlierer	Six months before your partner became pregnant
				Now
Cannabis/hash		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ecstasy		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cocaine		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heroin		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amphetamine		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, which: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

58. Have you ever drunk alcohol?

- No (go to question 62)
- Yes

59. How often did you drink alcohol in the six months before your partner became pregnant and how often do you drink now that your partner is pregnant?

	Before	Now
Approximately 6-7 times per week	<input type="checkbox"/>	<input type="checkbox"/>
Approximately 4-5 times per week	<input type="checkbox"/>	<input type="checkbox"/>
Approximately 2-3 times per week	<input type="checkbox"/>	<input type="checkbox"/>
Approximately once per week	<input type="checkbox"/>	<input type="checkbox"/>
Approximately 1-3 times per month	<input type="checkbox"/>	<input type="checkbox"/>
Less than once per month	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>

Units of alcohol

To compare different types of alcohol, we ask about what we call alcohol units (= 1,5 cl pure alcohol).
An alcohol unit corresponds to:

- 1 bottle alcopop/cider
- 1 glass (1/3 litre) beer
- 1 wine glass red wine or white wine
- 1 sherry glass of sherry or other fortified wine
- 1 glass with a single measure of spirit or liquor

+

60. How many alcohol units did you normally drink in the six months before your partner became pregnant and how many alcohol units now that your partner is pregnant?

(Tick both boxes for weekends and everyday, total 4 ticks)
(see the explanation of alcohol units on this page)

	Before		Now	
	Week-end	Every-day	Week-end	Every-day
10 or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5-6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3-4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fewer than 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

61. Have you drunk 5 alcohol units or more on at least one occasion in the six months before your partner became pregnant or now after your partner became pregnant?

	Before	Now
Several times per week	<input type="checkbox"/>	<input type="checkbox"/>
Once per week	<input type="checkbox"/>	<input type="checkbox"/>
1-3 times per month	<input type="checkbox"/>	<input type="checkbox"/>
Less than once per month	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>

+

62. How often are you now so physically active that you become out of breath or sweat? (one tick for leisure time and one for work.)

	In leisure time		At work
Never.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than once per week....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Once per week.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 – 3 times per week.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 – 6 times per week.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approximately every day.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

63. How has your physical activity in leisure time been in the last year? (Think of a weekly average for the year. Getting to work counts as leisure time. Answer both questions)

	Hours per week			
	None	Less than 1	1-2	3 or more
1. Light physical activity (not sweating/out of breath)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Heavy physical activity (sweating/out of breath)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

64. Describe your exercise and physical exertion in your leisure time. If the activity varies a lot, e.g. between summer and winter, take an average. The question relates to the last year (tick the most appropriate box).

- Read, watch TV or other sedentary occupation? +
- Walking, cycling or other motion, at least 4 hours per week? (Here you should also include walking/cycling to work, Sunday walks etc)
- Take part in sports/athletics, heavy garden work etc at least 4 hours per week? ((Note that the activity should take at least 4 hours per week).
- Hard training or take part in competitive sport regularly and several times a week.

65. Have you ever use any of the following substances? (Tick for every line.)

	Never	Previously	Six months before your partner became pregnant	Now
1. Anabolic steroids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Testosterone medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Growth hormone (e.g.. Genotropin/Somatropin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How are you now?

66. Have you been bothered by any of the following feelings during the past 2 weeks? (Enter a cross in a box for each item.)

	Not bothered	A little bothered	Quite bothered	Very bothered
1. Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

67. Have you ever experienced the following for a period of 2 weeks or more earlier in life? (Tick for each line)

	No	Yes
1. Felt depressed, sad	<input type="checkbox"/>	<input type="checkbox"/>
2. Had problems with appetite or eaten too much	<input type="checkbox"/>	<input type="checkbox"/>
3. Been bothered by feeling weak or lack of energy	<input type="checkbox"/>	<input type="checkbox"/>
4. Really blamed yourself and felt worthless	<input type="checkbox"/>	<input type="checkbox"/>
5. Had problems with concentration or had problems making decisions	<input type="checkbox"/>	<input type="checkbox"/>
6. Had at least 3 of the problems named above simultaneously	<input type="checkbox"/>	<input type="checkbox"/>

68. If you have had 3 or more of these problems at the same time:

+

How many times has it occurred? times

How many weeks did the longest period last? weeks

+

69. What kind of perception do you have of yourself? (Tick for each line.)

Strongly agree **Agree** **Disagree** **Strongly disagree**

1. I have a positive attitude towards myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel really useless at times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel that I don't have much to be proud of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel that I'm a valuable person, on an equal footing with anyone else, at any rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

70. Describe yourself as you usually are: (Tick for every line)

Strongly disagree **Disagree somewhat** **Neither Nor** **Agree somewhat** **Strongly agree**

1. Liven up in a party	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Care little about others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Am always well prepared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Become easily stressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have a rich vocabulary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do not say much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Am interested in other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Leave things lying around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Am usually relaxed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have problems understanding abstract ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Feel at ease with other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Offend people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Am attentive to detail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Worry about many things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Have a lively imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Stay in the background	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Have empathy with other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Mess things up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Rarely feel in low spirits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Am not interested in abstract ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Initiate conversations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Am not interested in other peoples' problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Complete tasks at once	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Am easily interrupted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Have excellent ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Have little to say	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Am good-natured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Often forget to put things back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Become easily upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Do not have a good imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

+

continues next page

+	+	Strongly disagree	Disagree somewhat	Neither Nor	Agree somewhat	Strongly agree
31. Talk to many people at a party		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Am not interested in other people		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Like order and tidiness		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Lot of mood changes		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Am quick to understand things		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Do not like to attract attention		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Take time to help others		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Shirk from responsibilities		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Often have mood swings		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Often use difficult words		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Have nothing against being the centre of attention		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. Am sensitive to other peoples' feelings		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Perform according to plan		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. Become easily irritated		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. Use time to think things over		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. Am quiet in company with strangers		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. Put others at their ease		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. Am thorough in my work		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. Often feel down		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. Am full of ideas		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

71. Do you agree or disagree with the following statements? (Tick only one box per line)

	Disagree completely	Disagree somewhat	Neither Nor	Agree somewhat	Agree	Agree completely
1. My life is largely what I wanted it to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My life is very good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am satisfied with my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To date, I have achieved what is important for me in my life ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If I could start all over, there is very little I would do differently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

72. Feeling of anxiety and restlessness in the last six months. (Tick for every line)

	Never	Seldom	Sometimes	Often	Very often
1. How often do you have problems completing the final aspects of a task when the challenging part is already done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How often do you have problems putting things in the right order when you are involved in tasks that require organisation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When you have a task which requires a great deal of careful preparation, how often do you avoid or put off starting it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How often do you have problems remembering appointments or duties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. When you have to sit still for a long time, how often do you move your hands and feet in an agitated and restless way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How often do you feel hyperactive and obliged to do things, as if you are being driven by an machine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

+

73. Have you experienced any of the following during the last 12 months? (Tick for every line)

	No	Yes	+
1. Problems at work/study place	<input type="checkbox"/>	<input type="checkbox"/>	
2. Financial problems	<input type="checkbox"/>	<input type="checkbox"/>	
3. Got divorced, separated or ended a relationship	<input type="checkbox"/>	<input type="checkbox"/>	
4. Problems or conflicts with family, friends or neighbours	<input type="checkbox"/>	<input type="checkbox"/>	
5. Serious concerns that something is wrong with the baby we are expecting	<input type="checkbox"/>	<input type="checkbox"/>	
6. Serious personal illness or injury	<input type="checkbox"/>	<input type="checkbox"/>	
7. Close relative has been seriously ill or injured	<input type="checkbox"/>	<input type="checkbox"/>	
8. Involved in a serious traffic accident, fire or robbery	<input type="checkbox"/>	<input type="checkbox"/>	
9. Have lost someone close to me	<input type="checkbox"/>	<input type="checkbox"/>	
10. Forced into sexual activity	<input type="checkbox"/>	<input type="checkbox"/>	
11. Exposed to physical violence	<input type="checkbox"/>	<input type="checkbox"/>	
12. Other, describe: _____	<input type="checkbox"/>	<input type="checkbox"/>	

+

74. How much do you agree with these descriptions of your relationship with your wife/partner? (Tick one box in each line)

	Completely agree	Agree	Agree somewhat	Disagree somewhat	Disagree	Disagree completely
1. My partner and I have problems in our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am very happy in my relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. My partner is usually understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am satisfied with my relationship to my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. We agree about how children should be raised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

75. Do you have anyone other than your wife/partner you can ask for advice in a difficult situation?

- No
- Yes 1-2 people
- Yes more than 2 people

76. How often do you meet or talk on the telephone with your family (other than your wife/partner and children) or close friends?

- Once a month or less
- 2-8 times a month
- More than twice a week

77. Do you often feel lonely?

- Almost never
- Seldom
- Sometimes
- Usually
- Almost always

+

78. How often do you experience the following in your everyday life? (Tick only one box per item)

	Never	Seldom	Sometimes	Often	Very often
1. Feel pleased about something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feel happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feel joyful as though everything is going your way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feel that you will scream at someone or hit something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Feel angry, irritated or annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feel mad with someone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If there is something else you would like to tell us, please write it on the next page.

+

+

Appendix E

Questionnaire Q2 in MoBa (week 22)

Questionnaire 2

Your Diet



Please fill in today's date:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------

day

month

year

Instructions

In this questionnaire we ask you what you have eaten since you became pregnant until now. We therefore ask you to remember what you have eaten in the last three to four months.

We know that many of you have experienced nausea and perhaps still are nauseous part of the day in a way that has affected your diet. We would still like to have information about your actual diet during this period.

We greatly appreciate your cooperation in this study, and wish you good luck for the remaining part of your pregnancy.

This questionnaire will be processed by a computer. It is therefore important that you follow the instructions below:

- Please use a blue or black ballpoint pen
- Mark the most relevant box for the most appropriate answer
- You should only mark **one** box for each line
- If you have marked the wrong box fill it in completely

Please do not use this questionnaire. Contact us at morbarn@fhi.no or phone + 47 53 20 40 40 if you need a questionnaire.

Example

Cheese	Slices of bread with this food item												
	per day					or per week			or per month				
Hard cheese (fat 27%)	6+	5	4	3	2	1	5-6	3-4	1-2	3	2	1	0
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input style="background-color: black; color: black;" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- The (plus) sign "+" means "more than". Example: 6+ means 6 and more than 6
- Please fill in the mean intake of the food items eaten since you became pregnant.
Example: If you ate grilled chicken twice a week for 2 weeks in a row during the first month, but have not had grilled chicken since, you ate grilled chicken 4 times. Mean intake of grilled chicken will then be once a month, and you mark the question like this;

Dinners with poultry	Number of times eaten									
	per week					or per month				
Fried chicken	5+	4	3	2	1	3	2	1	0	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

- Some places we ask you to write comments, please write clearly and only in the questions when you are asked to do so.

When completed, please return the form in the stamped addressed envelope provided.

Your diet

1. How would you describe your diet since you became pregnant?

My diet	Mark only one box
1. I eat both meat and fish	<input type="checkbox"/>
2. I avoid meat, but eat fish	<input type="checkbox"/>
3. I avoid fish, but eat meat	<input type="checkbox"/>
4. I'm a vegetarian and include dairy products and eggs in my diet (ovo-lacto-vegetarian)	<input type="checkbox"/>
5. I'm a vegetarian and include dairy products but not eggs in my diet (lacto-vegetarian)	<input type="checkbox"/>
6. I'm a vegetarian and avoid all dairy products and eggs (vegan)	<input type="checkbox"/>

2. Have you consumed organic food products since you became pregnant? (Mark only one box per line).

Organic food group	Seldom/never	Sometimes	Often	Mostly
1. Milk, dairy products, cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Bread and cereals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Eggs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your meal pattern

3. How often have you had the following meals per week since you became pregnant?

A snack is a smaller meal consisting of for example a fruit, biscuit, bun, cake, yoghurt or sweets/candy. A snack consisting only of a drink should not be included as you will be asked about beverages later. (Mark only one box per line).

Number of meals per week	Number of meals per week							
	7	6	5	4	3	2	1	0
1. Breakfast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Snack, morning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Lunch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Snack, afternoon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Dinner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Snack, evening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Supper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Night meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bread/ crispbread/ crackers

4. How many slices of bread/ crispbread/ crackers have you eaten on average per day/week since you became pregnant? When answering this question we ask you to include bread eaten during the day, i.

Half a roll = 1 slice of bread, 1 baguette = 4 slices of bread, 1 ciabatta = 3 slices of bread. (Mark only one box per line)

Type of bread	Number of slices													
	per day										or per week			
	13+	9-12	8	7	6	5	4	3	2	1	5-6	3-4	1-2	0
1. White bread (white loaf, baguettes, ciabatta)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wholemeal bread (Kneipp, Graham etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Dark bread (Danish ryebread etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Fibre bread, fibre crispbread, ryecrisp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Crispbread, rusk etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Crackers (Cream cracker etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Do you use butter/ margarine on your bread/crispbread/crackers?

Yes

No (go to question 8)

6. If you use butter /margarine, on how many slices on average and what kind do you use? (Mark only one box per line)

Type of butter/ margarine	Number of slices										or per week			
	per day										5-6	3-4	1-2	0
	13+	9-12	8	7	6	5	4	3	2	1				
1. Butter/ (Bremyk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Hard margarine (Per, Melange)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. "Butter-like" light margarine (Brelett)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Soft margarine (Soft, Vita, Olivero etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Light margarine (Soft light, Vita lett etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. How much butter/ margarine do you use on your slices of bread?

Plenty

Medium

Minimum

Spreads on bread, crispbread, crackers

8. How many slices of bread with the following spreads have you eaten on average since you became pregnant? (Mark only one box per line).

Cheese	Number of slices with this food item												
	per day						or per week			or per month			
	6+	5	4	3	2	1	5-6	3-4	1-2	3	2	1	0
1. Whey cheese goat milk, (brown cheese)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Whey cheese goat, low fat (brown)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Hard white cheese, cream cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Hard white cheese, cream cheese, low fat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Blue cheese (Camembert, Norzola etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Other kinds of cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish													
7. Roe spread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Mackerel/sardines in tomato sauce	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Sardines in oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Smoked salmon/trout/mackerel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Herring, pickled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Shrimp, (prawn)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Crab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Tuna	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Svolværpostei (spread of fish liver/roe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Other kinds of fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meat													
17. Low fat cold cuts (ham, roast beef etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Bologna, cold cuts of lamb, veal etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Salami, Swedish sausage etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Cold cuts of turkey, chicken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Liver paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other kinds of meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Number of slices with this food item												
	per day						or per week			or per month			
Other spreads	6+	5	4	3	2	1	5-6	3-4	1-2	3	2	1	0
23. Spread with mayonnaise (Italian etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Spread made with yoghurt and mayo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Mayonnaise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Jam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Honey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Peanut butter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Other nut spreads (Nugatti etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Other sweet spreads (Chocolate etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Vegetarian spreads (Tartex etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Fruit (banana, apple etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Vegetables (tomato, cucumber etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Eggs

9. How many eggs have you eaten on average since you became pregnant? Include eggs eaten with all meals; however, do not include eggs in pastries. (Mark one box per line)

Eggs	per day		or per week			or per month		
	2+	1	5-6	3-4	1-2	2-3	1	0
Eggs, - fried, boiled, scrambled, omelette	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of seagull eggs eaten last year	0 <input type="checkbox"/>		1-5 <input type="checkbox"/>			6-10 <input type="checkbox"/>		
						more than 10 <input type="checkbox"/>		

Breakfast cereals, porridge

10. How often have you eaten breakfast cereals or porridge on average since you became pregnant? Please include breakfast cereals eaten with other meals. (Mark one box per line)

Breakfast cereals	How often								
	per day		or per week			or per month			
	2+	1	5-6	3-4	1-2	2-3	1	0	
1. Unsweetened muesli, All-Bran Flakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Sweetened muesli, muesli with fruits/nuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Porridge, oatmeal etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Corn Flakes, Frosties etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Sugar with your cereals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Jam with your cereals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Beverage

11. How many cups/glasses have you drunk on average of the following since you became pregnant? Please include also milk/yoghurt consumed with breakfast cereal. 1 mug = 1 glass = 2 cups = 2.5 dl, ½ litre plastic bottle = 2 glasses. (Mark one box per line)

Milk and yogurt	How many glasses										
	per day					or per week			or per month		
	8+	6-7	4-5	2-3	1	5-6	3-4	1-2	2-3	1	0
1. Full-fat milk and fermented milk (1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Low-fat milk (1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Extra low-fat milk (1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Skimmed milk, and fermented (1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Cultura, all types (probiotic) (1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Biola milk/yoghurt (probiotic) (1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Yoghurt, natural/ fruit (1 serving)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Low-fat yoghurt (1 serving)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		How many glasses/servings										
		per day					or per week			or per month		
Milk and yoghurt		8+	6-7	4-5	2-3	1	5-6	3-4	1-2	2-3	1	0
9. Go'morgen yogurt	(1 serving)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Chocolate milk, Litago	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Soya milk	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Rice and oat milk	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		How many glasses										
		per day					or per week			or per month		
Juice/ soft drink/ water/ alcohol		8+	6-7	4-5	2-3	1	5-6	3-4	1-2	2-3	1	0
13. Orange juice	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Other fruit juices, nectar	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Tomato- and vegetable juices	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Cordial, with sugar	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Cordial, with sweetener	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Coca Cola/Pepsi with sugar	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Other soft drinks with sugar	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Diet Coke/Diet Pepsi	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Other light/diet soft drinks	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Caffeine drinks (Battery etc.)	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Tap water	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Uncarbonated bottled water	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Carbonated bottled water	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Non/low -alcoholic beers	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Pilsner	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Wine	(1 glass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Spirits, liqueur	(1 drink)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		How many cups/mugs										
		per day					or per week			or per month		
Coffee/tea		8+	6-7	4-5	2-3	1	5-6	3-4	1-2	2-3	1	0
30. Filter coffee	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Coffee instant	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Coffee boiled/cafetiere	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Cafe latte, cappuccino	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Espresso	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Decaffeinated coffee	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Fig/ barley coffee	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Tea (black tea, fruit tea etc.)	(1 mug)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Green tea	(1 mug)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Rosehip tea, herb tea	(1 mug)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. In how many cups of coffee or tea do you use milk/ cream/ sugar?

		How many cups/mugs										
		per day					or per week			or per month		
Milk/ cream/ sugar in coffee and tea		8+	6-7	4-5	2-3	1	5-6	3-4	1-2	2-3	1	0
1. Milk/ cream in coffee/ tea		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Sugar/ honey in coffee/ tea		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Artificial sweetener in coffee/ tea		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hot meals

First, we ask you to answer a couple of general questions concerning your hot meals. We will then ask more detailed questions about your intake of hot meals since you became pregnant. When you answer these questions please include all hot food you would eat during the day.

13. How often have you on average eaten the following types of hot food since you became pregnant? (Mark one box only)

General questions	How often									
	per week						or per month			
	6+	5	4	3	2	1	3	2	1	0
1. Meat and meat products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Meat and meat products, grilled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Offal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Chicken, turkey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Fish, fish products, boiled/ baked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Fish, fish products, fried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Vegetarian dishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

More detailed questions

14. How often have you on average had the following types of hot food since you became pregnant?

Hot meal with meat products	How often									
	per week						or per month			
	6+	5	4	3	2	1	3	2	1	0
1. Meat /pork sausage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Hot dogs and/or frankfurters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Chicken and/or turkey sausage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Meat balls, meat loaf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hamburger, meat patty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Minced meat in sauce e.g. casserole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot meal with beef/ veal										
7. Beef or veal roast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Beef (fillet, tenderloin, sirloin, entrecote)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. T-bone steak, veal cutlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Casserole, stew, soup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot meal with Pork										
11. Pork chop, cutlet, roast pork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Pork tenderloin, fillet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Smoked pork chops, pork loin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Pork, ribs, spareribs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Bacon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Pork in stew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot meal with Lamb										
17. Lamb roast, lamb chop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Lamb stews (Fårikål etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot meal with Venison										
19. Reindeer roast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Roast of elk, roe deer, fallow deer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Reindeer patty/reindeer stew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Patty/ stew of elk, roe / fallow deer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offal										
23. Liver, kidney from ox, pig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Liver kidney from lamb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Liver, kidney from venison	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Black pudding,"hashed lungs"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot meal with Poultry										
	6+	5	4	3	2	1	3	2	1	0

27. Chicken fillet, turkey fillet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Fried chicken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Pan fried/ boiled chicken, turkey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Chicken schnitzel, nuggets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Game (grouse, pheasant etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Other poultry (duck, goose, ostrich)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seafood									
33. Cod, saithe, haddock, pollack (boiled/fried/smoked)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Mackerel, herring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Salmon, trout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Halibut, plaice, flounder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Tuna fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Perch, pike, pikecake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Other fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Fish cake, fish pudding, fish balls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Fish fingers, breaded fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. Fish casserole, soup, fish au gratin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Shrimps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. Mussels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. Crab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. Roe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. Fish liver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pasta dishes									
48. Pasta with meat (Bolognese, Lasagne etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. Pasta with fish/ mussels/ shrimp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. Pasta with vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. Pasta with only tomato sauce/ ketchup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. Cheese (Parmesan) with your pasta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other hot meals									
53. Pizza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. Taco, burritos etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. Pancakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. Rice pudding etc. (not breakfast)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. Soup, home made and packet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vegetable dishes as main course									
58. Only with vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. With beans and/or lentils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. With soya products (sausage, burger)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

With your hot meal

15. How often have you on average eaten the following food items since you became pregnant?

	How often						
	per day 1	or per week			or per month		
Potato/ rice/ spaghetti		5-6	3-4	1-2	2-3	1	0
1. Potatoes (boiled, baked, mashed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. French fries, fried potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Creamed potatoes, gratinated potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Spaghetti, macaroni, noodles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Rice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Millet, couscous etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Gravy/ trimmings	How often							
	per day		or per week			or per month		
	1		5-6	3-4	1-2	2-3	1	0
7. Melted butter	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Melted margarine	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Brown gravy/white sauce	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Béarnaise sauce etc.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Mayonnaise, remoulade	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Sour cream	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Low-fat sour cream	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Ketchup	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Mustard	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cooking fat

16. How often have you used the following types of fat in your cooking since you became pregnant? Mark only one box for each line.

Cooking fat	How often							
	per day		or per week			or per month		
	2+	1	5-6	3-4	1-2	2-3	1	0
1. Butter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Butter soft (Bremyk, Smørgod)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Margarine hard (Melange, Per)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Soft soya margarine (pack/pot)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Margarine with olive oil (Olivero)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Other types of margarine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Soya oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Cooking oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Olive oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Corn oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other types of oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vegetables

First we ask you a couple of general questions. We will then ask more detailed questions about your intake of vegetables since you became pregnant. (Mark only one box for each line.)

17. How often have you on average eaten vegetables since you became pregnant?

General questions	How often							
	per day		or per week			or per month		
	2+	1	5-6	3-4	1-2	2-3	1	0
1. Raw vegetables (salads etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Vegetables in casseroles, soups, wok etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Boiled vegetables with main dish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. More detailed question about vegetables

How often have you on average eaten the following vegetable since you became pregnant? (Mark one box per line)

Vegetable	How often							
	per day		or per week			or per month		
	2+	1	5-6	3-4	1-2	2-3	1	0
1. Frozen vegetable mix	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Cucumber	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Aubergine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Avocado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vegetable	per day		How often or per week			or per month		
	2+	1	5-6	3-4	1-2	2-3	1	0
5. Cauliflower, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Cauliflower, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Broccoli, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Broccoli, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Green beans, haricots verts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Peas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Carrots, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Carrots, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Cabbage, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Cabbage, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Garlic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Swede, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Swede, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Onion, leek, spring onion, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Onion, leek, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Sweetcorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Pepper, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Pepper in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Brussels sprouts, boiled/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Lettuce, Chinese cabbage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Lettuce, Chinese cabbage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Celery, celeriac	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Button mushroom, raw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Button mushroom, fried/ in casseroles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Wild mushroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Spinach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Courgette (zucchini)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Tomato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Other vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. How often have you used dressing and other trimmings with salad since you became pregnant? (Mark one box per line)

Dressing/ trimmings	per day		How often or per week			or per month		
	2+	1	5-6	3-4	1-2	2-3	1	0
1. Dressing (Thousand-island etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Light dressing, yoghurt dressing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Olives, black/green	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feta cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home-made dressing								
5. With oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Without oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. With sour cream/ yoghurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. How would you characterize the usual ratio between vegetables and meat in your casseroles.

	Have not eaten	More vegetables than meat	Same amount meat and veg.	More meat than vegetables
1. Casseroles with meat/ fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Casseroles with offal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Casseroles with minced meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fruit

21. How many fresh fruits have you eaten on average since you became pregnant?

	per day					or per week			or per month		
	8+	6-7	4-5	2-3	1	5-6	3-4	1-2	2-3	1	0
Fresh fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. How often have you on average eaten the following fresh fruits since you became pregnant? (Mark one box per line)

Fresh fruit		How often									
		per day				or per week			or per month		
		4+	3	2	1	5-6	3-4	1-2	2-3	1	0
1. Orange, mandarin	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Banana	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Grapes	(8-10 pieces)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Apple	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Peach, nectarine	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Grapefruit	(½ piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Strawberries	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Other berries (blueberries etc.)	(1 cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Mango	(½ piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Melon	(1 slice)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Papaya	(½ piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Plum	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Pear	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Other fruits		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. How often have you on average eaten the following dried fruits since you became pregnant? (Mark one box per line)

Dried fruit /nuts		How often									
		per day				or per week			or per month		
		4+	3	2	1	5-6	3-4	1-2	2-3	1	0
1. Apricots		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Raisins		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Prune, fig, date		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Peanuts		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Almonds, hazelnuts, cashew nuts etc.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Desserts, ice cream, cakes, candy

24. How often have you on average eaten the following sweets since you became pregnant? (Mark one box per line)

Dessert/ice cream		How often								
		per day		or per week			or per month			
		2+	1	5-6	3-4	1-2	2-3	1	0	
1. Pudding (chocolate, creme caramel etc.)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Tinned fruit, stewed fruit thickened with potato flour		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Fruit salad made of fresh fruit		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Ice cream		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Ice cream made of yogurt or low fat		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Ice lollies, sorbet		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Vanilla sauce/custard		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Cream, whipped cream		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

25. How often have you on average eaten cakes and buns since you became pregnant?

Cakes, buns		per day				How often or per week			or per month		
		4+	3	2	1	5-6	3-4	1-2	2-3	1	0
1. Sweet bun, Norwegian Christmas cake etc	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Danish pastry	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Doughnut, cake	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Waffle	(1 plate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Chocolate cake, sponge cake etc.	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Cookie	(1 piece)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. How often have you on average eaten sweets and snacks since you became pregnant? (Mark only one box per line)

Sweets and snacks		per day				How often or per week			or per month		
		4+	3	2	1	5-6	3-4	1-2	2-3	1	0
1. Plain chocolate		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Chocolate with nuts etc		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Caramel, liquorice		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Sweets, jelly sweets		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Pastilles with sugar		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Sugar-free pastilles		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Marzipan		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Potato chips		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Popcorn		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Salty snacks		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other food items

27. It is difficult to ask about all the food you have eaten since you became pregnant. Please write down the names of any food items that you have eaten and that you have not yet been asked about.

Other food items eaten	Name:	per day						How often or per week			or per month	
		6+	5	4	3	2	1	5-6	3-4	1-2	2-3	1
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Genetically modified food

28. Many countries, including USA, England and France, allow the sale of genetically modified food. Most European countries, however, require labeling of such food items. We wish to know if you have eaten any genetically modified food items, either abroad or in Norway, since you became pregnant?

Yes No Do not know

29. If yes, please write down the name of the genetically modified food item(s) you have eaten.

Genetically modified food items	Name	per day						How often or per week			or per month	
		6+	5	4	3	2	1	5-6	3-4	1-2	2-3	1
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hot meals from kiosks, gas/petrol stations and fast food restaurants

30. On average, how often have you eaten hot meals bought at kiosks, gas stations or fast food Restaurants since you became pregnant?

Food bought from	per day			or per week			or per month		
	4+	2-3	1	5-6	3-4	1-2	2-3	1	0
1. Kiosks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Gas/petrol stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Fast food restaurants (McDonald's etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dietary changes during this pregnancy

31. Please mark if you have eaten more, less or the same amount of the following food items compared to before becoming pregnant

Food item	Did not eat or drink this before pregnancy	As before	More	Less	Stopped completely
1. Milk, dairy products, cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Bread and cereals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Biscuits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Fat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Eggs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Chocolate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other sweets/candy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Tea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Soft drinks with sugar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Soft drinks sugar free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

32. Have you experienced nausea during this pregnancy? Yes No

33. If yes; have you eaten more or less than before you became pregnant?
 More Less

34. In which week(s) were you most bothered with nausea?

From pregnancy week	To pregnancy week	Still nauseous
		<input type="checkbox"/>

35. Have you vomited during this pregnancy? Yes No

36. In which week(s) did you vomit?

From pregnancy week	To pregnancy week	Still vomiting
		<input type="checkbox"/>

37. Have you started to eat or drink certain food items during this pregnancy? Yes No

38. If yes, name the two most important food items you have started to eat/drink.

Write the name of the food item

Dietary Supplements

39. Do you use, or have you used supplements during this pregnancy? Yes No

40. If yes, we ask you to name and quantify the supplements you have used/are using

(ts = 3.5 ml (teaspoon), bs = 5 ml (2 x teaspoon), ss = 10 ml (3 x teaspoon))

Liquid supplements	Times per week										Amount			
	7	6	5	4	3	2	1	<1	0	1 ts	1bs	1ss		
1. Cod liver oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Omega-3 cod liver oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Sanasol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Biovit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Liquid iron mixture (Floradix etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Other liquid supplements														
6. Name:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Manufacturer:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8. Name:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
9. Manufacturer:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Capsules/tablets	Times per week										Number(s) per time			
	7	6	5	4	3	2	1	<1	0	1	2	3	4+	
10. Cod liver oil capsules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Fish oil capsules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Vitaplex, B vitamins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Kostpluss/nyco plus multi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Nyco plus folic acid 0.4 mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Spektro (Solaray)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16. Hemofer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Duroferon durretter, Ferro Retard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other supplements														
18. Name:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19. Manufacturer:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20. Name:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21. Manufacturer:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22. Name:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
23. Manufacturer::	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
24. Name:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25. Manufacturer:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Please remember to fill out the date on page 2!

Thank you for your time and help!

Appendix F

Questionnaire Q3 in MoBa (week 30)

den norske *Mor & barn undersøkelsen*

Questionnaire 3C

This questionnaire applies mainly to the period after week 12 of your pregnancy. We will ask you some questions which you may recognise from the first questionnaire. We do this because we want to continue following your and your child's progress. It would be useful for you to consult your pregnancy health card before you start answering the questions so that you can use the information contained in it when completing this questionnaire. If you feel uncomfortable with a question or it is difficult to answer, you can skip this question and go on to the next one.

This questionnaire will be processed by a computer. It is therefore important that you follow these instructions:

- Use a blue or black ballpoint pen.
- Put a cross in the box that is most relevant like this:
- If you put a cross in the wrong box, correct it by filling
- Write a number or capital letter in the large green box.

It is important that you only write in the white area.

Please do not use this questionnaire. Contact us at morbarn@fhi.no or phone + 47 53 20 40 40 if you need a questionnaire.

Number:

- When entering a single-digit number in boxes containing two or more squares, use the square on the right. **For example:** 5 is written like this:
- A number of questions in this questionnaire concern the week of pregnancy. *For example: If you want to indicate something that happened 14 weeks after your last period, enter a cross in the box for week 13-16.*
- Specific information concerning, for example, medication or profession should be written in the boxes or on the lines provided. Please write clearly in CAPITAL LETTERS.
- Remember to enter the date when you completed the questionnaire.

Please return the completed questionnaire in the stamped addressed envelope provided.

Date when the questionnaire was completed

Day

Month

Year

(write the year in full, e.g. 2001)

Antenatal care and health

1. Where have you been to antenatal check-ups?

(Fill in one or more boxes.) Specify how many times.

- Public health centre times
- Doctor's surgery times
- Hospital (outpatients) clinic times

2. Who has examined you each time? (Fill in one or more boxes.) Specify how many times.

- Midwife times
- General practitioner times
- Gynaecologist times
- Public health nurse times

3. Is your doctor male or female?

How many times have you gone to him/her?

- General practitioner female times
- male times
- Gynaecologist female times
- male times

4. If you visit or have visited a gynaecologist or hospital clinic for your antenatal check-ups, what is or was the reason?

- Referred due to complications during this pregnancy
- Referred due to previous illness or complications in previous pregnancies
- On your own initiative without a referral
- Referred for another reason

5. Do you agree with the following statements concerning your antenatal check-ups?

	Agree completely	Agree somewhat	Disagree somewhat	Disagree completely
I have been given sufficient advice and information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been well taken care of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There was not enough time during the consultations . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I felt secure during these check-ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been able to discuss everything I needed to during the check-ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On the whole, I am satisfied with the way I have been followed up by the health service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Have you contacted a midwife or doctor in addition to your normal check-ups?

	No	Yes
Midwife	<input type="checkbox"/>	<input type="checkbox"/>
Doctor	<input type="checkbox"/>	<input type="checkbox"/>

7. If yes, was it difficult to get an appointment?

	Midwife	Doctor
Not difficult	<input type="checkbox"/>	<input type="checkbox"/>
Somewhat difficult	<input type="checkbox"/>	<input type="checkbox"/>
Very difficult	<input type="checkbox"/>	<input type="checkbox"/>

8. Have you had a gynaecological examination during your pregnancy (internal examination)? If so, how many times?

No

Yes Times

9. How many ultrasound examinations have you had during your pregnancy?

External ultrasound examination Times

Internal ultrasound examination Times

10. How many children are you expecting?

11. Have you been offered an amniocentesis or placenta biopsy?

No (go to question 16)

Yes

12. If yes, were any tests performed and what were the results?

	Was the test performed?		Were the results normal?	
	Yes	No	Yes	No
Amniocentesis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Placenta biopsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If the tests were abnormal, describe the findings:

13. If an amniocentesis or placenta biopsy was performed, what was the reason?

- Due to my age (normally 38 or older at the time of delivery)
- Previous child with a chromosome disorder
- Previous child with neural tube defect (spina bifida)
- Epilepsy (medication for epilepsy)
- Ultrasound findings
- Other

14. Were there complications during the first 2 weeks following the amniocentesis?

- No
- Yes

15. If yes, what kind of complications?

- Vaginal bleeding
- Leakage of amniotic fluid
- Abdominal pain (similar to or stronger than menstrual pains)
- Other _____

16. Have you had an X-ray during pregnancy?

- No
- Yes

17. If yes, what part of your body was X-rayed? How many X-rays were taken and in which week of pregnancy? (Fill in one or more boxes.)

	Week of pregnancy						No. of times
	0-12	13-16	17-20	21-24	25-28	29+	
Teeth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Lungs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Arms or legs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Pelvis/abdomen/back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>

18. Have you received treatment to prevent a premature birth during this pregnancy? (Fill in one or more boxes.)

- No
- Yes, relax or bed-rest
- Yes, medication

Which medicines? _____

19. Have you been vaccinated during this pregnancy?

- No
- Yes

Which vaccine? _____

20. Has the midwife or doctor told you that you have or have had high blood pressure during this pregnancy?

- No
- Yes

21. If yes, what was the highest reading during this pregnancy? (High blood pressure is over 140/90) (Refer to your health card.)

/ E.g. /

- Don't know

22. Have you had high blood pressure without being pregnant?

- No
- Yes
- Don't know

23. If yes, what was the highest reading before this pregnancy?

/ E.g. /

- Don't know

30. Do you wake up at night due to pelvic pain?

- Yes, frequently
 Yes, sometimes
 No, never

31. Do you have to use a stick or crutches in order to walk due to pelvic pain?

- No, never
 Yes, but not every day, the pain varies from day to day
 Yes, I have to use a stick or crutches every day

32. Have you received an anaesthetic in connection with surgery or dental treatment during this pregnancy?

- No
 Yes

33. If yes, what type of anaesthetic have you had? (Fill in one or more boxes.)

- General (full) anaesthetic
 Spinal anaesthetic (epidural)
 Local anaesthetic
 Don't know

34. Have you been to the dentist during this pregnancy?

- No
 Yes

35. If yes, did the dentist perform any of the following treatments? (Fill in one or more boxes.)

	Yes	No
Put in new amalgam fillings (silver fillings)	<input type="checkbox"/>	<input type="checkbox"/>
Removed or replaced amalgam fillings	<input type="checkbox"/>	<input type="checkbox"/>
Put in new white fillings	<input type="checkbox"/>	<input type="checkbox"/>

36. How many teeth do you have and how many have fillings? (Look in the mirror and count.)

Total number of teeth	<input type="text"/>	<input type="text"/>
Number of teeth with amalgam fillings	<input type="text"/>	<input type="text"/>
Number of teeth with other types of fillings	<input type="text"/>	<input type="text"/>

37. At present, do your gums bleed when you brush your teeth?

- No, seldom or never
 Yes, sometimes
 Yes, frequently
 Yes, nearly always

38. Have you had a tattoo or body piercing, including extra holes in the ears? (Do not include pierced ears if you have one hole in each ear.)

- No
 Yes

39. If yes, where and when was it done? (Fill in one or more boxes.)

	Tattoo	Body piercing
Before this pregnancy:		
In Norway	<input type="checkbox"/>	<input type="checkbox"/>
Abroad	<input type="checkbox"/>	<input type="checkbox"/>
During this pregnancy:		
In Norway	<input type="checkbox"/>	<input type="checkbox"/>
Abroad	<input type="checkbox"/>	<input type="checkbox"/>

40. Have you ever had a blood transfusion? If yes, give the number of transfusions.

- No
 Yes, during this pregnancy Times
 Yes, before this pregnancy Times

41. If yes, in which country and which year? (Give the last 2 transfusions.)

Country: _____
 Country: _____

42. Have you ever had breast surgery?

- No
 Yes

43. If yes, was it:

- Breast enlargement
 Breast reduction
 Cancer/biopsy
 Other, describe: _____

44. Have you ever had cervical dysplasia?

- No
 Yes
 Year the dysplasia was detected the first time

45. Have you had an operation on your cervix?

- No
 Yes
 Year of operation

46. Have you ever had a gamma globulin injection? (used to prevent infection of hepatitis A, primarily when travelling abroad.)

- No
 Yes
 If yes, which year?

How have you been recently?

Some questions about the time that has elapsed since the 13th week of pregnancy.

47. Have you had one or more episodes of vaginal bleeding after the 13th week of pregnancy?

- No
 Yes

48. If yes, how much did you bleed, in which week(s) of pregnancy and how many days did the bleeding last? (If you have had more than 2 episodes of bleeding, describe the last 2 only.)

The amount of blood (spotting means a few drops)	In which week of pregnancy did the bleeding occur?					No. of days bleeding lasted
	13-16	17-20	21-24	25-28	29+	
1. <input type="checkbox"/> Spotting <input type="checkbox"/> More than spotting <input type="checkbox"/> Large amounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
2. <input type="checkbox"/> Spotting <input type="checkbox"/> More than spotting <input type="checkbox"/> Large amounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
<input type="checkbox"/> Number of episodes of bleeding if more than 2						<input type="text"/>

49. Do you know why you bled?

- No
 Yes

50. If yes, what was the reason? (Fill in one or more boxes.)

- The placenta is too low/is in a difficult position/placenta previa
 Premature separation of the placenta/abruptio/ablatio placenta
 Threatening miscarriage/premature birth
 Cervical ulcer, bleeding of the mucous membrane in the vagina
 Following intercourse
 Other reason

51. Have you been bothered by uterine contractions?

- No
 Yes, a little
 Yes, a lot

52. Do you have or have you had any of the following illnesses or problems after the 13th week of pregnancy? If you have used tablets, mixtures, suppositories, inhalers, creams, etc. in connection with the illness or problem, give the name(s) of the medication(s), when and how long you took them. (Fill in one or more boxes.) (This applies to all types of medicines including alternative and herbal remedies, both regular and occasional use. Do not include vitamins and nutritional supplements as these are asked about elsewhere.)

	In which week of pregnancy did you have problems?					The name of the medication taken	In which week of pregnancy did you take medication					No. of days taken
	13-16	17-20	21-24	25-28	29+		13-16	17-20	21-24	25-28	29+	
1 Pelvic girdle pain ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
2 Back pains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
3 Other pains in muscles/joints.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
4 Nausea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
5 Long-term nausea and vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
6 Vaginal thrush	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
7 Vaginal catarrh, unusual discharge...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
8 Pregnancy itch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
9 Constipation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
10 Diarrhoea/gastric flu. ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

Continued...

	In which week of pregnancy did you have problems?					The name of the medication taken	In which week of pregnancy did you take medication					No. of days taken		
	13-16	17-20	21-24	25-28	29+		13-16	17-20	21-24	25-28	29+			
11 Unusual fatigue /drowsiness.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12 Heartburn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
13 Swelling of the body (oedema)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14 Common cold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15 Throat infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
16 Sinusitis/ear infection....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
17 Influenza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18 Pneumonia /bronchitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19 Other cough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20 Sugar in urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
21 Protein in urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
22 Bladder infection/ cystitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
23 Incontinence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
24 High blood pressure ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
25 Leg cramps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
26 Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
27 Hay fever/other allergy ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
28 Headache/migraine...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
29 Depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
30 Other psychological problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
31 Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

53. If you have had a fever once or more since the 13th week of pregnancy, indicate in which week of pregnancy, name of any medication taken to reduce the fever and the highest temperature measured. (If more than 3 times, indicate the last 3.)

	Which week of pregnancy did you have a fever?					Name any medication taken to lower the fever	Highest recorded temperature (e.g. 38.9° C)	Temperature not taken
	13-16	17-20	21-24	25-28	29+			
1st time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="text"/> , <input type="text"/> °C	<input type="checkbox"/>
2nd time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="text"/> , <input type="text"/> °C	<input type="checkbox"/>
3rd time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="text"/> , <input type="text"/> °C	<input type="checkbox"/>

Fever more than 3 times

59. Give the complete name(s) of all the vitamins and nutritional supplements you take. Include also herbal remedies and diet products. (Write clearly using CAPITAL LETTERS since this will be read by a computer.)

1	e.g.	V	I	T	A	P	L	E	X	M	E	D	J	E	R	N										
2																										
3																										
4																										
5																										
6																										

60. If you take multivitamins (with or without minerals), do these contain folate/folic acid?

- No
 Yes
 Don't know

WORK

61. Have you been in paid employment during this pregnancy?

- No (go to question 76)
 Yes

62. Do you have the same job conditions now after the 13th week of pregnancy that you described in the first questionnaire?

- No
 Yes (go to question 66)

63. If no, in which week of your pregnancy did your work situation change?

Week of pregnancy

--	--

64. How has your work situation changed?

- I have stopped working
 I have gone over to a part-time position
 Other

65. If you have stopped working, why did you stop?

- I handed in my notice
 The work was temporary (seasonal, short-term contract)
 I was fired
 Other

66. Have your working arrangements been changed during this pregnancy making your job more suitable for you now that you are pregnant?

- No
 Yes

67. If no, why have your working conditions not been changed to make them more suitable for you?

- Not necessary
 Impossible or nearly impossible
 I have asked for changes but no changes have been made
 It is difficult to ask
 None of the above (explain why)

68. What are your working hours? (Fill in one or more boxes.)

- Permanent day work
 Permanent afternoon or evening work
 Permanent night work
 Shift work or shift rotas
 No set times (extra work, extra shifts, temporary employment, etc.)
 Other

69. Answer each of the following questions for your present work. (Fill in each item.)

	Yes daily, more than half of working hours	Yes daily, less than half of working hours	Yes periodically, but not daily	Seldom or never
Do you ever have so much to do that your work situation becomes stressful and annoying? . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have to bend or turn many times a day?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you work with your hands at shoulder level or higher?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you work standing or walking about?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In some jobs it is possible to decide yourself how much and how quickly you work. You can, for example, work a little faster one day and take it a little easier the next. Do you have this opportunity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there so much noise at your workplace that it is uncomfortable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there so much noise that you have to raise your voice to speak with others even at a distance of one metre?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

70. How often have you worked with a radio transmitter or radar after the 13th week of pregnancy?

- Seldom/never
- A few times a week
- Daily
- On average, more than 1 hour a day

71. How often have you worked with X-ray equipment (at a distance of less than 2 metres) after the 13th week of pregnancy? (Do not include treatment as a patient.)

- Seldom/never
- A few times a week
- Daily
- On average, more than 1 hour a day

72. Have you been absent from your normal job for more than two weeks after the 13th week of pregnancy?

- No
- Yes, part time
- Yes

73. Are you absent from regular work at the present time?

- No
- Yes, part time
- Yes

74. If yes, why are you currently absent from work?

(Fill in for only one item.)

- Sick leave (with sick compensation pay)
- Absent due to sick child
- Made redundant with compensation
- Absent with maternity allowance due to the working environment
- Started maternity leave (with allowance)
- Service leave
- Other (describe)

75. Complete the table below if you were on sick leave (full or part time) after the 13th week of pregnancy. Fill in the reason (e.g. pelvic girdle pain, pneumonia), which weeks you were on sick leave, the number of days and the percentage of time each period of sick leave represents. (Give one reason for sick leave per line.)

Reason for sick leave	Sick leave during week of pregnancy:					Number of days	% sick leave
	13-16	17-20	21-24	25-28	29+		
<i>Example: Pelvic girdle pain</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14	50
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

76. Do you currently lift anything over 10 kilos while you are pregnant? (10 kilos is equivalent to a full bucket of water)

	Home	Work
Seldom or never	<input type="checkbox"/>	<input type="checkbox"/>
Yes, less than 20 times a week	<input type="checkbox"/>	<input type="checkbox"/>
Yes, more than 20 times a week	<input type="checkbox"/>	<input type="checkbox"/>
Yes, 10-20 times a day	<input type="checkbox"/>	<input type="checkbox"/>
Yes, more than 20 times a day	<input type="checkbox"/>	<input type="checkbox"/>

77. Have others helped you with housework or childcare more than they usually do to relieve you during this pregnancy?

- Yes, considerably
- Yes, to a fair extent
- No, no one has offered
- No, it has not been necessary

78. If you are on maternity leave for this pregnancy, when did it start?

Date:

day month year

Habits

79. How often do you talk on a mobile phone?

- Seldom/never
- A few times a week
- Daily
- On average, more than 1 hour a day

80. Do you talk on your mobile phone for longer than 15 minutes at a time?

- Never
- Seldom
- Frequently

81. How frequently have you worked with a computer monitor, laser printer or photocopier machine (at a distance of less than 2 metres) after the 13th week of pregnancy?

	Computer monitor	Laser printer	Photocopier machine
Seldom/never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A few times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On average, more than 1 hour a day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

82. Do you live close to high-voltage power lines?

- No
- Yes, closer than 50 metres
- Yes, between 50 - 100 metres
- Yes, more than 100 metres

83. How often have you been to a discotheque since you answered the previous questionnaire?

- Never
- At least 1-2 times a week
- Less often

84. How often do you exercise at present? (Fill in for each item.)

	Never	1-3 times a month	Once a week	Twice a week	3 times or more a week
1. Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Brisk walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Running/jogging/orienteering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Cycling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Training studio/weight training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Special gymnastics/aerobics for pregnant women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Aerobics/gymnastics/dance without running and jumping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Aerobics/gymnastics/dance with running and jumping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Dancing (swing/rock/folk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Skiing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Ball sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Swimming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Riding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

85. How often do you do exercises at home or at a gym for the following groups of muscles? (Fill in for each item.)

	Never	1-3 times a month	Once a week	Twice a week	3 times a week or more
Abdominal muscles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back muscles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pelvic floor muscles (Muscles around the vagina, urethra, anus)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

86. How often at the moment are you so physically active in your spare time and/or at work that you get out of breath or sweat? (Fill in for both spare time and work.)

	Spare time	At work
Never	<input type="checkbox"/>	<input type="checkbox"/>
Less than once a week	<input type="checkbox"/>	<input type="checkbox"/>
Once a week	<input type="checkbox"/>	<input type="checkbox"/>
Twice a week	<input type="checkbox"/>	<input type="checkbox"/>
3-4 times a week	<input type="checkbox"/>	<input type="checkbox"/>
5 or more times a week	<input type="checkbox"/>	<input type="checkbox"/>

87. How often on average have you had sexual intercourse during the last month?

- Daily
- 5-6 times a week
- 3-4 times a week
- 1-2 times a week
- Less frequently
- Never

88. Have you been abroad during the last year?

- No
- Yes

89. If yes, which countries did you visit and when?

Country	Month	Year
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>

90. Have you come into contact with animals either at work or in your free time?

- No
- Yes

91. If yes, which animals have you come into contact with and how often?

	Daily	3-6 times a week	1-2 times a week	Less often
Dog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guinea pig/hamster/rabbit/rat, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canary or other caged birds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hens and other poultry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cow/sheep/goat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Horse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

92. How many hours a day do you usually sleep now when you are pregnant?

- Over 10 hours
- 8-9 hours
- 6-7 hours
- 4-5 hours
- Less than 4 hours

93. Do you currently sleep on a waterbed or use an electric blanket?

	Yes	No
Waterbed	<input type="checkbox"/>	<input type="checkbox"/>
Electric blanket.	<input type="checkbox"/>	<input type="checkbox"/>

94. Can you rest during the day (both at home and at work)?

- No
- Yes

95. Have you been in a sauna while you have been pregnant?

- No
- 1-5 times
- 6-10 times
- More than 10 times

96. Have you been in a solarium while you have been pregnant?

- No
- 1-5 times
- 6-10 times
- More than 10 times

97. Are you exposed to passive smoking either at home or at work? If yes, how many hours a day?

	No	Yes	No. of hrs
Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/> <input type="text" value=""/>
Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/> <input type="text" value=""/>

98. Do you smoke at present? If yes, how many cigarettes?

- No
- Sometimes Cigarettes per week
- Daily Cigarettes per day

99. Does the baby's father smoke at present? If yes, how many cigarettes?

- No
- Sometimes Cigarettes per week
- Daily Cigarettes per day

100. If one or both of you have stopped smoking during the pregnancy, in which week of pregnancy did you stop?

- You Week of pregnancy
- Baby's father Week of pregnancy

101. If you or the baby's father have smoked during the pregnancy, were there periods during which you or the baby's father did not smoke? (Fill in the weeks during pregnancy when you did not smoke.)

	Weeks of pregnancy <u>without</u> smoking							
	0-4	5-8	9-12	13-16	17-20	21-24	25-28	29+
You ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baby's father...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

102. Have you used other forms of nicotine after the 13th week of pregnancy?

	No	Yes
Nicotine chewing gum	<input type="checkbox"/>	<input type="checkbox"/>
Nicotine patches	<input type="checkbox"/>	<input type="checkbox"/>
Nicotine inhaler	<input type="checkbox"/>	<input type="checkbox"/>
Chewing tobacco/snuff	<input type="checkbox"/>	<input type="checkbox"/>

103. Have you used any of the following substances after the 13th week of pregnancy?

	No	Yes
Hash	<input type="checkbox"/>	<input type="checkbox"/>
Amphetamine	<input type="checkbox"/>	<input type="checkbox"/>
Ecstasy	<input type="checkbox"/>	<input type="checkbox"/>
Cocaine	<input type="checkbox"/>	<input type="checkbox"/>
Heroin	<input type="checkbox"/>	<input type="checkbox"/>

104. Have you ever used any of the following substances? (Fill in for each item.)

	No	Previously	Last 6 months before pregnancy	During this pregnancy
Anabolic steroids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Testosterone products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Growth hormones (e.g. genotropin/somatropin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Food and drink

105. How often do you eat the following foods? (Fill in for each item.)

	Before the pregnancy				During the pregnancy		
	Never	A few times a year	1-3 times a Month	Once a week or more	Never	1-3 times a month	Once a week or more
1 Crab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Shrimps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Shellfish (e.g. mussels, oysters)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Fish liver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Tuna fish or halibut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Flounder/other flat fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Pike or perch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Other fresh water fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Reindeer meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Mutton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Liver or kidney from game	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Wild mushrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

106. How often do you eat the following types of food? (Fill in for each item.)

	Never	A few times a year	1-3 times a month	Once a week or more
Food from restaurant/street vendors/canteen or the like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meat (not including tinned) bought in other countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meat (including poultry) that is raw or undercooked (pink near the bone)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Raw minced meat/meat mixtures (even to taste)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoked or cured salmon or trout (uncooked)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soft cheeses (e.g. cream cheese, camembert, blue cheese, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unwashed raw vegetables, unwashed fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

107. Do you avoid eating the following foods during this pregnancy?

	No	Yes
Fish	<input type="checkbox"/>	<input type="checkbox"/>
Eggs	<input type="checkbox"/>	<input type="checkbox"/>
Nuts	<input type="checkbox"/>	<input type="checkbox"/>
Oranges, lemons	<input type="checkbox"/>	<input type="checkbox"/>
Strawberries	<input type="checkbox"/>	<input type="checkbox"/>
Other, specify		

108. What type of drinking water do you have where you live?

- Own water source (e.g. well)
 - Water company (public or private)
 - Other source
- Name of water company _____
- Don't know the name of the water company

109. Is your water treated (chlorinated or UV-radiated)?

- No
- Yes, UV radiation
- Yes, chlorinated
- Don't know

110. What was your fluid consumption (number of cups/glasses) per day after the 13th week of pregnancy? (1 mug = 2 cups, 1 small plastic bottle (0.5 litre) = 4 cups, 1 large plastic bottle (1.5 litres) = 12 cups)

	Number of cups / glasses	Decaffeinated (fill in)
1. Filter coffee	<input type="text"/>	<input type="checkbox"/>
2. Instant coffee	<input type="text"/>	<input type="checkbox"/>
3. Boiled coffee	<input type="text"/>	<input type="checkbox"/>
4. Other coffee	<input type="text"/>	<input type="checkbox"/>
5. Tea	<input type="text"/>	<input type="checkbox"/>
6. Coca Cola/Pepsi, etc.	<input type="text"/>	<input type="checkbox"/>
7. Other fizzy drinks	<input type="text"/>	<input type="checkbox"/>
8. Diet Coca Cola, diet Pepsi	<input type="text"/>	<input type="checkbox"/>
9. Other diet fizzy drinks	<input type="text"/>	<input type="checkbox"/>
10. Tap water	<input type="text"/>	
11. Bottled water	<input type="text"/>	

	Number of cups/glass	Organic (fill in)
12. Juice/squash	<input type="text"/>	<input type="checkbox"/>
13. Diet juice/squash	<input type="text"/>	<input type="checkbox"/>
14. Milk (skimmed, low fat, whole)	<input type="text"/>	<input type="checkbox"/>
15. Yogurt, all types.	<input type="text"/>	<input type="checkbox"/>
16. Yogurt with active Lactobacillus all types	<input type="text"/>	<input type="checkbox"/>
17. Other type of cultured milk (kefir)	<input type="text"/>	<input type="checkbox"/>
18. Other.	<input type="text"/>	<input type="checkbox"/>

111. How often did you consume alcohol before and how often do you consume it now?

	Last 3 months	In this pregnancy		
	before last period	0-12	13-24	25+
Roughly 6-7 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 4-5 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 2-3 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 1 time a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 1-3 times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than once a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Never.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Alcohol units

Alcohol units are used to compare the different types of alcoholic beverages. 1 alcohol unit = 1.5 cl. pure alcohol.

- 1 glass of beer = 1 alcohol unit
- 1 wine glass of red or white wine = 1 alcohol unit
- 1 sherry glass of sherry or other fortified wine = 1 alcohol unit
- 1 spirit glass of spirits or liqueur = 1 alcohol unit
- 1 bottle/can breezer or cider = 1 alcohol unit

112. In the period just before you became pregnant and during this pregnancy, how many times have you consumed 5 units or more of alcohol? (See the explanation for units.)

	Last 3 mths before last period	In this pregnancy week of pregnancy		
		0-12	13-24	25+
Several times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-3 times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than once a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

113. How many units do you usually drink when you consume alcohol? (See the above explanation.)

	Last 3 mths before last period	In this pregnancy week of pregnancy		
		0-12	13-24	25+
10 or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5-6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3-4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

114. If you have changed your drinking habits before this pregnancy, when did the change occur? (Fill in one or more boxes.)

	Reduced intake	Increased intake
Last 3 months before last period	<input type="checkbox"/>	<input type="checkbox"/>
During pregnancy weeks 0-6	<input type="checkbox"/>	<input type="checkbox"/>
During pregnancy weeks 7-12	<input type="checkbox"/>	<input type="checkbox"/>
During pregnancy weeks 13-24	<input type="checkbox"/>	<input type="checkbox"/>
After pregnancy week 25	<input type="checkbox"/>	<input type="checkbox"/>

115. If you have modified your consumption of alcohol, how important were the following factors? (Fill in one or more boxes.)

	Not relevant	Not very important	Quite important	Important	Very important
Nausea, discomfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Altered taste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For the baby's sake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression/problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other reasons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You and your life now

116. What is your current civil status?

- Married
- Cohabiting
- Single
- Divorced/separated
- Widowed
- Other

117. Do you have anyone other than your husband/partner you can ask for advice in a difficult situation?

- No.
- Yes, 1 or 2 people
- Yes, more than 2 people

118. How frequently do you meet or talk on the telephone with your family (other than your husband/partner and children) or close friends?

- Once a month or less
- 2-8 times a month
- More than twice a week

119. Do you often feel lonely?

- Almost never
- Seldom
- Sometimes
- Usually
- Almost always

120. If you have given birth before, in general, how was the experience of giving birth?

- Very good
- Good
- Alright
- Bad
- Very bad

121. Do you agree or disagree with the following statements relating to the forthcoming birth of your baby?*(Fill in for each statement.)*

	Agree completely	Agree	Agree somewhat	Disagree somewhat	Disagree	Disagree completely
I want to give birth as naturally as possible without painkillers or intervention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am really dreading giving birth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to have enough medication so that the birth will be painless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to have an epidural regardless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to have an epidural if the midwife agrees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I could choose I would have a caesarean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think the woman herself should decide whether or not to have a caesarean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry all the time that the baby will not be healthy or normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am really looking forward to the baby coming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

122. How do these statements describe your relationship? (Only answer if you have a partner.)*(Fill in for each statement.)*

	Agree completely	Agree	Agree somewhat	Disagree somewhat	Disagree	Completely disagree
My husband/partner and I have a close relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My partner and I have problems in our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am very happy in my relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My partner is usually understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I often think about ending our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with my relationship with my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We often disagree about important decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been lucky in my choice of a partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We agree on how children should be raised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think my partner is satisfied with our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

123. Have you been bothered during the last 2 weeks by any of the following? *(Enter a cross in a box for each item.)*

	Not bothered	Slightly bothered	Fairly much bothered	Very much bothered
1. Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

124. How often do you experience the following in your everyday life? *(Fill in for each statement.)*

	Seldom/never	Fairly seldom	Sometimes	Often	Very often
Feel pleased about something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel joyful, as though everything is going your way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel that you will scream at someone or hit something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel angry, irritated or annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel mad at someone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

125. How well do these statements describe you? *(Fill in for each statement.)*

	Incorrect	Partly correct	Almost correct	Completely correct
I always manage to solve difficult problems if I try hard enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If anyone opposes me, I find a way to get what I want	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am sure that I can cope with unexpected events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am calm when I encounter difficulties because I trust my ability to cope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I am in a difficult situation, I usually find a solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

126. Do you agree or disagree with the following statements? (Fill in for each statement.)

	Disagree completely	Disagree somewhat	Don't agree or disagree	Agree somewhat	Agree	Agree completely
My life is largely what I wanted it to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My life is very good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have achieved so far what is important for me in my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I could start all over, there is very little I would do differently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

127. How do you feel about yourself? (Fill in for each statement.)

	Agree completely	Agree	Disagree	Disagree completely
I have a positive attitude toward myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel completely useless at times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I do not have much to be proud about	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I am a valuable person, as good as anyone else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

128. Have you experienced any of the following during the last 12 months? If yes, how painful or difficult was it for you?

(Fill in for each statement.)

	No	Yes	IF YES		
			Not too bad	Painful/difficult	Very painful/difficult
Have you had problems at work or where you study?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you had financial problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been divorced, separated or ended your relationship with your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you had problems or conflicts with your family, friends or neighbours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has anyone close to you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been involved in a serious accident, fire or robbery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you lost someone close to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

129. Have you ever experienced any of the following? (Fill in for each statement.)

	No, never	Yes, as a child (under 18)	Yes, as an adult (over 18)	Who was responsible for this?			Has this occurred during the last year?	
				A stranger	Family or relative	Another known person	No	Yes
Someone has over a long period of time systematically tried to subdue, degrade or humiliate you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone has threatened to hurt you or someone close to you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You have been subjected to physical abuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You have been forced to have sexual intercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Miscellaneous

130. Has anyone living with you had any of the following illnesses during this pregnancy? (Enter a cross and specify the period)

	In which week of pregnancy?			
	0-9	10-19	20-29	30+
<input type="checkbox"/> Influenza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Childhood diseases (fever and rash)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Prolonged cough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other infectious disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

131. Have there been any instances of cot death in your family or your partner's family?

No
 Don't know
 Yes, in my family (see question 132)
 Yes, in the baby's father's family (see question 133)

132. The child that died of cot death in my family was:

My sister
 My brother
 My sister's child Boy Girl
 My brother's child Boy Girl
 My mother's sibling Boy Girl Sex unknown
 My father's sibling Boy Girl Sex unknown
 Other

133. The child that died of cot death in the baby's father's family was:

- Baby's father's sister
 Baby's father's brother
 Baby's father's sister's child Boy Girl
 Baby's father's brother's child Boy Girl
 Baby's paternal grandmother's sibling Boy Girl Sex unknown
 Baby's paternal grandfather's sibling Boy Girl Sex unknown
 Other

134. Have you ever lost a child?

- No (*if no, you are finished with the questionnaire*)
 Yes

135. If yes, what was the cause of death and when did the death occur?

- Stillbirth (Birth after the 16th week of pregnancy.)
 Cot death
 Accident
 Illness/birth defect
 Which illness/birth defect: _____
 Other

	Year	Child's age	
		Years	Months
Child 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Child 2	<input type="text"/>	<input type="text"/>	<input type="text"/>

136. Did you receive counselling from healthcare staff or other persons after the death? How many sessions did you have with healthcare staff, and/or parent support group, family and friends? How many weeks did you receive support?

	Healthcare staff	Parent support group, family, friends
Number of meetings (approximately):	<input type="text"/>	<input type="text"/>
Number of sessions via telephone (approximately):	<input type="text"/>	<input type="text"/>
Weeks of support (approximately):	<input type="text"/>	<input type="text"/>

137. Do you feel that the follow-up you received after your child's death was adequate?

- No follow-up was provided
 Very good
 Good enough
 Should have been better
 Bad

138. Has the death made you more anxious during this pregnancy?

- No, not at all
 No, not very much
 Yes, to a fair extent
 Yes, very much

139. Do you feel that the health care staff at the antenatal clinics took into consideration this painful experience in their contact with you?

- Yes, very much
 Yes, to a fair extent
 No, not at all

Have you remembered to fill in the date on which you completed the questionnaire on page 1?

Thank you very much for your help!

Please return the completed questionnaire in the stamped addressed envelope provided.

Appendix G

Questionnaire Q4 in MoBa (6 months)

den norske *Mor & barn undersøkelsen*

+

Questionnaire 4 - When your child is around 6 months old

This questionnaire comes in two parts. The first part is about your child, while the other part is about yourself. It will help if you have your child's health card to hand before you start answering the questions so that you can use the information contained in it when completing this questionnaire. If you find a question difficult to answer, you can skip it and go onto the next question.

If you have had twins or triplets, complete one questionnaire for each child.

The questionnaire will be processed by a computer. It is therefore important that you follow these instructions when completing it:

- Use a blue or black ballpoint pen.
- In the small check boxes, enter a cross to indicate what you think is correct. If you make a mistake you can delete the cross by filling in the box.
- Write numbers in the large green boxes.

It is important that you only write in the white boxes.

Number:

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

Please do not use this questionnaire. Contact us at morbarn@fhi.no or phone + 47 53 20 40 40 if you need a questionnaire.

- In the case of numbered boxes with more than one square, enter a one-digit number in the right box. Example: 5 is entered as follows

	5
--	---

- Date boxes are split into 3 sections, with the first one for the day of the month, the second one for the month and the last one for the year.

So, enter the date as follows:

	6		5	2	0	0	5
Day		Month		Year			

- Specific information concerning, for example, medication should be written on the lines provided. Please write clearly!

As soon as you have completed the questionnaire, return it to us in the enclosed stamped addressed envelope.

Specify the day, month and year when the questionnaire was completed

--	--

Day

--	--

Month

--	--	--	--

Year

(write the year in full, e.g. 2005)

About your child's birth

+

1. Is your child a boy or girl?

Boy

Girl

2. How big was your child when he/she was born?

Birth weight:

--	--	--	--

 g

Length:

--	--

 ,

--	--

 cm

3. In which week of your pregnancy did you give birth?

--	--

 week

+

4. How long was your child in hospital after the birth?

Number of days

--	--

 or weeks

--	--

5. Was your child transferred to another department or hospital after the birth?

No

Yes

If yes, specify _____

6. Was your child delivered by caesarean section?

No

Yes

+

7. If yes, was the caesarean section planned?

- No
 Yes

+

If yes, why?

- Breech presentation
 Previous caesarean
 Pregnancy complication or mother taken ill
 Poor growth or other factor relating to the foetus
 Own preference
 Other

8. Were there any complications during the birth?

- No
 Yes

If so, describe: _____

9. Were you admitted or transferred to another department or other hospital due to complications in connection with the birth? (Applies both before and after the birth.)

- No
 Yes

10. If yes, where?

Department: _____

Hospital: _____

11. How many days were you in hospital in connection with the birth?

Before the birth Number of days

After the birth Number of days

12. Did the birth go as you had expected?

- Yes, as expected
 No, it went better
 Neither/nor
 No, it was worse
 Don't know

+

13. How true do you think the following descriptions are of the birth? (Enter a cross in a box for each item.)

	Fairly true	Partially true	Not true
I felt safe and in good hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was in a lot of pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I received too few pain-killing drugs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Was anyone from your close family present at the birth?

- Yes, child's father
 Yes, someone else
 No

+

About your child

Nutrition

15. What did you give your child to drink during the first week of life?

(You can enter a cross in more than one box.)

- Breast milk
 Water
 Sugar water
 Formula
 Other, specify: _____
 Don't know/don't remember

+

16. What has your child been given to drink during the first 6 months of his/her life?

(Enter a cross for each month you gave your child the relevant drink.)

	Child's age in months						
	0	1	2	3	4	5	6
Breast milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard Collett formula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collett formula with Omega 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard NAN formula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nan HA1 formula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other milk, specify: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Squash/Juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. How often do you give your child the following to drink at the moment? (Enter a cross in a box for each item.)

Never/
seldom

1-3 times
a week

4-6 times
a week

At least
once a day

1. Breast milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Breast milk supplement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Normal sweet milk, any type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. sour milk (yogurt, buttermilk, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Organic milk products (milk, yogurt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Boiled water	<input type="checkbox"/>	+	<input type="checkbox"/>	<input type="checkbox"/>

Cont.

+	Never/ seldom	1-3 times a week	4-6 times a week	At least once a day
7. Tap water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Bottled water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Bottled baby cordial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Other type of cordial, sweetened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Cordial, artificially sweetened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Other, specify:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

18. How often does your child eat the following food at the moment, and how old was your child when you started giving him/her this food?

+	How often do you give this to your child?				How old was your child when you gave him/her this food for the first time?
	Never/ seldom	1-3 times a week	4-6 times a week	At least once a day	
Instant porridge					
1. Rice porridge, maize porridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
2. Oatmeal porridge, different types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
3. Wheat porridge, all types, rusk porridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Home-made porridge using:					
4. Wheat flour (rough/fine), rusk, semolina, oats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
5. Iron-enriched wheat flour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
6. Helios baby flour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
7. Millet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Processed dinner in a jar:					
8. Vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
9. Vegetables and meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Home-made dinner:					
10. Potato/vegetable puree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
11. Meat and vegetables/potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
12. Fish and vegetables/potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
13. Other type of home-made dinner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
Snack/dessert:					
14. Home-made fruit puree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
15. Fruit/berry puree in a jar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
16. Rusks/biscuits/bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>
17. Other, specify:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>

+

+

19. Do you think or do you know that your child has a reaction to milk/dairy products?

- No
- Yes

+

20. If yes, which products?

- Whole milk
- Low-fat milk/skimmed milk
- Cream/whipped cream/ice cream
- Yogurt/sour milk
- Breast milk when mother is drinking milk
- Other

21. Do you give your child cod liver oil, vitamins, iron or any other dietary supplement?

- No
- Yes

+

22. If you give your child cod liver oil, vitamins, iron or another dietary supplement, specify how much you give your child each time and how often. How old was your child in months and weeks when you gave him/her the product for the first time?

Name of product	How many teaspoons each time?		How often do you give your child this?		How old was your child when you started giving the product?	
	teaspoons	teaspoons	daily	sometimes	months	weeks
1. Cod liver oil	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
2. Biovit	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
3. Sanasol	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
4. Nycoplus Multi-Vitamin mixture for children	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
5. Fluoride			<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
6. Iron supplement, specify: _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
7. Other dietary supplement, specify: _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

Growth, health and use of medication

You will find the information to help you answer the following questions on your child's health card.

23. How many times have you been to the mother and child health centre with your child?

- Never
- 1-2 times
- 3-5 times
- 6-10 times
- more than 10 times

24. Has your child been given the vaccinations recommended by the health centre?

- Yes
- No, don't want vaccination
- No, your child has been often ill
- No, vaccinations postponed for practical reasons
- Don't know

+

25. Referring to your child's health card, enter a cross for the vaccinations which your child has received and whether the vaccinations had any side-effect. (Enter a cross in a box for each item.)

Vaccinations	Has your child received the vaccination?		Was there any side-effect after the vaccination?		Was there any side-effect resulting in contact with a doctor?		Was there any side-effect resulting in hospital admission?	
	No	Yes	No	Yes	No	Yes	No	Yes
1. DTP (Infanrix)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. DT (diphtheria/tetanus)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Polio – Hib (Act-Hib polio)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Hepatitis B (Engerix-B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. BCG (tuberculosis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Pneumococcus (Prevenar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other vaccination: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

26. Referring to your child's health card, enter below your child's weight, length and head circumference when he/she was around 6 weeks, 3 months and 6 months.

+	Date of examination			Length	Head circumference	Weight
	Day	Month	Year			
Approx. 6 weeks	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> cm	<input type="text"/> cm	<input type="text"/> g
Approx. 3 months	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> cm	<input type="text"/> cm	<input type="text"/> g
5-6 months	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> cm	<input type="text"/> cm	<input type="text"/> g

The following questions concern any illnesses or health problems your child has had. We will first ask you about more longterm problems, then about illnesses and problems of a more acute nature.

27. Does your child have or has he/she had any of the following health problems? If yes, has the mother and child health centre or someone else referred your child for further specialist investigation? (Enter a cross in a box for each item.)

+	Has(had) your child problems?	Has your child been referred for a specialist investigation?				
		No	Yes	No	Yes, referred from health centre	Yes, referred by someone else
1. Hip disorder/dislocated hip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Impaired hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Impaired vision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Delayed motor development (movement development)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Too little weight gain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Too much weight gain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Abnormal head circumference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Heart defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Testicles not descended into scrotum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> +
11. Atopic eczema (childhood eczema)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Hives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Food allergy/intolerance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Delayed psychomotor development (several functions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. (Other) malformations: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. If your child was referred for a specialist investigation, what did this investigation show?

- Everything was fine
- Still some doubts/further investigations needed
- Don't know
- Given the following diagnosis: _____
- _____
- _____

29. Is your child suspected of having a syndrome or chromosomal defect?

- No
- Yes, a syndrome
- Yes, a chromosomal defect
- If yes, specify the name or describe the problem: _____
- _____
- _____

30. Has your child been treated for a hip problem (hip dysplasia)?

- No
- Yes, treated with a plaster cast
- Yes, treated with a cushion
- Yes, treated with braces
- If yes, how long did the treatment go on for? months

31. Has your child had the following illness/health problem? If yes, did you go to a doctor or hospital about it? (Enter a cross in a box for each item.)

+	+	Has your child had health problems? of times		Number doctor/clinic	Did you go to a admitted to hospital for this? for this?		Has your child been	
		No	Yes		No	Yes	No	Yes
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Common cold		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Throat infection		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ear infection		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Pseudocroup		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Bronchitis/RS virus/pneumonia		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Gastric flu/diarrhoea		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Urinary tract infection		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Conjunctivitis		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Febrile convulsions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Other convulsions (without any fever)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Colic		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Nappy rash		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Other, describe		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

32. Have your child ever been given any medication?

- No
- Yes

+

33. If yes, give the name of the medicines and when they were given. (Include all types of medication, as well as natural medicines, taken both on a regular and occasional basis.)

Name of medicine <i>(e.g. Apocilin, Paracetamol)</i>	+	How old was your child when you gave the medicine?				Number of days given in total
		<1 Month	1-2 months	3-4 months	5-6 months	
.....		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

34. Has your child been examined at or admitted to hospital (since returning home from hospital after birth)?

- No
- Yes, specify: _____

35. Has your child been operated on or does he/she have a condition requiring an operation?

- No
- Yes, specify: _____

+

Development, childcare and life style

36. The following questions concern your child's development. If you haven't actually observed your child, spend a little time looking at what he/she can actually do. (Enter a cross in a box for each question.)

	+	Yes often	Yes, but seldom	No, not yet	Don't know
1. When your child is lying on his/her back, does he/she play by grabbing hold of his/her feet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. When your child is lying on his/her tummy, does he/she raise his/her upper body off the ground with straight arms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child roll over from his/her back onto his/her tummy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. When you "chat" to your child, does he/she try to "chat" back to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Does your child babble and make sounds when he/she is lying on his/her own?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Can you tell how your child is just by listening to the sounds he/she is making (e.g. contented, hungry, angry, in pain)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you get a smile from your child when you just smile at him/her (without touching or tickling him/her and without holding up a toy)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. When you call your child, does he/she turn towards you one of the first times you say his/her name?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does your child grab hold of a toy you give him/her and then put it in his/her mouth or hold it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. When your child is sitting on your lap, does he/she stretch out for a toy or something else on the table in front of you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Does your child hold onto a toy with both hands when he/she is examining it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

37. Where is your child cared for during the day?

- At home with mother/father/other family member
- At home with an unqualified childminder
- At a childminder's
- In a family day nursery
- In a day nursery

38. How many other children are there usually along with your child during the day?

children

+

39. Does your child go to baby swimming?

- No
- Yes

If yes, indicate the number of times during the last 2 months

40. How often is your child outside? (Enter just one cross.)

- Seldom
- Often, but less than 1 hour a day
- 1-3 hours a day
- More than 3 hours a day

41. Does your child use a dummy/pacifier?

- Seldom or never
- Only when he/she goes to sleep
- Often
- Most of the time

42. How many hours in total does your child sleep per 24 hours?

- Less than 8 hours
- 8 - 10 hours
- 11 - 13 hours
- 13 - 14 hours
- More than 14 hours

+

43. How do you put your child down when he/she is going to sleep?
(Enter a cross in a box for each item.)

	On back	On side	On tummy
After the birth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At 2 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At 4 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At 6 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

44. Does your child share a bed with his/her mother/father (at least half the night)? (Enter a cross in a box for each item.)

	No	sometimes	Often
After the birth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At 2 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At 4 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At 6 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

45. Enter a cross to indicate whether you agree or disagree with the following statements about your child's mood and temperament. Think about how he/she usually is. (Enter a cross in a box for each item.)

	+		Totally disagree	Disagree	Slightly disagree	Neither agree or disagree	Slightly agree	Agree	Totally agree
1. Your child whimpers and cries a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Your child is usually easy to pacify when he/she is crying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. It doesn't take much for your child to become upset and start crying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. When your child is crying, he/she usually screams angrily and loudly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your child is very easy to deal with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Your child demands an awful lot of attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. When your child is left alone, he/she usually plays contentedly on his/her own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Your child is so demanding that he/she would pose a major problem for most parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Your child smiles and laughs often	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Your child is easy to put down and goes to sleep quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

46. Currently how often does your child usually wake up during the night? (Enter just one cross.)

- 3 or more times every night
 Once or twice every night
 A few times a week
 Seldom or never

+

+

Comments

+

+

About yourself

+

The last time you completed a questionnaire was around week 30 of your pregnancy. The questions we are asking you now are mainly about the period after this up until your child was 6 months old.

Health and use of medication

47. Did you go to your doctor/midwife/health visitor for your own health problems during the first month after the birth?

- No Yes times +

48. If yes, what was the reason for this?

- Perineal wound/stitches
 Caesarean section wound
 Mastitis
 Sore nipples
 Breastfeeding problems
 Other, specify: _____

49. When you think back to the time just after the birth, did you feel depressed during that period?

- No Yes, specify how long: weeks +

50. Apart from being in hospital for the birth, have you been admitted to hospital since you completed the previous questionnaire?

- No
 Yes, specify hospital: _____

51. Do you have a chronic/long-term illness which has started since you completed the previous questionnaire?

- No
 Yes, specify: _____

52. Overall, how would you describe your physical health at the moment?

- Very good
 Good
 Poor
 Very poor +

53. Have you had any of the following problems/illnesses since you completed the previous questionnaire? If yes, are you taking or have you taken medication for these problems? (This includes every type of medication, including natural medicines, taken on both a regular and occasional basis.) (Enter a cross in a box for each item.)

Illness / problem	Have you suffered from?			If you have taken medication				Number of days taken in total
	No	Yes, last part of during pregnancy	Yes, after the birth	Name of medication taken	Last part of this pregnancy	After the birth 0-3 mth	4-6 mth	
1. Sugar in urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
2. Protein in urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
3. High blood pressure . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
4. Swelling (oedema) . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
5. Cystitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
6. Sluggish bowels/constipation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
7. Diarrhoea/vomiting . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
8. Heartburn/acidity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
9. Common cold/influenza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
10. Sore throat/sinusitis/earinfection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

+

cont. next page

+

Illness / problem	Have you suffered from?			If you have taken medication				Number of days taken in total
	No	Yes, last part of during pregnancy	Yes, after the birth	Name of medication taken	Last part of this pregnancy	After the birth		
						0-3 mth	4-6 mth	
11. Pneumonia/bronchitis ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
12. Asthma.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
13. Hay fever/other allergy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
14. Headache/other pains .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
15. Vaginitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
16. Mental health problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
17. Mastitis.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
18. Fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
19. Other, specify: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

54. Have you taken medicines other than those mentioned in Question 53? (For instance, sleeping tablets, sedatives or analgesics.)

No Yes

+

55. If yes, give the name of the medicines and when you took them. (Include all types of medication, as well as natural medicines, taken both on a regular and occasional basis.)

Name of medicine (e.g. Valium, Rohypnol, Paracetamol)	Last part of pregnancy		0-3 months after the birth		4-6 months after the birth	
	Taken medication	Number of days	Taken medication	Number of days	Taken medication	Number of days
_____	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
_____	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
_____	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>

56. Do you take or have you taken cod liver oil, vitamins or other dietary supplements since the previous questionnaire?

No Yes

+

57. If yes, which product, when did you take it and how often? (One line for each product.)

Name of product	+	When did you take the product?			How often?	
		Last part of pregnancy	0-3 months after the birth	4-6 months after the birth	Taken daily	Taken sometimes
_____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

58. Have you experienced any pain in your back or pelvis since you completed the previous questionnaire?

- No
- Yes

+

+

59. If yes, enter a cross to indicate where you have experienced pain, when and how much.

Where was the pain?	Last part of pregnancy		0-3 months after the birth		4-6 months after the birth	
	Some pain	Major pain	Some pain	Major pain	Some pain	Major pain
	Small of the back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
One of the pelvic/sacroiliac joints at the back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Both pelvic/sacroiliac joints at the back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Over the coccygeal bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the buttocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Over the pubic bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other back pains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

60. Currently, do you wake up at night because of pelvic pain?

- No, never
- Yes, but only sometimes
- Yes, often

61. Do you have such problems walking at the moment due to pelvic pain that you have to use a stick or crutches?

- No, never
- Yes, but not every day
- Yes, every day

62. Have you ever received treatment for pelvic pain?

- No
- Yes

63. If yes, enter a cross to indicate the type of treatment and when it was.

	Before this pregnancy	During this pregnancy	After this birth
Physiotherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chiropractic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, specify: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

64. How long was it before you resumed sexual intercourse after the birth?

weeks

- Have not had sexual intercourse

+

65. Do you have any of the following problems at the moment; if so, how often and to what extent? (Enter a cross in a box for each item.)

Problem	How often do you have these problems?					How much at a time?	
	Never	1-4 times a month	1-6 times a week	Once a day	More than Once a day	Drops	Large amounts
	Incontinence when coughing, sneezing or laughing . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incontinence during physical activity (running/jumping)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incontinence with a strong need to urinate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problems retaining faeces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problems with flatulence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

66. How many times did you go for an ultrasound scan during your pregnancy?

times

67. Was everything OK with the ultrasound scan(s)?

- Yes
- No

+

68. If no, what was the problem?

- The baby was not growing enough.
- Suspected malformation, describe:

- Other, specify: _____

+

69. How much did you weigh at the end of your pregnancy and how much do you weigh now?

At end of pregnancy kg

Now kg +

70. Were you completely or partly on sick leave after week 30 of your pregnancy? (Don't include maternity leave)

No

Yes, partly on sick leave

Yes, completely on sick leave +

71. If you were on sick leave after week 30 of your pregnancy, complete the table below with a line for each time you were on sick leave. Give the reason and enter a cross indicating which weeks of your pregnancy you were on sick leave. Specify how many days and what percentage of the period you were on sick leave each time.

Reason for sick leave:	Was on sick leave during pregnancy weeks			Number of days	% sick leave
	30-33	34-37	38+		
<i>Example: pelvic girdle pains</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

Finances – lifestyle

72. Would your current financial situation allow you to cope with an unexpected bill of NOK 10,000 for a dental visit or a repair, for a instance?

No

Yes

Don't know

73. Have you found it difficult sometimes during the last six months to cope with running expenses for food, transport, rent etc.?

No, never

Yes, but infrequently

Yes, sometimes

Yes, often

74. Are there pets in the child's home?

No

Yes

+

75. If yes, which type(s)? (You can enter a cross in more than one box.)

Dog

Cat

Guinea pig, rabbit, mouse, rat, etc.

Budgie, other type of bird

Other type of animal:

76. Do you have heating based on electrical heating cables under the floor in rooms where you child is? (Do not include waterborne heating)

No

Yes

77. If yes, in which rooms? (You can enter a cross in more than one box.)

Living room

Kitchen

Child's room

Bedroom

Hall

Bathroom

Other rooms

78. How often do you exercise these muscle groups at home or at the gym at present? (Enter a cross in a box for each item.)

	Never	1-3 times a month	Once a week	Twice a week	Three times or more a week
Stomach muscles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back muscles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pelvic floor muscles (muscles around the vagina, urethra, rectum)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

79. How often are you physically active at present? (Enter a cross in a box for each item.)

+		Never	1-3 times a month	Once a week	Twice a week	Three times or more a week
1	Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Brisk walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Running/jogging/orienteering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Cycling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Training studio/weight training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Special gymnastics/aerobics for pregnant women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Aerobics/gymnastics/dancing without running and jumping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Aerobics/gymnastics/dancing with running and jumping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Dancing (swing, rock, folk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Skiing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Ball sport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Swimming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Riding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

80. Currently how often are you physically active (during your spare time or at work) that you get out of breath or sweat?

	Spare time		At work	
	Never	Less than once a week	Once a week	Twice a week
Never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Twice a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3-4 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 times or more a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

81. What were your and your partner/husband's smoking habits during the last 3 months of your pregnancy and in the period after the birth? (Enter a cross in a box for each period.)

+		Yourself			Your partner/husband		
		Last 3 mths during pregnancy	0-3 mths after birth	4-6 mths after birth	Last 3 mths during pregnancy	0-3 mths after birth	4-6 mths after birth
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Didn't smoke		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoked sometimes		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoked every day		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If every day, number of cigarettes per day		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
If sometimes, number of cigarettes per week		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

82. Is your child ever present in a room where someone smokes?

- No
- Yes, sometimes
- Yes, several times a week
- Yes, every day

If every day, number of hours

+

83. Did you take any of the following substances during the last 3 months of your pregnancy and after the birth? (Enter a cross in a box for each item.)

	No	Yes, last 3 month of pregnancy	Yes after birth
Hanish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amphetamines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ecstasy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cocaine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heroin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, specify:			
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

84. Have you taken any of the following substances during the last 3 months of your pregnancy and after the birth? (Enter a cross in a box for each item.)

		No	Yes, last 3 months of pregnancy	Yes, after birth	
Anabolic steroids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+
Testosterone preparations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Growth hormone (e.g. genotropin/somatropin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

85. How often did you drink alcohol during the last 3 months of your pregnancy and how often do you drink now? (Enter a cross in a box for each period.)

	Last 3 months of pregnancy	After the birth	
		0-3 months	4-6 months
Roughly 6-7 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 4-5 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 2-3 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly once a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roughly 1-3 times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less often than once a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Alcohol units

In order compare different types of alcohol, we ask for the number of alcohol units (= 1.5 cl of pure alcohol).

In practice, this means the following:

1 glass (1/3 litre) of beer	= 1 alcohol unit
1 wine glass of red or white wine	= 1 alcohol unit
1 sherryglass of sherry	= 1 alcohol unit
1 brandy glass of spirits or liquor	= 1 alcohol unit
1 bottle of alcopop/cider	= 1 alcohol unit

+

86. How many units of alcohol do you usually drink when you consume alcohol (complete both for the last 3 months of your pregnancy and afterwards)? (See explanation about alcohol units.) (Enter a cross in a box for each period.)

Number of alcohol units	Last 3 months of pregnancy	After the birth	
		0-3 months	4-6 months
10 or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5-6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3-4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A little more about yourself and how you are keeping now

87. Do you have a boyfriend/husband/partner?

Yes

No

+

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88. If yes, to what extent do you agree with the following descriptions? (Enter just one cross in a box for each item.)

	Totally agree	Agree	Slightly agree	Slightly disagree	Disagree	Totally disagree
My husband/partner and I have a close relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My partner and I have problems in our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am very happy in my relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My partner is usually understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I often think about ending our relationship.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with my relationship with my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We often disagree about important decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been lucky in my choice of partner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We agree on how children should be raised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think my partner is satisfied with our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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89. In your daily life, how often do you (Enter just one cross in a box for each item.)

	Seldom never	Fairly seldom	A few times	Often	Very often
Feel pleased about something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel joyful, as though everything is going your way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel that you will scream at someone or hit something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel angry, irritated or annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feel mad at somebody	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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90. Indicate with a cross whether you agree or disagree with the following statements.

(Enter just one cross in a box for each item.)

	Totally disagree	Disagree	Slightly disagree	Neither agree or disagree	Slightly agree	Agree	Totally agree
My life is largely what I wanted it to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My life is very good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have achieved so far what is important for me in my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I could start all over, there is very little I would do differently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

91. Have you experienced any of the following situations since the previous questionnaire? If yes, how painful or difficult was this for you? (Enter a cross in a box for each item.)

	No	Yes	If yes		
			Not so bad	Painful/difficult	Very painful/difficult
Have you had problems at work or where you study?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you had financial problems?.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been divorced, separated or ended your relationship with your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you had problems or conflicts with family, friends or neighbours?.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been seriously worried that there is something wrong with your child?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has anyone close to you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been involved in a serious accident, fire or robbery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you lost someone close to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been pressurized into having sexual intercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

92. Have you experienced any of the following feelings during the last week? (Enter just one cross in a box for each item.)

	Yes, almost all the time	Yes, now and then	Not very often	No, never
Really reproached yourself when something went wrong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have been anxious or worried for no reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have been afraid or panicked for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have been so unhappy that you've had problems sleeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Felt down or unhappy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have been so unhappy that you've cried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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93. How do you feel about yourself? (Enter just one cross in a box for each item.)

	Totally agree	Agree	Disagree	Totally disagree
I have a positive attitude towards myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel completely useless at times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I do not have much to be proud about	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I am a valuable person, as good as anyone else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

94. Have you been bothered by any of the following feelings during the past 2 weeks? (Enter just one cross in a box for each item.)

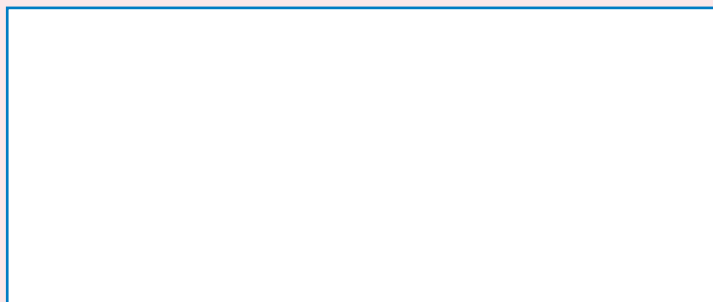
	Not bothered	A little bothered	Quite bothered	Very bothered
Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

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Thank you very much for your help!

Insert the completed questionnaire in the stamped addressed envelope.



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Appendix H

Questionnaire Q5 in MoBa (18 months)

den norske *Mor & barn undersøkelsen*

+

Questionnaire 5 – Your child at 18 months

+

In this questionnaire we will ask you some questions which you may recognise from previous questionnaires. We do this because we want to continue following your and your child's progress. It will help if you have child's Health card to hand so that you can use the information contained in it.

If you feel that a question is too upsetting or difficult to answer you can skip this question and go on to the next one.

The questionnaire will be processed by a computer. It is therefore important that you following these instructions when completing it:

- Use a blue or black ballpoint pen.
- Put a cross in the box that is most relevant like this:
- If you put a cross in the wrong box, correct it by filling in
- Write numbers in the large green boxes.

It is important that you only write in the white area of each box like this:

Number:

1	2	3	4	5	6	7	8	9	0
---	---	---	---	---	---	---	---	---	---

Please do not use this questionnaire. Contact us at morbarn@fhi.no or phone + 47 53 20 40 40 if you need a questionnaire.

- Numbered boxes have two or more squares. When you enter a single-digit number, use the square on the right. Example: 5 is entered as follows

5

- Specific information concerning, for example, medication should be written on the lines provided. Write clearly in CAPITAL LETTERS.
- Remember to fill in the date on which you completed the questionnaire

As soon as you have completed this questionnaire, return it to us in the stamped addressed envelope provided.

Specify the day, month and year when the questionnaire was completed

--	--

Day

--	--

Month

--	--	--	--

Year

(write the year in full, e.g. 2005)

ABOUT YOUR CHILD

+

Food and drink

1. What type of milk has your baby been given since he/she was 6 months old?

(You can enter more than one cross.)

Milk type	Child's age in months			
	6 - 8	9 - 11	12 - 14	15 - 18
1. Breast milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Formula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Formula in the case of milk intolerance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Whole milk (sweet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Low-fat milk normal (sweet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Extra low-fat milk (sweet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Skimmed milk (sweet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Yogurt with active Lactobacillus, all types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Other yogurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Other types of sour milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

5. Do you give your child a home-made dinner or readymade (processed) baby food in a jar?

- Only home-made
 Mostly home-made
 About half and half of each
 Mostly ready-made
 Only ready-made

6. How often do you give your child organic food/drink?

(Enter a cross in a box for each item.)

	Never	Sometimes	Often	Almost always
Sweet milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buttermilk/yogurt . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vegetables/fruit . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Porridge/flour/bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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7. Does your child have a reaction to certain foods?

- No
 Yes
 Don't know

+

8. If yes, what type of food does your child have a reaction to? (You can enter a cross in more than one box.)

- | | | |
|---|---|--|
| 1. <input type="checkbox"/> Whole milk | 8. <input type="checkbox"/> Boiled or fried egg | 14. <input type="checkbox"/> Fruit, berries |
| 2. <input type="checkbox"/> Skimmed milk/low-fat milk | 9. <input type="checkbox"/> Fish/fish products | 15. <input type="checkbox"/> Vegetables/potatoes |
| 3. <input type="checkbox"/> Cream | 10. <input type="checkbox"/> Additives | 16. <input type="checkbox"/> Chocolate |
| 4. <input type="checkbox"/> Yogurt/buttermilk | 11. <input type="checkbox"/> Wheat | 17. <input type="checkbox"/> Other sweets |
| 5. <input type="checkbox"/> Ice cream | 12. <input type="checkbox"/> Nuts | 18. <input type="checkbox"/> Sugar |
| 6. <input type="checkbox"/> Cheese | 13. <input type="checkbox"/> Soya | 19. <input type="checkbox"/> Other: _____ |
| 7. <input type="checkbox"/> Raw egg (e.g. egg flip) | | |

9. Are there any foods which you specifically avoid giving your child?

- No
 Yes

+

10. If yes, which foods do you try to avoid and how strict are you with your child's diet?

	Some reduced use compared to normal diet	Not used unmixed but allowed a little bit in different dishes	Use completely avoided (also "hidden" in dishes)
1. Milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Eggs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Fish/fish products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Meat/meat products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Wheat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Sugar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Do you give your child cold liver oil, vitamins, iron or any other dietary supplement?

- No
 Yes

+

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12. If yes, specify which product(s) and how often you give them to your child. How old was your child when you first started giving him/her the product?

+	How often do you give it to your child?		How old was your child when you first gave him the product?	
	Every day	sometimes	Number of months	
1. Cod liver oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
2. Biovit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
3. Sanasol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
4. Nycoplus Multi-Vitamin mixture for children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
5. Fluoride tablets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
6. Iron supplement, specify:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
7. Other dietary supplement, specify:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

Growth, health and illness

Consult your child's health card and use the information contained in it to complete the following questions.

13. How many times have you been to the mother and child health centre since his/her birth?

- 0 - 4
 5 -10
 11 -15
 16 or more

14. Do you want your child to be given the vaccinations that are recommended for children in Norway?

- Yes, all the recommended vaccinations
 Yes, some vaccinations
 No, no vaccinations

15. Indicate whether your child has had any vaccinations. If yes, how many times, and indicate if there have been any sideeffects requiring a doctor or hospital to be contacted. (Enter a cross in a box for each item.)

Vaccinations	No		If yes, how many times?			Side-effect resulting in extra contact with a doctor?		Side-effect resulting in examination/admission to hospital?	
	No	Yes	1	2	3	No	Yes	No	Yes
1. DTP (diphtheria, tetanus, whooping cough)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Hib (Haemophilus influenzae type b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Polio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. MMR (measles, mumps, rubella)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. DT (diphtheria, tetanus - sometimes given instead of DTP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Hepatitis B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. BCG (tuberculosis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Pneumococcus (Prevenar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Other vaccination:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions concern any illnesses or health problems your child has had. We will first ask you about more long-term problems, then about illnesses and problems of a more acute nature.

16. Does your child have or has he/she had any of the following health problems? If yes, has your child been referred for a specialist examination? (Enter a cross in a box for each item.)

Health problem	No		Yes, has now		Yes, had previously		If yes, has child been referred for a specialist examination?	
	No	Yes	No	Yes	No	Yes	No	Yes
1. Dislocated hip (hip problem)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Reduced hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Impaired vision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

(cont.)

Health problem	+				
	No	Yes, has now	Yes, had previously	If yes, has child been referred for specialist examination?	
				No	Yes
4. Delayed motor development (e.g. sits/walks late) . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Too little weight gain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Too much weight gain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Abnormal head circumference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Heart defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Testicles not descended into scrotum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Atopic eczema (childhood eczema)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Urticaria (hives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Food allergy/intolerance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Late or abnormal speech development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Sleep problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Behavioural problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Social problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. (Other) malformations: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. If a specialist referral was made, what did this examination show?

Everything was fine

Still some doubts/further examinations needed

Has not been for any examination yet

Diagnosis I: _____

Diagnose II: _____

Diagnose III: _____

18. Has your child been treated with a “cushion” for a hip problem?

No

Yes How long? months

+

19. Has your child had any of the following illnesses/health problems between 6 and 11 months and/or 12 and 18 months? Specify how many times and whether your child has been admitted to hospital for this health problem. (Enter a cross in a box for each item.)

Illness/health problem	At 6 –11 months		Number of times	At 12 -18 months		Number of times	Was admitted to hospital for this?	
	No	Yes		No	Yes		No	Yes
1.Common cold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Throat infection with confirmed streptococcal infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Other type of sore throat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ear infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Pseudocroup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Bronchitis/RS virus/pneumonia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Gastric flu/diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Urinary tract infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Conjunctivitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input type="checkbox"/>

+ +

Illness/health problem	+		At 6 –11 months		Number of times	At 12 -18 months		Number of times	Was admitted to hospital for this?	
	No	Yes	No	Yes		No	Yes			
	10. Febrile convulsions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
11. Other convulsions (without any fever)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Chickenpox	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Injury or accident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Has your child been to see the doctor or to the hospital between 6 and 11 months and/or 12 and 18 months?

If yes, specify how many times. (Enter a cross in a box for each item.)

	At 6 – 11 months			At 12-18 months		
	No	Yes	Number of times	No	Yes	Number of times
GP (excluding mother and baby health centre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Casualty doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Private specialist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Hospital outpatient clinic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Admitted to hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

21. Has your child been referred to any of the following services?

	No	Yes
Habilitation service	<input type="checkbox"/>	<input type="checkbox"/>
Educational psychology service	<input type="checkbox"/>	<input type="checkbox"/>
Child psychiatric outpatient clinic/department	<input type="checkbox"/>	<input type="checkbox"/>

+

22. If your child has been examined at or admitted to hospital, give the name of the hospital:

Hospital name:

Hospital name:

Hospital name:

+

23. Has your child had any of the following symptoms since the age of 6 months? If yes, at what age? (Enter a cross in a box for each item.)

	Had symptoms?		If yes, at what age?			
	No	Yes	6-8 mth	9-11 mth	12-14 mth	15 mth or more
1. Wheezing/whistling in the chest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Tightness in the chest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Coughing at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Runny nose without a cold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Constipation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Itchy rash that comes and goes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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24. Has your child ever been tested for allergies?

- No
 Yes +

25. If yes, what allergens were tested for and what was the result?
(You can enter a cross in more than one box.)

Test:	Was the test positive?		
	No	Yes	Don't know
1. <input type="checkbox"/> Milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. <input type="checkbox"/> Egg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. <input type="checkbox"/> Fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. <input type="checkbox"/> Mould	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. <input type="checkbox"/> Mites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. <input type="checkbox"/> Animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. <input type="checkbox"/> Pollen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. <input type="checkbox"/> Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Have you ever tried any kind of so-called alternative medicine on your child since he/she was 6 months old?

- No
 Yes times

27. If yes, what kind of alternative medicine?

28. Has your child received any medication since the age of 6 months? *(This means any type of medication, including natural medicines and herbal remedies)*

- No
 Yes +

29. If yes, give the name of the medication and what age your child was when he took it. *(Include all types of medication, as well as natural medicines)*

Name of medicine <i>(WRITE IN CAPITALS, e.g. APOCILLIN, PARACET)</i>	How old was your child when he/she took this medication?			
	6-8 mth	9-11 mth	12-14 mth	15-18 mth
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. What were your child's length, weight and head circumference when he/she was around 8 months, 1 year and the last time they were measured (15-18 months)?
(Refer to your child's health card)

	Date of measurement			Length	Head circumference	Weight
	Day	Month	Year			
Around 8 mth	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> , <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> cm	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> , <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> cm	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> g
Around 1 year	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> , <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> cm	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> , <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> cm	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> g
15 - 18 mth	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> , <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> cm		<input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> g

Development and behaviour

In this section you will find some questions repeated in a different form. However, please answer all the questions as well as you can.

31. Can your child walk unaided? No Yes

If yes, how old was your child when he/she could first walk unaided? Number: months.

32. The questions that follow are about your child's development at around the age of 18 months. (Enter a cross in a box for each item.) ⁺

+

	Yes	Sometimes	Not yet
1. When you ask him/her, does your child go into another room to find a familiar toy or object? (When you ask, for instance: "Where's your ball?", "Go and get your coat" or "Go and get your blanket")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does your child say eight or more words, in addition to "mamma" and "dadda"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Without showing him/her first, does your child point to the correct picture when you say "Show me the cat" or "Where is the dog"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child move around by walking, rather than by crawling on his/her hands and knees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Can your child walk well and seldom fall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Does your child walk down stairs if you hold onto one of his/her hands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Does your child throw a small ball or toy with a forward arm motion? (If he/she simply drops the ball, enter a cross under "Not yet")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Does your child stack a small block or toy on top of another? (For example, small boxes or toys about 3 cm in size)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does your child turn the pages in a book by himself/herself? (He/she may turn over more than one page at a time.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does your child hug dolls or cuddly toys when playing with them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Does your child try to get your attention show you something by pulling your hand or clothes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Does your child come to you when he/she needs help, such as with opening a box?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Does your child copy the activities you do, such as wiping up a spill, sweeping, shaving or combing hair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

33. More about your child's development (Enter a cross in a box for each item.)

	Yes, usually	Very seldom	Not yet
1. Does your child use sounds or words together with gestures (e.g. uses sounds when pointing or reaching towards toys or objects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. When you look at a distant object and, surprised and excited, say: "Wao...what's that?", – does he/she turn his/her head in the same direction as you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When you enthusiastically say: "Where is the ball (or other toy)?", will your child point towards the toy, even if it is more than 1 metre away?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child show you a toy by looking at you and holding the toy up towards your face (from a distance just so you can look at it)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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34. How typical is the following behaviour of your child? (Enter a cross in a box for each item.)

	Very typical	Quite typical	Neither/nor	Not so typical	Not typical
1. Your child cries easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Your child is always on the go.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Your child prefers playing with others rather than alone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your child is off running as soon as he/she wakes up in the morning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your child is very sociable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Your child takes a long time to warm to strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Your child gets upset or sad easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Your child prefers quiet, inactive games to more active ones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Your child likes to be with people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Your child reacts intensely when upset.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Your child is friendly towards and trusting of strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Your child complains that certain garments are too tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Your child becomes distressed by having his/her face or hair washed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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35. About your child's behaviour We are asking you about how your child usually is. If something happens seldom (for instance, if you have only seen it one or twice), enter a cross under "No". (Enter a cross in a box for each item.)

	Yes	No	+
1. Is your child interested in different sorts of toys or objects and not for instance mainly in cars or buttons?	<input type="checkbox"/>	<input type="checkbox"/>	
2. When your child expresses his/her feelings, for instance by crying or smiling, do you usually understand <u>why</u> your child is laughing or crying?	<input type="checkbox"/>	<input type="checkbox"/>	
3. Does your child react in a normal way to sensory stimulation, such as coldness, warmth, light, pain or tickling?	<input type="checkbox"/>	<input type="checkbox"/>	
4. Can you easily tell from the face of your child how he/she feels?	<input type="checkbox"/>	<input type="checkbox"/>	
5. When your child has been left alone for some time, does he/she try to attract your attention, for instance, by crying or calling?	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is your child's behaviour without stereotyped repetitive movements, e.g. banging his/her head against the wall or rocking his/her body back and forth?	<input type="checkbox"/>	<input type="checkbox"/>	
7. Does your child like to be cuddled?	<input type="checkbox"/>	<input type="checkbox"/>	
8. Does your child ever laugh directly at you or at other people?	<input type="checkbox"/>	<input type="checkbox"/>	
9. Does your child react when spoken to, for instance, by looking, listening, smiling, speaking or babbling?	<input type="checkbox"/>	<input type="checkbox"/>	
10. Does your child ever try to comfort you if you are sad or hurt?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Has your child ever had things that he/she seemed to have to do in a very particular way or order, or rituals that he/she has to have you do?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Does your child ever do things to get you to laugh?	<input type="checkbox"/>	<input type="checkbox"/>	

+

36. More about your child's play and behaviour. We are asking you again about how your child usually is. If something seldom happens (for instance, if you have only seen it one or twice), enter a cross under "No". (Enter a cross in a box for each item.)

	Yes	No
1. Does your child enjoy being swung, bounced on your knee, etc.?	<input type="checkbox"/>	<input type="checkbox"/>
2. Does your child take an interest in other children?	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child like climbing on things, such as up stairs?	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child enjoy playing peek-a-boo/hide-and-seek?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does your child ever pretend, for example, to talk on the phone or take care of dolls, or pretend other things?	<input type="checkbox"/>	<input type="checkbox"/>
6. Does your child ever use his/her index finger to point, to ask for something?	<input type="checkbox"/>	<input type="checkbox"/>
7. Does your child ever use his/her index finger to point, to indicate interest in something?	<input type="checkbox"/>	<input type="checkbox"/>
8. Can your child play properly with small toys (e.g. cars or bricks) without just mouthing, fiddling or dropping them?	<input type="checkbox"/>	<input type="checkbox"/>
9. Does your child ever bring objects over to you to show you something?	<input type="checkbox"/>	<input type="checkbox"/>
10. Does your child look you in the eye for more than a second or two?	<input type="checkbox"/>	<input type="checkbox"/>
11. Does your child ever seem oversensitive to noise (e.g. plugging ears)?	<input type="checkbox"/>	<input type="checkbox"/>
12. Does your child smile in response to your face or your smile?	<input type="checkbox"/>	<input type="checkbox"/>
13. Does your child imitate you (e.g. you make a face - will your child imitate it)?	<input type="checkbox"/>	<input type="checkbox"/>
14. Does your child respond when you call his/her name?	<input type="checkbox"/>	<input type="checkbox"/>
15. If you point at a toy across the room, does your child look at it?	<input type="checkbox"/>	<input type="checkbox"/>
16. Does your child look at things you are looking at?	<input type="checkbox"/>	<input type="checkbox"/>
17. Does your child make unusual finger movements near his/her face?	<input type="checkbox"/>	<input type="checkbox"/>
18. Does your child try to attract your attention to his/her own activity?	<input type="checkbox"/>	<input type="checkbox"/>
19. Have you every wondered if your child is deaf?	<input type="checkbox"/>	<input type="checkbox"/>
20. Does your child understand what people say?	<input type="checkbox"/>	<input type="checkbox"/>
21. Does your child sometimes stare at nothing or wander with no purpose?	<input type="checkbox"/>	<input type="checkbox"/>
22. Does your child look at your face to check your reaction when faced with something unfamiliar? ..	<input type="checkbox"/>	<input type="checkbox"/>

37. To what extent are the following statements true of your child's behaviour during the last two months? (Enter a cross in a box for each item.)

	Not true	Somewhat or sometimes true	Very true or often true
1. Can't concentrate, can't pay attention for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Quickly shifts from one activity to another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can't sit still, restless or hyperactive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Gets into everything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

(cont.)

+	Not true	Somewhat or sometimes true	Very true or often true
5. Is mostly happy and content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Clings to adults or too dependent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Gets too upset when separated from parents	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Gets into many fights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Hits others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is defiant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Doesn't seem to feel guilty after misbehaving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Punishment doesn't change his/her behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Doesn't eat well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Likes almost every kind of food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Resists going to bed at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Doesn't want to sleep alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Afraid to try new things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Disturbed by any change in routine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Too fearful or anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

38. How often does your child usually wake during the night?

3 or more times every night

Once or twice every night

A few times a week

Seldom or never

+

39. How many hours in total does your child sleep in 24hrs?

10 hours or less

11 - 12 hours

13 -14 hours

15 hours or more

40. About your worries (Enter a cross in a box for each item.)

	No	Yes	Don't know
1. Are you worried about your child's physical development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are you worried about your child's behaviour?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are you worried because your child is demanding and difficult to cope with?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are you worried because your child is so uninterested in other children?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you any other worries with regard to your child's health	<input type="checkbox"/>	<input type="checkbox"/>	Specify _____

(Use the last page if you need more space to write)

Your child's daily routine

41. Where has your child been cared for during the day? Enter a cross for the various age groups. (Enter a cross in a box for each item.)

	At home with his/her mother his/her father	At home with unqualified childminder	At a childminder's	In a day nursery
1. 0-6 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 7-9 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 10-12 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 13-15 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 16-18 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

42. How many hours a week is your child looked after in the current childcare scheme (other than by his/her mother and father)?

hours

+

43. How many children in total are looked after in this childcare scheme (if day-care centre, how many in the department)?

children

44. Do you and your child live with your child's father?

Yes

No

+

45. If your child does not live with his/her father, how much time does your child spend with him?

- At least half the time
 At least once a week +
 At least once a month
 Less often than once a month
 Never

46. How many times have you moved house since your child was born?

times

47. Roughly how many square metres is the living area where you currently live?

m²

48. Are the rooms where your child is heated by electrical underfloor heating?

- No Yes

49. If yes, which rooms? Enter a cross in more than one box, if appropriate)

- Living room Hall
 Kitchen Bathroom
 Child's room Other rooms
 Bedroom

50. Has there been any damage caused by damp, any visible fungal/mould growth or mouldy smell in your home during the last year (You can enter a cross in more than one box.)

- No
 Yes, damage caused by damp +
 Yes, visible fungal/mould growth
 Yes, mouldy smell

51. What type of drinking water do you have where you live?

- Water from a public or private water company
 Water from your own water supply (e.g. own well)
 Don't know

52. Do you live close to high-voltage lines?

- No
 Yes, closer than 50 metres
 Yes, 50–100 metres away
 Yes, but more than 100 metres away

53. Are there pets where your child lives or at the childminder's?

- No
 Yes, at home +
 Yes, at the childminder's

54. If yes, what kind of pets? (You can enter a cross in more than one box.)

- Dog
 Cat
 Guinea pig, rabbit, mouse, rat, etc.
 Budgie, other type of bird
 Other type of animal: _____

55. Is your child ever present in a room where someone smokes?

- Yes, every day Number of times per day +
 Yes, several times a week
 Yes, sometimes
 Don't know
 No

56. How many months old was your child when he/she got his/her first tooth?

- Number of months
 Don't remember

57. How often are your child's teeth brushed?

- Twice a day or more
 Once a day
 sometimes
 Never

58. Do you use fluoride toothpaste when brushing your child's teeth?

- No
 Sometimes
 Yes, usually

59. How often is your child outside at the moment?

- Seldom
 Often, but less than one hour a day on average
 1 - 3 hours a day on average
 More than 3 hours a day

60. How many hours on average does your child sit in front of a TV/video every day?

- 4 hours
 3 hours
 1 -2 hours
 Less than 1 hour
 Seldom/never

61. Does your child go to or has been to swimming classes for babies?

- No
 Yes +
 If yes, how long has your child been going? months

62. Does your child use a dummy/pacifier now at 18 months?

- Seldom or never
 Only when he/she goes to sleep
 Quite often
 Most of the time

ABOUT YOURSELF



Health, illness and use of medication

63. What is your civil status at the moment?

- Married
- Cohabiting
- Single
- Separated/divorced
- Widowed
- Other



64. Are you pregnant at the moment?

- No
- Yes

If yes, how many weeks?

65. Are you suffering from a long-term illness that has started during the last 12 months?

- No
- Yes, specify _____

66. Have you yourself been admitted to hospital during the last 12 months?

- No
- Yes, which hospital? _____

67. Are you taking at the moment any cod liver oil, vitamins or other dietary supplements?

- No
- Yes, specify

1. _____
2. _____
3. _____
4. _____

68. What is your current weight?

kg

69. Have you during the last 6 months or at any time previously: (Enter a cross in a box for each item.)

	Last 6 months			Previously		
	Yes	Perhaps	No	Yes	Perhaps	No
1. Felt yourself that you were too fat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Been really afraid of putting on weight or becoming too fat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Heard others say you were too thin, while you yourself thought that you were too fat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Felt that it was extremely important for your self-image to maintain a particular weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

70. Have you at some time during the last 6 months or previously in your life - for a period lasting at least 3 months - experienced any of the following situations, and if so, how frequently was this? (Select the period you were affected the most.) (Enter a cross in a box for each item.)

	Last 6 months			Previously		
	At least twice a week	1-4 times a mth	Seldom/never	At least twice a week	1-4 times a mth	Seldom/never
1. Felt that you were losing control when eating and couldn't stop before you had eaten too much?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Used vomiting to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Used laxatives to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Used fasting to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Used hard physical exercise to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

71. Have you at some time during the last six months or previously in your life gone at least three months without any periods (without you being pregnant or giving birth/breast-feeding) in connection with a period when you had eating problems?

- No, never
- Yes, during the last 6 months
- Yes, previously



72. Have you experienced pain during the last 12 months in any of the following places? (Enter a cross in a box for each item.)

	Seldom/never	Slight pain	Some pain	Major pain
1. Stomach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Arms/legs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Neck/shoulders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Head	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Pelvis (pelvic girdle pains)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

73. Have you experienced any pain in your back or pelvis during the last 12 months. Enter a cross to indicate how much pain you have felt in different places:

	Some pain	Major pain
1. In the small of the back	<input type="checkbox"/>	<input type="checkbox"/>
2. One of the pelvic/sacroiliac joints at the back	<input type="checkbox"/>	<input type="checkbox"/>
3. Both pelvic/sacroiliac joints at the back	<input type="checkbox"/>	<input type="checkbox"/>
4. Over the coccygeal bone	<input type="checkbox"/>	<input type="checkbox"/>
5. In the buttocks	<input type="checkbox"/>	<input type="checkbox"/>
6. Over the pubic bone	<input type="checkbox"/>	<input type="checkbox"/>
7. Groin	<input type="checkbox"/>	<input type="checkbox"/>
8. Other back pains	<input type="checkbox"/>	<input type="checkbox"/>
9. Other pains	<input type="checkbox"/>	<input type="checkbox"/>

74. Currently, do you wake during the night because of pelvic pain?

- No, never
- Yes, but seldom
- Yes, often

75. Do you have such problems walking at the moment because of pelvic pains that you have to use a stick or crutches?

- No, never
- Yes, but not every day - the pain varies from day to day
- Yes, must use a stick or crutches every day

76. Did you receive any treatment for pelvic pain after your last birth?

- No
- Yes

77. If yes, what type of treatment did you receive? (You can enter a cross in more than one box.)

- Physiotherapy
- Chiropractic
- Medication
- Other: _____

78. Do you have any of the following problems at the moment? (Enter a cross in a box for each problem.)

Problems:	How often do you have problems?					How much at a time?	
	Never	1-4 times a month	1-6 times a week	Once a day	More than Once a day	Drops	Large amounts
1. Incontinence when coughing, sneezing or laughing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Incontinence during physical activity (running/jumping)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Incontinence with a strong need to urinate ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Problems retaining faeces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Problems retaining flatus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

79. Do you regularly take medication? (This means any type of medication, including natural medicines.)

- No
- Yes

+

+

80. If yes, give the name of the medicines and how often you take them. (Include all types of medication, as well as natural medicines.)

Name of medicine (e.g. APOCILLIN, PARACET)	How often do you take them?		
	Every day	Every day for certain periods	Sometimes
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Finances – lifestyle

81. How much leave did you and the child's father take after the birth? (Specify either the number of months or weeks.)

	Months		Weeks
Yourself	<input type="text"/>	or	<input type="text"/>
Child's father	<input type="text"/>	or	<input type="text"/>

82. Are you in paid employment?

No
 Yes **+**

83. If so, how many hours do you work a week?

hours

84. If you are in paid employment, have you taken any time off sick since you went back to work? If yes, specify how many days you were off sick.

No

Yes, due to own illness. Number of days

Yes, due to your child being ill.

85. Would your current finances allow you to cope with an unexpected bill of NOK 3,000 for a dental visit or a repair, for instance?

No
 Yes
 Don't know

86. Have you found it difficult sometimes during the last six months to cope with running expenses for food, transport, rent, etc.?

No, never
 Yes, but infrequently
 Yes, sometimes **+**
 Yes, often

87. How often are you so physically active (during your spare time or at work) that you get out of breath and sweat?

	Spare time	At work
1. Never	<input type="checkbox"/>	<input type="checkbox"/>
2. Less than once a week	<input type="checkbox"/>	<input type="checkbox"/>
3. Once a week	<input type="checkbox"/>	<input type="checkbox"/>
4. Twice a week	<input type="checkbox"/>	<input type="checkbox"/>
5. 3-4 times a week	<input type="checkbox"/>	<input type="checkbox"/>
6. 5 times or more a week	<input type="checkbox"/>	<input type="checkbox"/>

88. How often do you exercise at present? (Enter a cross in a box for each item.)

Activity	Never	1-3 times a month	Once a week	Twice a week	3 times or more a week
1. Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Brisk walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Running/jogging/orienteering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Cycling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Training studio/weight training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Aerobics/gymnastics/dance without running and jumping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Aerobics/gymnastics/dance with running and jumping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Dancing (swing/rock/folk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Skiing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Ball sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Swimming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Riding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

89. What are your and your partner's smoking habits at home at the moment?

	Yourself	Your partner/ husband
1. Don't smoke	<input type="checkbox"/>	<input type="checkbox"/>
2. Smoke sometimes	<input type="checkbox"/>	<input type="checkbox"/>
3. Smoke every day	<input type="checkbox"/>	<input type="checkbox"/>
4. If every day, number of cigarettes per day	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>

90. How often do you consume alcohol at the moment?

- Roughly 6-7 times a week
- Roughly 4-5 times a week
- Roughly 2-3 times a week
- Roughly once a week
- Roughly 1-3 times a month
- Less often than once a month
- Never

91. How many units do you usually drink when you consume alcohol? (Enter a cross for both weekends and weekdays). (See explanation below.)

	Weekend	Weekdays
10 or more	<input type="checkbox"/>	<input type="checkbox"/>
7-9	<input type="checkbox"/>	<input type="checkbox"/>
5-6	<input type="checkbox"/>	<input type="checkbox"/>
3-4	<input type="checkbox"/>	<input type="checkbox"/>
1-2	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Alcohol units

In order to compare different types of alcohol, we ask for the number of alcohol units (= 1.5 cl of pure alcohol). This means the following in practice:

- 1 glass (1/3 litre) of beer = 1 unit
- 1 wine glass of red or white wine = 1 unit
- 1 sherry glass of sherry or other fortified wine = 1 unit
- 1 brandy glass of spirits or liqueur = 1 unit
- 1 bottle of alcopop/cider = 1 unit

A little more about yourself and how you are keeping now

92. If you have a husband/boyfriend/partner, to what extent do you agree with the following descriptions? (Enter a cross in a box for each item.)

	Totally agree	Agree	Slightly agree	Slightly disagree	Disagree	Totally disagree
1. My husband/partner and I have a close relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My partner and I have problems in our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am very happy in my relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. My partner is usually understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I often think about ending our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I am satisfied with my relationship with my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. We often disagree about important decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I have been lucky in my choice of partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. We agree on how children should be raised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I think my partner is satisfied with our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

93. Do you have anyone other than your-spouse/boyfriend/partner whom you can seek advice from in a difficult situation?

- No
- Yes, 1 or 2 people
- Yes, more than 2 people

94. How often do you see or talk on the telephone to your family (apart from your household) or close friends?

- Once a month or less often
- 2-8 times a month
- More than twice a week

95. Do you often feel lonely?

- Almost never
- Seldom
- Sometimes
- Generally
- Almost always

96. How accurate are these statements to you? (Enter a cross in a box for each item.)

	Not accurate	Slightly accurate	Almost accurate	Totally accurate
1. I always manage to solve difficult problems if I try hard enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. If anyone opposes me, I find a way to get what I want	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am sure that I can cope with unexpected events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am calm when I encounter difficulties because I trust my ability to cope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. When I am in a difficult situation, I usually find a solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

97. In your daily life, how often do you (Enter a cross in a box for each item.)

	Seldom/ never	Fairly seldom	Sometimes	Often	Very often
1. Feel pleased about something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feel happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feel joyful, as though everything is going your way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feel that you will scream at someone or hit something.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Feel angry, irritated or annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feel mad at somebody	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

98. How do you feel about yourself? (Enter a cross in a box for each item.)

	Totally agree	Agree	Disagree	Totally disagree
1. I have a positive attitude towards myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel completely useless at times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel that I do not have much to be proud of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel that I'm a valuable person, as good as anyone else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

99. Have you been bothered by any of the following feelings during the past 2 weeks? (Enter a cross in a box for each item.)

	Not bothered	A little bothered	Quite bothered	Very bothered
1. Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

100. Have you experienced any of the following situations in the last year (since the previous questionnaire)? If yes, how painful and difficult was this for you? (Enter a cross in a box for each item.)

	No	Yes	If yes		
			Not so bad	Painful/ difficult	Very painful/ difficult
1. Have had problems at work or where you study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have had financial problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have been divorced, separated or ended your relationship with your partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have had problems or conflicts with your family, friends or neighbours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have been seriously worried that there is something wrong with your child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have been seriously ill or injured (your self)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Has anyone close to you been seriously ill or injured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Have been involved in a serious accident, fire or robbery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Have lost someone close to you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have been pressurized into having sexual intercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

+

101. How would you rate your quality of life?

- Very poor
- Poor
- Neither poor nor good
- Good
- Very good

+

102. How satisfied are you with your health?

- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

+

103. The following questions ask about how much you have experienced certain things in the last two weeks. (Enter a cross in a box for each item.)

	Not at all	A little	A certain amount	A lot/very	Totally/extremely
1. To what extent do you feel that (physical) pain prevents you from doing what you need to do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. To what extent do you need medical treatment to be able to function in your daily life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How much do you enjoy life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To what extent do you feel your life to be meaningful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. How well are you able to concentrate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How safe do you feel in your daily life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. How healthy is your physical environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

104. The following questions ask about how completely you experienced or were able to do certain things in the last two weeks. (Enter a cross in a box for each item.)

	Not at all/None	A little	To a certain extent	Mostly Almost	Always
1. Do you have enough energy for everyday life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are you able to accept your bodily appearance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you enough money to meet your needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How accessible is the information that you need in your day-to-day life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. To what extent do you have the opportunity for leisure activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

105. How well are you able to get around?

- Very badly
- Badly
- Neither well nor badly
- Well
- Very well

106. The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks. (Enter a cross in a box for each item.)

	Very dissatisfied	Dis-satisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1. How satisfied are you with your sleep?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How satisfied are you with your ability to perform your daily living activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How satisfied are you with your capacity for work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How satisfied are you with yourself?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. How satisfied are you with your personal relationships?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How satisfied are you with your sex life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. How satisfied are you with the support you get from your friends?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. How satisfied are you with the conditions where you live?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. How satisfied are you with your access to health services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. How satisfied are you with your transport?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

+

107. The following question relates to how often you have experienced or had negative feelings during the last two weeks?

How often do you have negative feelings, such as blue mood, despair, anxiety, depression? + Never Seldom Quite often Very often Always

COMMENTS:

+

+

CHILD'S MEASUREMENTS AND WEIGHT

108. If any of the measurements in Question 30 are missing from the child's health card, can we contact the well baby clinic for them?

- No
- Yes Name of well baby clinic _____
- Post code or district _____

Have you remembered to fill in on page 1 the date on which you completed the questionnaire?

Thank you very much for your help!

Please return the completed questionnaire in the stamped addressed envelope provided to:

Den norske Mor og Barn undersøkelsen
 Nasjonalt folkehelseinstitutt
 Avd. for medisinsk fødselsregister
 Kalfarveien 31
 5018 Bergen

+

+

Appendix I

Questionnaire Q6 in MoBa (3 years)

den norske *Mor & barn undersøkelsen*

Questionnaire 6 – Your child at 36 months

In this questionnaire we will ask you some questions which you may recognise from previous questionnaires. We do this because we want to continue following your and your child's development. You are welcome to consult your child's Health card so that you can use the information contained in it.

If you feel that a question is too upsetting or difficult to answer you can skip this question and go on to the next one.

The questionnaire will be processed by a computer. It is therefore important that you follow these instructions when completing it:

- Use a blue or black ballpoint pen.
- Put a cross in the box that is most relevant like this:
- If you put a cross in the wrong box, correct it by filling in the box completely like this:
- Write numbers in the large boxes. **It is important that you only write in the white area of each box like this:**

Number:

1	2	3	4	5	6	7	8	9	0
---	---	---	---	---	---	---	---	---	---

- Numbered boxes have two or more squares. When you enter a single-digit number, use the square on the right.

Example: 5 is entered as follows

	5
--	---

- Specific information concerning, for example, medication should be written on the lines provided. Write clearly in CAPITAL LETTERS.
- Remember to fill in the date on which you completed the questionnaire

As soon as you have completed this questionnaire, return it to us in the stamped addressed envelope provided.

Specify the day, month and year when the questionnaire was completed

--	--

Day

--	--

Month

--	--	--	--

Year

(write the year in full, e.g. 2005)

Your child's development, health and history of illness

1. What is your child's height and weight (without clothes) at 3 years? If you know your child's height and weight at 2 years and 15-18 months, enter these measurements too. (If you don't know them, go on to the next question.) Give the date when the measurements were taken and enter a cross to indicate whether they were taken by you.

	Date of measurement			Height	Weight	Own measurement															
Approx. 3 years	<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> cm						<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> kg					<input type="checkbox"/>
Approx. 2 years	<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> cm						<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> kg					<input type="checkbox"/>
Approx. 15-18 months	<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td></tr></table>			<table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> cm						<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> kg					<input type="checkbox"/>
	Day	Month	Year																		

2. How many months old was your child when he/she took his/her first steps unaided?

--	--

month

Still not walking unaided

The following questions concern any illnesses or health problems your child has had. We will first ask you about longer-term problems and then about illnesses and problems of a more acute nature.

3. Has your child suffered any long-term illness or health problems since the age of 18 months?

Health problem	No	Yes, has now	Yes, had previously	If so, has child been referred to a specialist	
				No	Yes
1. Impaired hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Impaired vision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Delayed motor development (e.g. sits/walks late)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Cerebral palsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Joint problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Gained too little weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Gained too much weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Heart defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Testicles not descended into scrotum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Allergy affecting eyes or nose, e.g. hay fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Atopic eczema (childhood eczema)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Other type of eczema	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Frequent diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Frequent stomach pains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Food allergy/intolerance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other gastrointestinal problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Late or abnormal speech development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Sleep problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Trouble relating to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Hyperactivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Autistic traits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Other behavioural problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Other long-term illness/condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specify _____					

4. If your child has been to see a specialist or to the hospital, what did the investigation show?

- Everything was fine
- Still some doubts/further investigations needed
- Has not been for any investigation yet
- Received diagnosis I: _____
- _____
- Received diagnosis II: _____
- _____
- Received diagnosis III: _____
- _____

5. If your child has a serious or long-term illness, describe it, if possible, in more detail:

6. Has your child ever been exposed to or involved in a serious incident?

- No Yes

7. If yes, give a description:

8. Do you think that this has affected your child's behaviour or development?

- No Yes

9. Has your child suffered any acute illness/health problem since the age of 18 months?

(Specify how many times and whether your child has been admitted to or examined at a hospital for this health problem.)

	No	Yes	Number of times	If yes, has child been admitted to or examined in hospital?	
				No	Yes
1. Common cold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Throat infection with a confirmed streptococci	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Other type of throat infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ear infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Pseudocroup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Bronchitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Pneumonia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Gastric flu/diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Urinary tract infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Encephalitis/meningitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Febrile convulsions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Other convulsions (without any fever)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Injury or accident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If your child has been examined in or admitted to hospital, give the name of the hospital:

Hospital name: _____
 Hospital name: _____
 Hospital name: _____

11. Has your child been referred to the following services since the age of 18 months?

	No	Yes
Habilitation service	<input type="checkbox"/>	<input type="checkbox"/>
Educational psychology service	<input type="checkbox"/>	<input type="checkbox"/>
Child psychiatric clinic/department	<input type="checkbox"/>	<input type="checkbox"/>

12. Has your child taken any medication during the last 12 months? *(This means any type of medication, including fever-reducing medicines, alternative medicines and herbal remedies)*

No Yes

13. If yes, give the name of the medicines and indicate how long your child took these medicines for altogether and whether he/she is still taking them now.

Name of medicine: (CAPITALS)	Duration of use					Still being taken now?	
	0-2 weeks	3-4 weeks	1-2 mth	3-6 mth	7-12 mth	No	Yes
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Has your child been given any vaccinations since you completed the previous questionnaire (at around 18 months or 6 months)? No Yes

15. If yes, specify which vaccinations and when your child received them.

Type of vaccination:

Date given:

<input type="text"/>	<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------

Day Month Year

16. Is your child taking at the moment any cod liver oil, vitamins or other dietary supplements?

	Yes, daily	Sometimes	No
1. Cod liver oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Fluoride tablets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Vitamin preparations, specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Iron supplement, specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Other dietary supplements, specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your child's development and ability to cope

In this section you will find some questions repeated in a different form. We do this so that we can compare your child's development with other similar studies and try out the best way to ask the question. The questions will relate to children who have reached different stages of development. Answer all the questions as well as you can, even if everything does not necessarily apply to your child.

17. About your child's motor development. (Enter a cross in a box for each item.)

	Yes	A few times	Not yet
1. Can your child kick a ball by swinging his/her leg forward without holding onto anything for support?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Can your child catch a large ball with both hands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When drawing, does your child hold a pencil, crayon or pen between his/her fingers and thumb like an adult does?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Can your child undo one or more buttons?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. About your child's language skills. (Enter a cross for the option which best describes the way your child talks.)

- Not yet talking
- He/she is talking, but you can't understand him/her
- Talking in one-word utterances, such as "milk" or "down"
- Talking in 2- to 3-word phrases, such as "me got ball" or "give doll"
- Talking in fairly complete sentences, such as "I got a doll" or "can I go outside?"
- Talking in long and complicated sentences, such as "when I went to the park, I went on the swings" or "I saw a man standing on the corner"

19. Your child's body language. (Enter a cross in the box of the answer that fits your child best for each statement.)

	Yes, usually	Very seldom	Not yet
1. When you enthusiastically say: "Where is the ball (or other toy)?", will your child point towards the toy, even if it is more than 1 metre away?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. When you look at a distant object and, surprised and excited, say: "Waaa...what's that?", - does he/she turn his/her head in the same direction as you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child use sounds or words together with gestures? (for example, uses sounds when pointing or reaching towards toys or objects)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child show you toys by looking at you and holding the toy up towards you? (from a distance just so you can look at it)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. About your child's social skills.

(Enter a cross in a box for each statement to indicate whether you agree or disagree.)

	Disagree	Partially agree	Totally agree
1. Your child shares readily with other children (treats, toys, pencils, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Your child is helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Your child is considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your child is kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your child often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Your child pays careful attention when you try to teach him/her something new	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Understanding what others say and being able to communicate

(Enter a cross in the box of the answer that fits your child best for each statement.)

	Yes	A few times	Not yet
1. Without showing him/her first, does your child point to the correct picture when you say, "Where is the cat" or "Where is the dog"? Your child must only point at the correct picture.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. When you ask your child to point at his/her eyes, nose, hair, feet, ears, etc., does he/she point correctly at least seven parts of the body? (The child can point at himself/herself, you or a doll.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child use sentences made up of three or four words?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Without giving him/her help by pointing or using gestures, ask your child to "Put the shoe on the table" and "Put the book under the chair". Does your child carry out both of these directions correctly? .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. When looking at a picture book, does your child tell you what is happening or what action is taking place in the picture? (For example, "Barking", "Running", "Eating" and "Crying"?) You may ask, "What is the dog (or boy) doing?"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Can your child tell you at least two things about an object he/she is familiar with? If you say, for example, "Tell me about your ball", will your child answer by saying something like "It is round, I can throw it, it is big"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. About body language and other ways of communicating with others. (We are asking you about how your child usually is. If the behaviour is rare , e.g. you have only seen it once or twice, enter a cross in the 'No' box. Enter a cross in a box for each question.)

	Yes	No
1. Does your child respond to his/her name one of the first two times you call?	<input type="checkbox"/>	<input type="checkbox"/>
2. Does your child ever bring objects over to you to show you something?	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child imitate you (e.g. you make a face - will your child imitate it)?	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child ever use his/her index finger to point, to indicate interest in something?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does your child take an interest in other children?	<input type="checkbox"/>	<input type="checkbox"/>
6. If you point at a toy across the room, does your child look at it?	<input type="checkbox"/>	<input type="checkbox"/>
7. Is it easy to make eye contact with your child?	<input type="checkbox"/>	<input type="checkbox"/>
8. Does your child react when spoken to, for instance, by looking, listening, smiling, speaking or babbling?	<input type="checkbox"/>	<input type="checkbox"/>
9. Does your child ever seem oversensitive to noise (e.g. plugging ears)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Does your child only choose a very small number of particular toys or objects, even if you try to make him/her interested in more things?	<input type="checkbox"/>	<input type="checkbox"/>
11. Does your child wave to people to greet or say goodbye to them?	<input type="checkbox"/>	<input type="checkbox"/>
12. Can your child hurt himself/herself a lot without seeming to be bothered (has a high pain threshold)?	<input type="checkbox"/>	<input type="checkbox"/>

23. About talking with others. (Enter a cross in a box for each question to indicate whether you think it applies to your child or not.)

	Yes	No
1. Does your child talk using short phrases or sentences?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you have a to-and-fro "conversation" with your child that involves taking turns or building on what you have said?	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child ever use odd phrases or say the same thing over and over again in almost exactly the same way? (either phrases that the child hears other people use or ones that he/she makes up)	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child ever use socially inappropriate questions or statements? For example, does your child ever regularly ask personal questions or make personal comments at awkward times?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does your child ever get his/her pronouns mixed up (i.e. saying "you" or "he/she" instead of "I")?	<input type="checkbox"/>	<input type="checkbox"/>
6. Does your child ever use words that he/she seems to have invented or made up himself/herself, put things in odd, indirect ways or use metaphorical ways of saying things? (e.g. saying "hot rain" for "steam") ..	<input type="checkbox"/>	<input type="checkbox"/>
7. Does your child ever say the same thing over and over in exactly the same way or insist that you say the same thing over and over again?	<input type="checkbox"/>	<input type="checkbox"/>
8. Does your child ever have things that he/she seems to have to do in a very particular way or order, or rituals that the child insists that you go through?	<input type="checkbox"/>	<input type="checkbox"/>

24. About behaviour and specific things that children can think of doing. (Enter a cross in a box for each question to indicate whether you think it applies to your child or not.)

	Yes	No
9. Does your child's facial expression usually seem appropriate to the particular situation, as far as you can tell? ..	<input type="checkbox"/>	<input type="checkbox"/>
10. Does your child ever use your hand like a tool or as if it were part of his/her own body (e.g. pointing with your finger or putting your hand on a doorknob to get you to open the door)?	<input type="checkbox"/>	<input type="checkbox"/>
11. Does your child ever have any interests that preoccupy him/her and might seem odd to other people (e.g. traffic lights, drainpipes or timetables)?	<input type="checkbox"/>	<input type="checkbox"/>
12. Does your child ever seem to be more interested in parts of a toy or an object, rather than in using the object as it was intended (e.g. spinning the wheels of a car)?	<input type="checkbox"/>	<input type="checkbox"/>
13. Does your child ever have any special interests that are unusual in their intensity, but otherwise appropriate for his/her age and peer group (e.g. trains or dinosaurs)?	<input type="checkbox"/>	<input type="checkbox"/>
14. Does your child ever seem to be unusually interested in the sight, feel, sound, taste or smell of things or people?	<input type="checkbox"/>	<input type="checkbox"/>
15. Does your child ever have any mannerisms or odd ways of moving his/her hands or fingers, such as flapping or moving his/her fingers in front of his/her eyes?	<input type="checkbox"/>	<input type="checkbox"/>
16. Does your child ever have any complicated movements of his/her whole body, such as spinning or repeatedly bouncing up and down?	<input type="checkbox"/>	<input type="checkbox"/>
17. Does your child ever injure himself/herself deliberately, such as by biting his/her arm or banging his/her head? ..	<input type="checkbox"/>	<input type="checkbox"/>
18. Does your child ever have any objects that he/she has to carry around (other than a soft toy or comfort blanket)? ..	<input type="checkbox"/>	<input type="checkbox"/>

25. About your child's social development and interest in others. (Enter a cross in a box for each question to indicate whether you think it applies to your child or not.)

	Yes	No
19. Does your child have any particular friends or a best friend?	<input type="checkbox"/>	<input type="checkbox"/>
20. Does your child ever talk with you just to be friendly (rather than to get something)?	<input type="checkbox"/>	<input type="checkbox"/>
21. Does your child ever spontaneously copy you (or other people) or what you are doing (such as vacuuming, gardening or mending things)?	<input type="checkbox"/>	<input type="checkbox"/>
22. Does your child ever spontaneously point at things around him/her just to show you things (not because he/she wants them)?	<input type="checkbox"/>	<input type="checkbox"/>
23. Does your child ever use gestures, other than pointing or pulling your hand, to let you know what he/she wants?	<input type="checkbox"/>	<input type="checkbox"/>
24. Does your child nod his/her head to indicate yes?	<input type="checkbox"/>	<input type="checkbox"/>
25. Does your child shake his/her head to indicate no?	<input type="checkbox"/>	<input type="checkbox"/>
26. Does your child usually look at you directly in the face when doing things with you or talking with you?	<input type="checkbox"/>	<input type="checkbox"/>
27. Does your child smile back if someone smiles at him/her?	<input type="checkbox"/>	<input type="checkbox"/>
28. Does your child ever show you things that interest him/her to engage your attention?	<input type="checkbox"/>	<input type="checkbox"/>

cont. next page

	Yes	No
29. Does your child ever offer to share things other than food with you?	<input type="checkbox"/>	<input type="checkbox"/>
30. Does your child ever seem to want you to join in his/her enjoyment of something?	<input type="checkbox"/>	<input type="checkbox"/>
31. Does your child ever try to comfort you when you are sad or hurt?	<input type="checkbox"/>	<input type="checkbox"/>
32. If your child wants something or wants help, does he/she look at you and use gestures with sounds or words to get your attention?	<input type="checkbox"/>	<input type="checkbox"/>
33. Does your child show a normal range of facial expressions?	<input type="checkbox"/>	<input type="checkbox"/>
34. Does your child ever spontaneously join in and try to copy the actions in social games, such as "The Mulberry Bush" or "London Bridge is Falling Down"?	<input type="checkbox"/>	<input type="checkbox"/>
35. Does your child play any pretend or make-believe games?	<input type="checkbox"/>	<input type="checkbox"/>
36. Does your child seem interested in other children of approximately the same age whom he/she does not know? ..	<input type="checkbox"/>	<input type="checkbox"/>
37. Does your child respond positively when another child approaches him/her?	<input type="checkbox"/>	<input type="checkbox"/>
38. If you come into a room and start talking to your child without calling his/her name, does he/she usually look up and pay attention to you?	<input type="checkbox"/>	<input type="checkbox"/>
39. Does your child ever play imaginative games with another child in such a way that you can tell that each child understands what the other is pretending?	<input type="checkbox"/>	<input type="checkbox"/>
40. Does your child play cooperatively in games that need some form of joining in with a group of other children, such as hide-and-seek or ball games?	<input type="checkbox"/>	<input type="checkbox"/>

26. Loss of skills. (Is there something your child used to be able to do, but has lost the ability to do?)

	No	Yes	Not sure
1. Has your child lost any language skills? (For example, used single words or sentences for a time and then stopped using the words)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has your child lost any social skills? (For example, could wave or say "Hi" to greet someone, then lost this skill)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has your child turned out to be less sociable? (For example, he/she is more difficult to have eye contact with, is less interested in other people now)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has your child lost any motor skills? (For example, could run and jump while remaining steady, but falls over much more now)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your child's temperament and behaviour

27. To what extent do the following statements apply to your child's behaviour during the last two months? (Enter a cross in a box for each item.)

	Very typical	Quite typical	Neither/nor	Not so typical	Not at all typical
1. Your child cries easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Your child is always on the go	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Your child prefers playing with others rather than alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your child is off and running as soon as he/she wakes up in the morning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your child is very sociable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Your child takes a long time to warm up to strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Your child gets upset or sad easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Your child prefers quiet, inactive games to more active ones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Your child likes to be with people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Your child reacts intensely when upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Your child is very friendly with strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Your child finds other people more fun than anything else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Your child complains that certain garments are too tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Your child is distressed by having his/her face or hair washed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. The following list contains statements describing children's behaviour and manner from the age of 2-3. Some of these features are temporary while others continue for a longer period of time. To what extent are the following statements true of your child's behaviour during the last two months? (Enter a cross in a box for each item.)

	Not true	Somewhat or sometimes true	Very true or often true
1. Afraid to try new things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Can't concentrate, can't pay attention for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can't sit still, restless or hyperactive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Can't stand waiting, wants everything now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Clings to adults or too dependent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Constipated, doesn't move bowels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Defiant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Demands must be met immediately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Disturbed by any change in routine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Doesn't want to sleep alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Doesn't eat well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Doesn't seem to feel guilty after misbehaving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Eats or drinks things that are not food (don't include sweets)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Gets in many fights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Gets into everything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Gets too upset when separated from parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Hits others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Poorly coordinated or clumsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Punishment doesn't change his/her behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Quickly shifts from one activity to another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Resists going to bed at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Stomach aches or cramps (without medical cause)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Sudden changes in moods or feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Too fearful or anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Vomiting, throwing up (without medical cause)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Doesn't seem to be happy eating food (don't include sweets)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. Some more statements follow about your child's behaviour and manner. We are again asking to what extent you feel the statements are true of your child during the last two months? (Enter a cross in a box for each item.)

	Not true	Somewhat or sometimes true	Very true or often true
1. Becomes distracted or diverted by outside stimuli (sounds or events)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Finds it difficult waiting his/her turn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has problems keeping focused on tasks or activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is excessively talkative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Doesn't differentiate between adults; behaves the same way to all of them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Will wander after other adults, even if they are strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Doesn't seem to listen when he/she is being spoken to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Has a habit of rolling his/her head around or making humming sounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Mood can vary greatly from day to day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is extremely passive, needs help to get going	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. "Tests" other children to see whether they get angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Becomes aggressive when he/she is frustrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. His/her body is affected by twitches or contortions that seem difficult to control (e.g. eyes, mouth, nose or legs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Hits, shoves, kicks and bites other children (not including siblings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Is very anxious about getting dirty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Wants things to be clean and tidy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Places toys or other objects in a certain order/sequence over and over again	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Wakes up in the night and needs help to get back to sleep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Gets distressed when you go out and he/she is going to be looked after by family or a babysitter he/she knows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

cont. next page

	Not true	Somewhat or sometimes true	Very true or often true
20. Does things he/she is not allowed to do to attract attention from adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Seems to have less fun than other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Is extremely noisy. Shouts and screams a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Is disobedient or defiant (e.g. refuses to do anything you ask)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Comes over to you when something happens that makes him/her afraid or anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Runs off when you are outside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Seems to have less energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Is very fussy when it comes to food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Seems to be unhappy, sad or depressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Wakes up several times during the night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. About your child's eating habits and appetite and your attitude to it.

	Totally disagree	Slightly disagree	Neither/nor	Slightly agree	Totally agree
1. I have to be sure that my child does not eat too many sweet things (sweets, ice cream, cakes or pastries)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have to be sure that my child does not eat too many high-fat foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I have to be sure that my child does not eat too much of his/her favourite food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I intentionally keep some foods out of my child's reach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I offer sweet things (sweets, ice cream, cakes, pastries) to my child as a reward for good behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I offer my child his/her favourite foods in exchange for good behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If I did not guide or regulate my child's eating he/she would eat too many junk foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. If I did not guide or regulate my child's eating he/she would eat too much of his/her favourite foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. My child should always eat all of the food on his/her plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I have to be especially careful to make sure that my child eats enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. If my child says: "I'm not hungry", I try to get him/her to eat anyway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. If I did not guide or regulate my child's eating, he/she would eat much less than he/she should.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. About your concerns.

	No	Yes
1. Are you concerned because your child is demanding and difficult to cope with?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have you every wondered if your child's hearing is impaired?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have others (family, nursery, health visitor) expressed concerns about your child's development?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are your concerned because your child is hardly interested at all in playing with other children?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you have any other concern about your child's health?	<input type="checkbox"/>	<input type="checkbox"/>

If so, specify _____

Your child's everyday life and environment

32. Do you live with your child's father?

No Yes

33. If no, how much time does your child spend with his/her mother and father respectively?

	Mother	Father
More than half the time	<input type="checkbox"/>	<input type="checkbox"/>
Roughly half the time	<input type="checkbox"/>	<input type="checkbox"/>
At least once a week	<input type="checkbox"/>	<input type="checkbox"/>
At least once a month	<input type="checkbox"/>	<input type="checkbox"/>
Less often than once a month	<input type="checkbox"/>	<input type="checkbox"/>
Never	<input type="checkbox"/>	<input type="checkbox"/>

34. How often does your child have his/her teeth brushed?

- Twice a day or more
 Once a day
 Sometimes
 Never

35. Does your child use fluoride toothpaste?

- No
 Sometimes
 Yes, usually

36. Is your child ever present in a room where someone smokes?

- Yes, every day
- Yes, several times a week
- Yes, sometimes
- Don't know
- No

Number of hours a day:

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37. How often is your child outside at present?

- Seldom
- Frequently, but less than 1 hour a day on average
- 1-3 hours a day on average
- More than 3 hours a day

38. How many hours on average does your child sit in front of a TV/video every day?

- 4 hours or more
- 3 hours
- 1-2 hours
- Less than 1 hour
- Seldom/never

39. How is your child cared for during the day at the moment? (You can enter a cross in more than one box.)

- At home with his/her mother
- At home with his/her father
- At home with an unqualified childminder
- At a childminder's
- In a short term outdoor day nursery
- In a day nursery

40. How many hours a week is your child looked after during the day by someone other than his/her mother or father?

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Diet

41. How often does your child drink or eat the following at present? (Select the frequency which is most applicable on average.)
(Enter a cross in a box for each item.)

	Seldom/ less than once a week	1-3 times a week	4-6 times a week	Once in 24 hrs	Twice in 24 hrs	3 times in 24 hrs	4 or more times in 24 hrs
1. Whole milk, sweet/sour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Low-fat, extra low-fat, skimmed milk, sweet/sour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Yogurt, natural	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Yogurt / yogurt drink with fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Yogurt with active Lactobacillus, all types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Cordial / nectar / squash / fizzy drinks, sweetened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Cordial / squash / fizzy drinks, with artificial sweeteners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Meat filling (liver paste, ham, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Fish filling (mackerel, caviar, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Brown cheese, brown cheese spread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Other types of cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Jam, honey, chocolate spread, other sweet spread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Eggs, boiled, fried, scrambled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Other filling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Raisins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Ice cream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Ice lolly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Biscuits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Buns, cakes, waffles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Chocolate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Sweets, jelly babies, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Crisps, potato snacks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

42. How many slices of bread/crispbread does your child eat every day?

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How many of these include fibre-rich bread/ crispbread (e.g. rye bread, Fedons bread)

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43. How often does your child eat the following at present? (Select the frequency which is most applicable on average.)
(Enter a cross in a box for each item.)

	Once a mth or less often	2-3 times a month	Once a week	Twice a week	3 times a week	4 times a week	5 or more times a week
1. Meat, rissoles, sausages, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Oily fish (salmon, herring, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. White fish (cod, coley, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Fish pudding, fish cakes, fish balls, etc. ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Soup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Pancakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Potatoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Pasta, spaghetti, noodles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Pizza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Rice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Cooked vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Raw vegetables, salad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Questions about yourself

44. What is your civil status at present?

- Married Separated/divorced
 Cohabiting Widowed
 Single Other

45. Are you in paid employment at the moment?

- No (go to question 49)
 Yes Usual number of hours per week:

46. What type of working pattern do you have? (You can enter a cross in more than one box.)

- Permanent day work
 Shift work/rota system
 Permanent afternoon/evening work
 Non-permanent (relief cover, relief on-call, supply, etc.)
 Permanent night work

47. How many days altogether were you absent from work last year (excluding holidays and time off in lieu)?

days

48. What was the reason for this? (You can enter a cross in more than one box.)

- Leave
 Own illness, specify _____
 Sick child
 Other

49. Do you often feel lonely?

- Almost never
 Seldom
 Sometimes
 Generally
 Almost always

50. Do you have anyone other than your spouse /boyfriend/partner whom you can seek advice from in a difficult situation?

- No
 Yes, 1 or 2 people
 Yes, more than 2 people

51. How often do you see or talk on the telephone to your family (apart from your household) or close friends?

- Once a month or less
 2-8 times a month
 More than twice a week

52. Have you ever experienced the following, since you became pregnant with this child, for a consecutive period of two weeks or more..... (Enter a cross in a box for each item.)

	No	Yes, during pregnancy	Yes, during first year after birth	Yes, during the last 2 years
1. Felt depressed, sad, down?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Had problems with your appetite or eaten too much?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Been affected by lethargy or a lack of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Really got down on yourself and felt worthless?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Had problems concentrating or found it difficult to make decisions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Had at least 3 of the problems mentioned above at the same time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

53. Are you pregnant now?

No Yes

54. Have you had any long-term illness or health problems which have occurred during the last 3 years?

Physical problem:

No
 Yes, before, describe: _____
 Yes, now, describe: _____

Mental problem:

No
 Yes, before, describe: _____
 Yes, now, describe: _____

55. Have you yourself been examined at the hospital during the last 3 years?

No
 Yes, which hospital? _____

56. Do you have any of the following problems at present; if so, how often and how much at a time? (Enter a cross in a box for each item.)

Problems:	How often do you have problems?					How much at a time?		
	Never	1-4 times a month	1-6 times a week	Once a day	More than once a day	Drops	Small gushes	Large amounts
1. Incontinence when coughing, sneezing or laughing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Incontinence during physical activity (running/jumping)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Incontinence with a strong need to urinate . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Problems retaining faeces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5. Problems with flatulence								

57. How physically active are you? We are asking you here about the duration of activities where you get out of breath or sweat. How often does this happen? Include activities both at home and at work. (Enter a cross in a box for each item.)

Duration of activity where you get out of breath or sweat	How often					
	Never	Less than once a week	Once a week	Twice a week	3-4 times a week	5 times or more a week
Less than 30 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Between 30 and 60 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More than 60 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

58. Overall, how would you describe your physical health?

Very good
 Good
 Poor
 Very poor

59. Do you smoke at present?

Don't smoke

Smoke sometimes - no. cigarettes per week:

Smoke every day - no. cigarettes per day:

60. Do you take:

Chewing tobacco/snuff
 Nicotine chewing gum
 Nicotine patches
 Nicotine inhaler

61. How often do you consume alcohol at present?

Roughly 6-7 times a week
 Roughly 4-5 times a week
 Roughly 2-3 times a week
 Roughly once a week
 Roughly 1-3 times a month
 Less than once a month
 Never

62. How many alcohol units do you usually drink when you consume alcohol? (Enter a cross for both weekends and weekdays) (See explanation below about alcohol units.)

	Weekend	Weekdays
10 or more	<input type="checkbox"/>	<input type="checkbox"/>
7-9	<input type="checkbox"/>	<input type="checkbox"/>
5-6	<input type="checkbox"/>	<input type="checkbox"/>
3-4	<input type="checkbox"/>	<input type="checkbox"/>
1-2	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1	<input type="checkbox"/>	<input type="checkbox"/>

Alcohol units

In order to compare different types of alcohol, we ask for the number of alcohol units (= 1.5 cl of pure alcohol). This means the following in practice:

- 1 glass (1/3 litre) of beer = 1 unit
- 1 wine glass of red or white wine = 1 unit
- 1 wine glass of sherry or other fortified wine = 1 unit
- 1 brandy glass of spirits or liqueur = 1 unit
- 1 bottle of alcopop/cider = 1 unit

63. Have you experienced any of the following during the last 3 years:

	No	Yes
Being hit, kicked or attacked physically in any other way?	<input type="checkbox"/>	<input type="checkbox"/>
Being pressured into having sexual intercourse?	<input type="checkbox"/>	<input type="checkbox"/>

64. Have you during the last 18 months: (Enter a cross in a box for each item.)

	No	Yes
1. Thought yourself that you were too fat? . . .	<input type="checkbox"/>	<input type="checkbox"/>
2. Been really afraid of putting on weight or becoming too fat?	<input type="checkbox"/>	<input type="checkbox"/>
3. Heard others say that you were too thin, while you yourself thought that you were too fat?	<input type="checkbox"/>	<input type="checkbox"/>
4. Thought that it was extremely important for your self-image to maintain a particular weight?	<input type="checkbox"/>	<input type="checkbox"/>

65. Have you at some time during the last 18 months or previously in your life - for a period lasting at least 3 months - experienced any of the following situations, and if so, how frequently was this? (Enter a cross in a box for each item.)

	At least twice a week	1-4 times a month	Seldom/never
1. Felt that you were losing control when eating and couldn't stop before you had eaten far too much?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Used vomiting to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Used laxatives to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Used fasting to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Used hard physical exercise to control your weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

66. Have you at some time during the last 18 months gone at least three months without a period in connection with a time when you have been having eating problems? (without being pregnant)

- No Yes

67. What is your current weight? kg

How tall are you? cm

68. Feeling of anxiety and restlessness. (Enter a cross in a box for the items that apply to you best during the last 6 months.)

	Never	Seldom	Sometimes	Often	Very often
1. How often do you have problems completing the final aspects of a task when the challenging part is already done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How often do you have problems putting things in the right order when you are involved in tasks that require organisation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When you have a task which requires a great deal of careful preparation, how often do you avoid or put off starting it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How often do you have problems remembering appointments or engagements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. When you have to sit still for a long time, how often do you move your hands and feet in an anxious, restless way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How often do you feel hyperactive and obliged to do things, as if you are being driven by an engine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

69. If you have a husband/boyfriend/partner, to what extent do you agree with the following descriptions? (Enter a cross in a box for each item.)

	Totally agree	Agree	Slightly agree	Slightly disagree	Disagree	Totally disagree
1. My partner and I have problems in our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am very happy in my relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. My partner is generally understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am satisfied with the relationship with my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. We agree on how children should be brought up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

70. Have you been bothered during the last 2 weeks by any of the following? (Enter a cross in a box for each item.)

	Not bothered	A little bothered	Quite bothered	Very bothered
1. Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

71. Have you experienced during the last 18 months any of the following situations? If yes, how painful and difficult was this for you?

(Enter a cross in a box for each item.)

	No	Yes	Not so bad	Painful/difficult	Very painful/difficult
1. Have you had problems at work or where you study?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have you had financial problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you been divorced, separated or ended your relationship with your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have you had problems or conflict with family, friends or neighbours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you been seriously worried that there is something wrong with your child?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Has anyone close to you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Have you been involved in a serious accident, fire or robbery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Have you lost someone close to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

72. In your daily life, how often do you (Enter a cross in a box for each item.)

	Seldom/never	seldom	A few times	Fairly Often	Very often
1. Feel glad about something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feel happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feel joyful, like everything is going your way, everything is rosy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feel like screaming at somebody or hitting things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Feel angry, irritated or annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feel mad at somebody	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

73. Indicate with a cross whether you agree or disagree with the following statements (Enter a cross for each statement.)

	Totally disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Totally agree
1. My life is largely what I wanted it to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My life is very good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I'm satisfied with my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I've achieved so far what's important to me in my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If I could start all over, there is very little I would do differently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I really enjoy my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

74. What kind of perception do you have of yourself? (Enter a cross in a box for each item.)

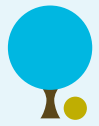
	Totally agree	Agree	Disagree	Totally disagree
1. I have a positive attitude towards myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel completely useless at times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel that I don't have much to be proud of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel that I am a valuable person, as good as anyone else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

75. Bringing up your child (Enter a cross to indicate whether you agree or disagree with the following statements. Enter a cross in a box for each item.)

	Totally disagree	Partially disagree	Neither/nor	Partially agree	Totally agree
1. What I do has little influence on my child's behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My child is used to getting what he/she wants in any case, so there's no point in even trying to refuse him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cuddles and hugs are an important way of showing my child that I love him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. If my child and I have a disagreement it is usually easy to divert him/her ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. My life is mainly becoming controlled by my child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I think it is very important for my child to learn to deal with the fact he/she cannot get their own way on everything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. It is often easier to let my child get his/her own way rather than having to put up with a tantrum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Sometimes when I'm tired I let my child get to do things that I usually would not have allowed otherwise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. It isn't so important what strategies you use to bring up your children; if you love your children they will develop well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix J

Questionnaire Q5y in MoBa (5 years)



+ Questionnaire before starting school – at approximately 5 years old +

The questionnaire will be processed by a computer. It is therefore important to us use a blue or black ballpoint pen and write clearly.

- In the small boxes you should put a cross in the box that is most relevant like this:
- If you think that you have put a cross in the wrong box, correct it by filling in the box completely like this:

Specify the day, month and year when the questionnaire was completed

day

month

year

(write the year in full, e.g. 2010)

About the child

1. What is your child's height and weight nowadays?

Height cm Weight kg

Date of measurement month year

2. Who do you live with?

- Spouse
- Cohabitant
- Other adults
- Children of others
- None

3. If children lives with you, how many and what ages?

(Also include the child you are filling out this form for)

Number of children 5 years old or older

Number of children 3 or 4 years old

Number of children from 0 to 3 years old +

4. Do you live with the child's father?

- Yes
- No
- Have never lived with the child's father

If NO, how old was the child when you separated/moved apart

 år

Childcare

5. Where is the child looked after in the daytime these days?

(You may tick several boxes)

	No. hours per week
<input type="checkbox"/> Nanny/ au pair/ outdoor nursery	<input type="text"/>
<input type="checkbox"/> Family kindergarten	<input type="text"/>
<input type="checkbox"/> Private kindergarten	<input type="text"/>
<input type="checkbox"/> Public kindergarten	<input type="text"/>
<input type="checkbox"/> Family members other than mother/father	<input type="text"/>

6. If your child is attending kindergarten, is it organized in traditional units or as bases/large groups?

- Unit-kindergarten
- Base-kindergarten

7. If the child is looked after another place than home, how many adults are looking after the child (e.g number of adults in the unit/base)?

 adults

8. How many other children are cared for in the same child care? (If kindergarten, state the number of children in the same unit/base)

 children

9. How many times has the child changed child care? (Do not include change of unit within the kindergarten)

 times

10. How old was the child when he/she started in current child care?

 months

11. Does your child receive, or has received any extra resources in the kindergarten?

No Yes Number of hours per week

12. How does your child like being in the current child care?

Not at all Not much Both likes and dislikes Mostly Very much

18. More about the child's health

+

- | | No | Yes | |
|---|--------------------------|--------------------------|-----------------|
| 1. Has the child had an injury, resulting in a diagnosis?..... | <input type="checkbox"/> | <input type="checkbox"/> | Describe: _____ |
| 2. Does the child have a learning disability or mental development delay? | <input type="checkbox"/> | <input type="checkbox"/> | Describe: _____ |
| 3. Does the child have a syndrome or suspected of having a syndrome?.... | <input type="checkbox"/> | <input type="checkbox"/> | Describe: _____ |
| 4. Has the child had other serious, but short term illnesses?..... | <input type="checkbox"/> | <input type="checkbox"/> | Describe: _____ |
| 5. Has the child ever been a witness to close family being subject to violence? | <input type="checkbox"/> | <input type="checkbox"/> | Describe: _____ |

19. Developmental milestones

- | | No | Yes |
|--|--------------------------|--------------------------|
| 1. Did your child say his/her first words before 2 years of age (do not include mum and dad)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Did your child start combining words before 2,5 years of age (combine 2-3 words into sentences)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Did your child stop using diapers in the daytime before 4 years of age (tick yes if less than 3 accidents per month)? | <input type="checkbox"/> | <input type="checkbox"/> |

+

20. Has a professional ever assessed your child as having reduced hearing?

- No Yes **If yes, at what age?** (Enter a cross in several boxes if necessary)
- Before 18 months
- 18 - 36 months
- later than 36 months

+

21. Has your child been referred to the following services?

- | | No | Yes |
|--|--------------------------|--------------------------|
| Habilitation services | <input type="checkbox"/> | <input type="checkbox"/> |
| Child psychiatric clinic/ department | <input type="checkbox"/> | <input type="checkbox"/> |
| Educational psychology services | <input type="checkbox"/> | <input type="checkbox"/> |

If yes, what was the reason for the referral?

22. Has your child been assessed for language delay or other difficulties with language/speech or communication?

- No Yes

If yes: What was the conclusion after the assessment?*(You may enter several crosses)*

1. Everything was fine, no difficulties.....
2. Only delay in spoken language, good language comprehension.....
3. Delay in both using spoken language and ability to understand spoken language.....
4. Difficulties in pronunciation
5. Stammer or stutters when talking
6. Other language issues

Describe: _____

23. Has anyone in the child's close family ever had any of the following problems? (Only include the child's biological relatives)

We are especially interested in the child's siblings, parents, grandparents, uncles, aunts or cousins.

+

- | | No | Yes | |
|---|--------------------------|--------------------------|---|
| 1. Been a late talker as a child..... | <input type="checkbox"/> | <input type="checkbox"/> | If Yes, specify the relationship: _____ |
| 2. Had difficulties learning to read and write..... | <input type="checkbox"/> | <input type="checkbox"/> | If Yes, specify the relationship: _____ |
| 3. Had difficulties in pronouncing sounds as a child (preschool)..... | <input type="checkbox"/> | <input type="checkbox"/> | If Yes, specify the relationship: _____ |

+

24. About the child's pronunciation*(Enter a cross in a box from 1-5 with 1 being very difficult and 5 being very easy.)*

- | | Very difficult | | Varies | | Very easy |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| 1. How easy it is for you to understand what your child's speech? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. How easy it is for strangers to understand what your child's speech? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Food supplements and eating habits

25. Is your child taking any of the following dietary supplements? (Enter a cross in a box for each line, for both frequency and amount and fill in brand name.)

Liquor dietary supplements	No	Numer of times per week				Amount per time		
		6-7	4-5	1-3	<1	1 tsp	1 csp	1 ss
Cod liver oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Omega 3, brand name: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sanasol/Biovit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other liquid dietary supplement, brand name: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Capsules/tablets	No	Times a week				Amount per time		
		6-7	4-5	1-3	<1	1	2	3+
Omega 3, brand name: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cod liver oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multivitamines, brand name: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluoride tablets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other dietary supplements, brand name: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. How often does your child eat breakfast (at home or in the kindergarten)?	Rarely/never	Once a week	2-3 times per week	4-6 times per week	Every day
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. Is the following correct for your child for the last 6 months?

	No	Yes		
1. Has your child ever eaten what most people would consider a really large amount of food?	<input type="checkbox"/>	<input type="checkbox"/>		
2. Have you ever had the impression that your child could not stop eating or that he/she could not control what or how much he/she was eating?	<input type="checkbox"/>	<input type="checkbox"/>		
	Twice a week or more	Once a week	More rarely	Never
3. How often has your child been eating a really large amount of food where you at the same time had the impression that the child did not have control?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Language and preschool activities

28. The child's ability to understand and tell

Here are some questions about children's oral language and what they understand. Maybe your child already has done some of the activities described here, and some the child has not started doing yet. Tick the box for each question you find suitable for your child.

	Yes	Sometimes	Not yet
1. Can the child tell you at least two things about a familiar object? If you f.ex. say: "Tell me about the ball" can the child answer something like "It is round and I can throw it and it is big"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Without giving your child help by pointing or repeating directions, does your child follow three directions that are unrelated to one another? Give all three directions before your child starts. For example, you may ask your child to "Clap your hands, walk to the door and sit down" or "Give me the pen, open the book and stand up"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your child use four- and five- word sentences? For example, does your child say, "I want the car"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. When talking about something that already happened, does your child use words that end in "ed" such as walked, jumped or played? Ask your child questions such as "How did you get to the store?" ("We walked") "What did you do at your friend's house?" ("We played").	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Does your child use comparison words such as heavier, stronger or shorter? Ask your child questions, such as "A car is big, but a bus is _____" (bigger); "A cat is heavy, but a man is _____" (heavier); "A TV is small, but a book is _____" (smaller).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Does your child answer the following questions: 1. "What do you do when you are hungry?" (Acceptable answers include: "Get food", "Eat", "Ask for something to eat", and "Have a snack".) 2. "What do you do when you are tired?" (Acceptable answers include: "Take a nap", "Rest", "Go to sleep", "Go to bed", "Lie down", and "Sit down").	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Does your child repeat the sentences shown below back to you, without any mistakes? You may repeat each sentence one time. Mark "yes" if your child repeats both sentences without mistakes or "sometimes" if your child repeats one sentence without mistakes. "Jane hides her shoes for Maria to find" - "Al read the blue book under his bed".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. What is the mother tongue of the child's mother and father and what language(s) does the child speak?

	Mother's mother tongue	Father's father tongue	What language(s) does the child speak? (you may enter several crosses)
1. Norwegian, Danish or Swedish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Other Nordic languages (Icelandic, Finnish) or Sami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Western European languages (for example German, English, Spanish).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Other languages (Eastern European, Asian, Turkish, African).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. About the child's language experiences.

	Only Norwegian	More Norwegian than other language	As much Norwegian as other language	More other language than Norwegian	Only other language
1. What language(s) do you speak with your child?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. What language(s) does your spouse/partner speak with your child?...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. What language(s) does the child speak with his/her siblings?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. Factors of importance for language skills.

Relatively to other children of the same age, to which degree does the following questions serve to describe the child's language performance?
Use the scale from 1 to 5 to express your view.

	Quite wrong		Both yes and no		Quite right	
	1	2	3	4	5	
1. Forgets words she/he knows the meaning of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Mixes up words with similar meaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Has difficulties in understanding the meaning of common words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Has difficulties in responding to questions just as quickly as others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is often searching for the right words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Has difficulties in using complete sentences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Is using short sentences when s/he is responding to questions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Has difficulties in retelling a story s/he has heard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Is quickly getting tired in tasks demanding attention to language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. It doesn't seem like what s/he is learning is remembered.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Has difficulties in remembering things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Difficulties in understands what others are saying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Misconceive instructions and when told to.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Has problems with remembering messages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Misunderstands context and what is going on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16. Is difficult to understand.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Has difficulties in expressing wishes and needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Is not understood by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19. Is not initiating communication and are active in use of language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20. Has difficulties in pronunciation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21. Is able to have a dialogue with peers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22. Avoids talking to other people than close family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

32. About the child's language competence.

How typical is the statement for your child:

	Rarely or never	Some- times	Regulary	Often or always
1. It is hard to make sense of what he/ she is saying, even though the words are clearly spoken. ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Gets the sequence of events muddled up when trying to tell a story or describe a recent event. E.g., if describing a film, might talk about the end before the begining.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Uses terms like "he" or "it" without making it clear what he/she is talking about. For instance, when talking about a film, might say "he was really great" without explaining who "he" is.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Talks clearly about what he/she plans to do in the future (e.g. what he/she will do tomorrow, or plans for going on holiday).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Can be hard to tell if he/ she is talking about something real or make-believe.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Explains a past event clearly (e.g. what he/she did at school, or what happened at a football game).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | No | Yes |
|--|--------------------------|--------------------------|
| 7. Does the child talk about things that is going to happen in the near future, like the weekend, e.g. "Tomorrow, we'll go to the movies"..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Does the child talk about things that has already happened, e.g. "Yesterday, we took the bus to kindergarten"..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Does the child talk about things that could or can happen, e.g. "If he touches the stove top, he could burn himself"..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Does the child talk in a special way when pretending to be someone else, e.g. "Now you were the king and I was the queen". | <input type="checkbox"/> | <input type="checkbox"/> |

33. About the child's pre-school activities

- | | Very poor/
poor | Average | Good/
very good |
|--|--------------------------|--------------------------|--------------------------|
| 1. How would you rate your child's ability to tell a story?..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. How would you rate your child's ability to communicate his/ her own needs in a way understandable to adults and friends?..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

During a typical week:

- | | Never | Seldom | Sometimes | Often | Very often |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 3. How often do you teach your child how to print letters and words? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. How often do you help your child read letters and sounds?..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- | | Nei | Ja |
|--|--------------------------|--------------------------|
| 5. Would you say that your child is interested in writing letters?.... | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Would you say that your child is generally interested in books?.. | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Would you say that your child is able to read simple words?..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Would you say that your child is able to read simple sentences? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Would you say that your child is able to write his/ her name?.... | <input type="checkbox"/> | <input type="checkbox"/> |

10. About how many minutes does your child like to sit still when you read for him/her?

- | | |
|-------------------------------|--------------------------|
| Does not like it at all | <input type="checkbox"/> |
| Less than 5 minutes | <input type="checkbox"/> |
| 6-15 minutes | <input type="checkbox"/> |
| 16-45 minutes | <input type="checkbox"/> |
| More than 45 minutes | <input type="checkbox"/> |
| Will not be read to | <input type="checkbox"/> |

Child's skills and behavior

34. Child's play

The following scale examines various behaviors that children may engage in during indoor free play. Although it is true that children's behaviors may be quite variable, please try to make a general evaluation of the child's 'everyday' behavior.

- | | Never | Hardly
ever | Some-
times | Often | Very
often |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Talks to other children during play | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Plays by himself/herself, examining an object or toy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Plays 'rough-and tumble' with other children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Takes on the role of onlooker or spectator | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Plays 'make-believe' with other children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Engages in group play | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Engages in pretend play by himself/herself | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Plays alone, building things with blocks and/or other toys | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Wanders around aimlessly | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Plays in groups with (not just beside) other children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Plays 'make-believe' but not with other children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Watches, or listens to other children without trying to join in | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Engages in playful/mock fighting with other children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Plays by himself/herself, drawing, painting pictures or doing puzzles | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Engages in active conversations with other children during play | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Engages in pretend play with other children | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Plays alone, exploring toys or objects, trying to figure out how they work..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Remains alone and unoccupied, perhaps staring off into space..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Plays by him/herself, engaging in simple motor activities (e.g. running) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Plays just for a short while with each toy, does not settle with any toy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

35. Activities and restlessness

Please rate each item according to your child's behavior in the last month..

- | | Not true
at all | Just a
little true | Pretty
much true | Very
much true |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Inattentive, easily distracted | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Short attention span | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Fidgets with hands or feet or squirms in seat | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Messy or disorganized at home or in the kindergarten | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Only attends if it is something he/she is very interested in | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Distractibility or attention span a problem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Avoids, expresses reluctance about, or has difficulties engaging in tasks that require sustained mental effort (such as activities in kindergarten or helping out at home) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

+	Not true at all	Just a little true	Pretty much true	Very much true
8. Gets distracted when given instructions to do something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Has trouble concentrating in kindergarten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Leaves seat in kindergarten or in other situations in which remaining seated is expected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Does not follow through on instructions and fails to finish tasks in kindergarten, chores or duties at home (not due to oppositional behavior or failure to understand instructions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Easily frustrated in efforts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

36. About motor skills

Enter a cross for each line if your child masters these activities.

+	No	Yes
1. Do you think your child walks, runs, and climbs like other children at the same age?	<input type="checkbox"/>	<input type="checkbox"/>
2. Able to stand on one foot for at least 5 sec without problems keeping balance	<input type="checkbox"/>	<input type="checkbox"/>
3. Hops, on one foot, many times, without support	<input type="checkbox"/>	<input type="checkbox"/>
4. Plays "catch" with other children; throwing to him/her and catching the ball at least half the time	<input type="checkbox"/>	<input type="checkbox"/>
5. Swings on a swing, pumping by self	<input type="checkbox"/>	<input type="checkbox"/>
6. Rides a two-wheeled bike, with or without training wheels	<input type="checkbox"/>	<input type="checkbox"/>
7. Puts together a puzzle with nine or more pieces	<input type="checkbox"/>	<input type="checkbox"/>
8. Draws or copies a square with straight corners	<input type="checkbox"/>	<input type="checkbox"/>
9. Cuts with scissors, following a simple outline or pattern	<input type="checkbox"/>	<input type="checkbox"/>
10. Draw pictures of complete people that have at least head: with eyes-nose-mouth; body. Arms and legs, hands and feet (need to do all seven for a yes)	<input type="checkbox"/>	<input type="checkbox"/>
11. Colours within the lines in a colouring book	<input type="checkbox"/>	<input type="checkbox"/>
12. Does your child show interest in and likes to participate in sports or active games requiring good motor skills?	<input type="checkbox"/>	<input type="checkbox"/>

37. About temperament and personal style

How typical are the following statements for your child's behavior? (Enter a cross in a box for each line)

+	Very typical	Quite typical	Neither/ nor	Not so typical	Not at all typical
1. Your child is always on the go	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Your child is off and running as soon as he/she wakes up in the morning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Your child prefers quiet, inactive games to more active ones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your child cries easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your child gets upset (or sad) easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Your child reacts intensely when upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Your child is very sociable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Your child takes a long time to warm up to strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Your child is very friendly with strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Your child prefer playing with others rather than alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Your child likes to be with people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Your child finds other people more stimulating than anything else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

38. About the child's abilities and skills compared to peers.

Enter a cross from 1 - 5 for each line according to how well the statement fits your child.

+	Very much lower	2	Typical for age	4	Very much higher
+	1	2	3	4	5
1. My child's ability to ask questions properly is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My child's ability to answer questions properly is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. My child's ability to say sentences clearly enough to be understood by strangers is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The number of words my child knows is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. My child's ability to use his/her words correctly is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. My child's ability to get his/her message across to others when talking is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My child's ability to use the proper words when talking to others is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. My child's ability to get what he/she wants by talking is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. My child's ability to start a conversation, or start talking with other children is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My child's ability to keep a conversation going with other children is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The length of this child's sentences is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My child's ability to make "grown up" sentences is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. My child's ability to correctly say the sounds in individual words is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. About the child's behavior

The following list contains statements describing children's behavior and manners. To what extent are the following statements true of your child's behavior for the last 2 months

+	Often/ typical	Sometimes	Never/ rarely
1. Afraid to try new things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Can't concentrate, can't pay attention for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can't sit still, restless or hyperactive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Can't stand waiting; wants everything now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Clings to adults or too dependent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Cries a lot.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Defiant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Demands must be met immediately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Disturbed by any change in routine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Doesn't eat well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Doesn't seem to feel guilty after misbehaving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Fears certain animals, situations or places	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Gets in many fights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Gets into everything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Gets too upset when separated from parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Hits others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Nervous, highstrung, or tense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Punishment doesn't change his/her behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Quickly shifts from one activity to another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Stomach aches or cramps (without medical cause)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Too fearful or anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Unhappy, sad or depressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Vomiting/ throwing up (without medical cause)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Poorly coordinated or clumsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. The child is teased/bullied by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Feelings are easily hurt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Self-conscious or easily embarrassed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

40. How often does your child wake up during the night?

- 3 or more times per night
- 1-2 times per night
- A few times per week
- Seldom, never

41. Approximately, how many hours does the child usually sleep per night on weekdays?

- 8 hours or less
- 9 hours
- 10 hours
- 11 hours
- 12 hours or more

42. About your concerns

	No	Yes
1. Do you have any concerns about how your child speak and pronounce sounds?	<input type="checkbox"/>	<input type="checkbox"/>
2. Are you concerned because your child is demanding and difficult to cope with?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are you concerned because your child is hardly interested at all in playing with other children?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you have any concerns because your child's activity level is so high?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have others (family, nursery, health visitor) expressed concerns about your child's development?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are you concerned because your child is hardly interested at all in playing with other children?	<input type="checkbox"/>	<input type="checkbox"/>

If Yes:

	No	Yes a bit	Yes a lot
1. Is the child bothered or disturbed by the difficulties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do the difficulties affect the child's daily life in any of the following areas:			
- At home/in the family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- With friends/ peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- In the kindergarten/ outdoor nursery/ with child minder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do the difficulties cause strain on you or the family as a whole?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. If the child has difficulties, how old was the child when the difficulties started?

/

Questions about yourself

43. What is your current weight?

Weight kg

+

44. Are you pregnant now?

No Yes

45. What are the smoking habits in your household?

	You	Your partner/ spouse
1. Do not smoke	<input type="checkbox"/>	<input type="checkbox"/>
2. Smoke sometimes	<input type="checkbox"/>	<input type="checkbox"/>
3. Smoke daily	<input type="checkbox"/>	<input type="checkbox"/>
4. If daily - no. Of cigarettes per day.....	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

+

46. How often do you consume alcohol at present?

- Roughly 6-7 times a week
 Roughly 4-5 times a week
 Roughly 2-3 times a week
 Roughly once a week
 Roughly 1-3 times a month
 Less than once a month
 Never

+

47. How many alcohol units do you usually drink when you consume alcohol? Enter a cross for both weekends and weekdays. (See explanation below about alcohol units.)

	Weekends	Weekdays
10 or more.....	<input type="checkbox"/>	<input type="checkbox"/>
7-9.....	<input type="checkbox"/>	<input type="checkbox"/>
5-6.....	<input type="checkbox"/>	<input type="checkbox"/>
3-4.....	<input type="checkbox"/>	<input type="checkbox"/>
1-2.....	<input type="checkbox"/>	<input type="checkbox"/>
Less than 1.....	<input type="checkbox"/>	<input type="checkbox"/>

Alcohol units:

In order to compare different types of alcohol, we ask for the number of alcohol units (1,5 cl of pure alcohol). This means the following practice:

1 glass (1/3 litre) of beer	= 1 unit
1 wine glass of red or white wine	= 1 unit
1 wine glass of sherry or other fortified wine	= 1 unit
1 brandy glass of spirits of liqueur	= 1 unit
1 bottle of alcopop/cider	= 1 unit

48. Have you had a serious illness or health problems which has arisen during the last 5 years (Heart disease, cancer, muscle disease, serious chronic disease such as diabetes, mental illness, disability or other illness)?

No Yes If No, go to question 50

If Yes,

Report which illness(es) and cross off whether a diagnosis has been given by a medical doctor and if you have been hospitalized for this illness.

Write the name of the illness/disorder	Doctor given a diagnosis		Hospitalization		If you are well, about how old were you?
	No	Yes	No	Yes	
1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> year
2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> year
3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> year
4. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> year

49. Has this or these illnesses/ problems made it difficult for you to function in your daily life, the last 5 years?

No Yes a little Yes a great deal Yes very much

+

50. Have you ever had problems with your physical or mental health which has limited in your work or social activities with friends or family?

No Yes

+

If yes, how much have the problems affected you?

	Very much	A great deal	Some	A little	Not at all
1. Physical health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Mental health.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

51. Have you been bothered during the last 2 weeks by any of the following? (Enter a cross for each line.)

	Not bothered	A little bothered	Quite bothered	Very much bothered
1. Feeling fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

52. If you have a husband/ boyfriend/ partner, How much do you agree with these descriptions of your relationship with your husband/ partner? (Enter a cross for each line.)

	Completely agree	Agree	Agree somewhat	Disagree somewhat	Disagree	Totally disagree
1. My partner and I have problems in our relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am very happy in my relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. My partner is generally understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am satisfied with the relationship with my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. We agree on how children should be raised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

53. How often does this happen in your home? (Enter a cross for each line)

	Never	Almost never	Sometimes	Often	Always
1. You let your child know when he/she is doing a good job with something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. You threaten to punish your child and then do not actually punish him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. You have a friendly talk with your child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your child talks him/herself out of being punished after he/she has done something wrong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. You ask you child about his/her day in childcare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. You compliment your child when he/she does something well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. You praise your child if he/she behaves well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. You talk to your child about his/her friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. You let your child out of a punishment early (E.g. Lift restrictions earlier than you originally said)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

54. Make a cross whether you agree or disagree with the following statements

(Enter a cross for each line from totally disagree to totally agree.)

	Totally disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Totally agree
1. In most ways my life is close to my ideal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The conditions of my life are excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I'm satisfied with my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. So far I have gotten the important things I want in life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If I could live my life over, I would change almost nothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I really enjoy my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

55. Have you, during the last year, experienced any of the following situations?

	No	Yes, during the last year	Yes, 2-5 years ago
1. Have you had problems at work or where you study?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have you had financial problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you been divorced, separated or ended your relationship with your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have you had problems or conflicts with family, friends or neighbors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you been seriously worried that there is something wrong with the child?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. HHAs anyone close to you been seriously ill or injured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Have you been involved in a serious accident, fire or robbery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Have you been the victim of maltreatment or abuse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you lost someone close to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other dramatic events/experiences you have had:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe: _____

56. Has any of the events listed in the questions above affected you so that you have been on sick leave or not been able to function in your daily life/ work?

No Yes

+

+

The list below consists of many statements that may fit or not fit as a description of you/your person. Cross off on each line for how you think each statement fit as a description of yourself. If you think a question is difficult to answer, you can skip it and continue with the next question.

57. Describe yourself the way you usually are: (Enter a cross for each line)

	Strongly disagree	disagree somewhat	Neither nor	Agree somewhat	Strongly agree
1. Liven up in a party	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Care little about others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Am always well prepared.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Become easlily distressed.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have a rich vocabulary.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do not say much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Am interested in other people.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Leave things lying around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Am usually relaxed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have problems understanding abstract ideas	<input type="checkbox"/>	<input type="checkbox"/>	+	<input type="checkbox"/>	<input type="checkbox"/>
11. Feel at ease with other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Offend people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Am attentive to detail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Worry about many things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Have a lively imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Stay in the background	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Have empathy with other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Mess things up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Rarely feel in low spirits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Am not interested in abstract ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Initiate conversations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Am not interested in other peoples' problems.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Complete tasks at once	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Am easily interrupted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Have excellent ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Have little to say	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Am good-natured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Often forget to put things back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Become easily upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Har ikke god forestillingsevne.....	+	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Do not have a good imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Am not interested in other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Like order and tidiness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Lot of mood changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Am quick to understand things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Do not like to attract attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Take time to help others.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Shirk from responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Often have mood swings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Often use difficult words.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Have nothing against being the centre of attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. Am sensitive to other peoples' feelings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Perform according to plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. Become easily irritated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. Use time to think things over	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

+		Strongly disagree	disagree somewhat	Neither nor	Agree somewhat	Strongly agree
46. Am quiet in company with strangers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. Put others at their ease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. Am thorough in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. Often feel down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. Am full of ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

58. We wish to prepare for child care research in MoBa, and want to look at the connections between child care quality and health. We therefore ask you to name the child's present or previous kindergarten, when the child went there, and in what municipality the kindergarten is placed. This will enable us to gather information from a public kindergarten register (BASIL) so that we can compare different kindergartens based on number of employees, number of employees with Early Childhood Education, kindergarten size, and other resources.

My child has never attended kindergarten

+

Start with the first kindergarten the child attended

Name of the kindergarten	Municipality					
<i>(F.eks Kløverenga barnehage)</i>	<i>(Nes)</i>	<i>(Fall X</i>	<i>Spring <input type="checkbox"/></i>	<i>Year</i>	<i>2</i>	<i>0 0 9)</i>
1.	Fall <input type="checkbox"/>	Spring <input type="checkbox"/>	Year		
2.	Fall <input type="checkbox"/>	Spring <input type="checkbox"/>	Year		
3.	Fall <input type="checkbox"/>	Spring <input type="checkbox"/>	Year		
4.	Fall <input type="checkbox"/>	Spring <input type="checkbox"/>	Year		

Comments

Have you remembered to fill in the date on which you completed the questionnaire on page 1?
Thank you very much for your continued participation in The Norwegian Mother and Child Cohort Study.

+

+

Appendix K

Questionnaire Q7y in MoBa (7 years)



When the child is 7 years old

The questionnaire will be processed by a computer. It is therefore important to us use a blue or black ballpoint pen and write clearly.

- In the small boxes you should put a cross in the box that is most relevant like this:
- If you think that you have put a cross in the wrong box, correct it by filling in the box completely like this:

Specify the day, month and year when the questionnaire was completed

day

month

year

(write the year in full, e.g. 2010)

Living habits and lifestyle

1. What is the child's height and weight now at 7 years of age?

Height cm

Weight kg

2. Outside of school: Approximately how many times per week is the child physically active/takes part in sports such that he/she becomes short of breath or sweaty? (include times with physical activity in after-school club)

times per week

3. Outside of school: Approximately how many hours per week does the child spend on physical activity/sports (soccer, handball, skiing or gymnastics/dance or similar)? (Include also hours with physical activity in after-school club) (Cross off for both summer and winter)

	Summer	Winter
Less than 1 hour per week	<input type="checkbox"/>	<input type="checkbox"/>
1-2 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
3-4 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
5-7 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
8-10 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
11 hours or more per week	<input type="checkbox"/>	<input type="checkbox"/>

4. Outside of school on a regular week day: Approximately how many hours per day is the child usually outdoors? (Include outside time in after school- club)

Summer hours per day

Winter hours per day

5. Outside of school, on a regular week day: How many hours per day does the child usually spend watching TV, videos, playing electronic video games, DVDs or using a computer? (Cross off for both summer and winter)

	Summer	Winter
Less than 1 hour per day	<input type="checkbox"/>	<input type="checkbox"/>
1-2 hours per day	<input type="checkbox"/>	<input type="checkbox"/>
3-4 hours per day	<input type="checkbox"/>	<input type="checkbox"/>
5 hours or more per day	<input type="checkbox"/>	<input type="checkbox"/>

6. How many days has the child missed school in the past three months because of illness?

days

7. Has the child been swimming in an indoor swimming pool in the past 12 months?

No

Sometimes Number of hours per month

Weekly Number of hours per week

8. When the child was 4-6 years old, approximately how often did he/she use an indoor swimming pool?

Never/rarely

Sometimes Number of hours per month

Weekly Number of hours per week

9. How often does the child get to school by?

	Never	Sometimes	Usually	Always
Walking/riding a bike	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. How far is the child's home from school?

- Less than 1 km
 1-2 km
 3-4 km
 More than 4 km

11. Does the child's father live together with you?

Yes No

If not, how much of the time does the child live with you?

- Almost always
 Half of the time or more
 Less than half of the time

12. What year did you move to your current address?

Year

13. On which floor is the child's bedroom
(write 0 for basement/lower level)?

floor

14. Approximately how many hours does the child usually sleep at night on a week night?

- 8 hours or less
 9 hours
 10 hours
 11 hours
 12 hours or more

15. How often does the child snore?

- Never
 Less than one night a week
 Approximately one night per week
 Several nights a week
 Almost every night

16. Has there been damage caused by dampness, visible mould or smell of mould in the child's home in the last year?

- No
 Yes, damage caused by dampness during the last year
 Yes, visible mould during the last year
 Yes, smell of mould during the last year

17. Do you smoke now? If yes, how many cigarettes?

No

Yes, sometimes cigarettes per week

Yes, daily cigarettes per day

18. Does your partner/spouse smoke now? If yes, how many cigarettes?

No

Yes, sometimes cigarettes per week

Yes, daily cigarettes per day

19. Did you use wood-burning heating (stove or open fire) in the child's home in the time before the child was 3 years old?

- Never Rarely Sometimes Often

20. During the last year, did you ever use an open fire?

- Never Rarely Sometimes Often

21. During the last year, has wood-burning heating been used as heating in the child's home?

- No Yes

If yes, is wood-burning heating the main source of heating in this home?

- No Yes

If yes, are you using a wood burning stove made before 1997?

- No Yes Don't know

22. Approximately how often do you burn candles in the home during the winter months-?

- Never/less than 4 times during winter months
 Only in December (4 times or more)
 1-3 times a month
 1-3 times a week
 4-6 times a week
 Daily/almost daily
 Several times a day on most days

23. Are there pets in the child's home?

- No Yes

If yes, which?

- Dog Cat Other furry animals (guinea pig, rabbit or the like)
 Bird Other

24. Is the child in contact with farm animals at least once a week?

- No Yes

If yes, which?

- Horse Pig Sheep/goat
 Cattle Hens/poultry Other

The child's illnesses and health problems

25. Cross off if your child has or has had the following illnesses or conditions: (You can cross off more than one box.)

- | | | |
|--|--|--|
| <input type="checkbox"/> Rheumatoid arthritis/chronic joint inflammation | <input type="checkbox"/> Epilepsy | <input type="checkbox"/> Middle ear drains |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Mentally disabled | <input type="checkbox"/> Other conditions, congenital syndrome, Describe |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Autistic characteristics/autism | _____ |
| <input type="checkbox"/> Cerebral palsy | <input type="checkbox"/> Aspergers syndrome | _____ |
| <input type="checkbox"/> ADHD | <input type="checkbox"/> Chronic Fatigue Syndrome/ME | |
| <input type="checkbox"/> Coeliac disease | <input type="checkbox"/> Removed tonsils | |
| <input type="checkbox"/> Fractures | | |

26. Does the child have or has he/she ever had, any the following illnesses or health problems? Give the child's age at the first sign of the illness. If the child no longer has the illness, state the age when he/she recovered. (Give age in whole years, write 0 years if the child was younger than 1 year).

	Has or has had		Confirmed by a doctor Yes	Health problems started at Age	years	Symptoms the last year		Child no longer has the health problem Age	years
	No	Yes				No	Yes		
1 Trouble sleeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
2 Anaemia (low blood percent)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
3 Delayed motor development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
4 Delayed or deviating language development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
5 Behavioural problems (difficult and unruly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
6 Emotional difficulties (sad and anxious)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
7 Overweight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
8 Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
9 Allergy to pollen/hay fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
10 Allergy to cat or dog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
11 Atopic eczema/dermatitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
12 Allergy to milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
13 Allergy to egg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
14 Allergy to peanuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
15 Allergy to other nuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
16 Allergy to fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
17 Allergy to shellfish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
18 Allergy to fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years
19 Allergy to other foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	years

↓
If yes, which

Wheat Soy Rye Other, which: _____

27. During the last year, has the child used medication, spray, inhaler or other medications for treatment of asthma?

No Yes

If yes, Name of medication used on a regular basis: _____

Name of medications used during attacks: _____

When did your child last use medications for asthma? Yesterday Last 7 days Last month Last year

The child's dental health

33. How old was the child when he/she lost his/her first milk tooth?

Age : year Don't remember Hasn't lost one yet

34. How often are the child's teeth brushed by the child or others?

Twice daily or more often Sometimes
 Once daily Never/seldom

35. Have any cavities or early stages for cavities been found in the child's teeth?

No Yes

36. Does the child get help to brush his/her teeth?

Twice daily or more often Sometimes
 Once daily Never/seldom

37. Does the child use dental floss (with help)?

Once daily Sometimes Never/seldom

The child's mother's health problems

38. Do you have, or have you ever had, any of the following illnesses or health problems?

	Confirmed by a doctor		Symptoms started at Age	Symptoms the last year?		Used medication for this during the last 12 months Yes
	Yes	Yes		No	Yes	
1 Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Pollen allergy/hay fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Tightness/wheezing/whistling in chest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. Do you have, or have you ever had, a food allergy?

No Yes Don't know

40. If yes, do you have, or have you had, an allergy to the following foods?

	Yes	Age when allergy started		Spist dette siste året?		Fortsatt allergisk?	
		Before age 18	Age 18 or older	No	Yes	No	Yes
1. Allergy to milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Allergy to egg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Allergy to peanuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Allergy to other nuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Allergy to shellfish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Allergy to fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Allergy to fruit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Allergy to other foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

↓
If yes, which?

Wheat Soya Rye Other, which: _____

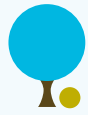
Did you remember to fill in the date for completion of the questionnaire on page 1?

If you have any comments regarding the questionnaire, please write these on a separate sheet and send them in with the questionnaire.

Thank you for your continued participation in the Norwegian Mother and Child Cohort Study!

Appendix L

Questionnaire Q8 in MoBa (8 years)



Questionnaire when your child is 8 years old

The questionnaire will be processed by a computer. It is therefore important to us use a blue or black ballpoint pen and write clearly.

- In the small boxes you should put a cross in the box that is most relevant like this:
- If you think that you have put a cross in the wrong box, correct it by filling in the box completely like this:

ABOUT YOUR CHILD

Child's friends and leisure time

1. What grade is your child in? 2nd grade 3rd grade 4th grade

2. Outside school hours: Approximately how many hours per week is your child physically active / takes part in sports (football, handball, skiing, gymnastics / dance, etc.)? (Also include hours of physical activity in afterschool (SFO)) (Please mark for both summer and winter)

	Summer	Winter
Less than 1 hour per week	<input type="checkbox"/>	<input type="checkbox"/>
1-2 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
3-4 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
5-7 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
8-10 hours per week	<input type="checkbox"/>	<input type="checkbox"/>
11 hours or more per week	<input type="checkbox"/>	<input type="checkbox"/>

3. Approximately how many close friends does your child have? (not including siblings) None 1 friend 2-3 friends 4+friends

4. Outside of school / afterschool (SFO) – approximately how many days per week ...

	Never/ seldom	1 day	2-3 days	4-5 days	6-7 days
... does the child participate in various organized activities (including sports / music / drama group / other)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... does the child spend with friends / peers (outside organized activities)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. How many hours on a typical weekday ...

	Never/ seldom	Less than 1 hour	1-2 hours	3-4 hours	5 hours or more
...does the child watch TV / DVD movies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...does the child play video games, computer games, or handheld video games?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. In the course of the past 12 months...

	Never	Seldom	2-3 times per month	Once a week	Many times per week
...has your child been teased or bullied by other children?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...has your child teased or bullied other children?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...has your child been subjected to hitting, kicking or other violence by other children?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...has your child been subjected to hitting, kicking or other violence by adults?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your child's health

7. What is your child's height and weight now at 8 years of age?

Height cm Weight kg

8. Has your child ever had any of the following health problems?

- Rheumatoid arthritis/chronic joint inflammation Epilepsy Accidental injury with subsequent medical treatment
 Diabetes Cancer Cerebral palsy
 Chronic fatigue syndrome / ME Coeliac disease Other conditions / congenital syndromes, describe:

9. Has your child ever had any of the following health problems? (Please mark for each item.)

If yes, has your child been referred to a specialist?

	No	Yes, currently	Yes, in the past	No	Yes
1. Delayed psychomotor development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Delayed or abnormal language development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Hyperactivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Concentration or attention difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Autistic traits / autism / Asperger's Syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Behavioral problems (difficult and unruly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Emotional difficulties (sad or anxious)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your child's behavior

10. The questions below concern how your child has felt or behaved recently.

Mark how true each item has been for your child during the two last weeks. (Mark one box per line.)

	Not true	Sometimes true	True
1. Was miserable or unhappy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Felt so tired he/she just sat around and did nothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was very restless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Didn't enjoy anything at all	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Felt he/she was no good anymore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Cried a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Hated him/herself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Thought he/she could never be as good as other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Felt lonely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Thought that nobody really loved him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Felt he/she was a bad person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Thought he/she did everything wrong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Found it hard to think properly or concentrate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Think back over the last year. How well do these statements apply to your child's behavior over the past year?

(Mark one box per line.)

	Not typical	Not very typical	Quite typical	Typical	Very typical
1. Is easily caught up in problems (*)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has a broad range of interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Makes an all-out effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Obeys without protests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Takes himself/herself into consideration first	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is quick to worry about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Forgets anything and everything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is constantly on the move	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Prefers to leave work to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Talks to people easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Does everything to get his/her own way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Derives pleasure from creating things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Is not very thorough (*)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Doubt himself/herself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Finishes tasks to the very end	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Imposes her or his will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Is readily discouraged by imminent failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Is chatty (*)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Enjoys life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Is quick to understand things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Is easily incensed by things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Is quick to doubt his/her own capacities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Has an infectious laugh (*)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Has a rich imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Talks about own feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Carries out work to the last detail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Has confidence in own abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Doesn't envy others (*)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Is interested in all that is new	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Can express himself/herself well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Mark the box that best describes your child's behavior during the last 12 months / last year.

(Mark one box per line.)

	Never	Seldom	Sometimes	Often
1. Bullies, threatens or intimidates others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Initiates physical fights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has been physically cruel to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Aldri	Sjelden	Noen ganger	Ofte
4. Has harassed or injured animals physically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has stolen items of nontrivial value without confronting a victim (e.g. shoplifting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has deliberately destroyed other's property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Has been truant from school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Has used an object that can cause serious physical harm to others (e.g. a bat, stone, knife, heavy toy)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Mark the box that best describes your child's behavior over the past 6 months

(Mark one box per line.)

	Never/ seldom	Some- times	Often	Very often
1. Fails to give close attention to details or makes careless mistakes in schoolwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has difficulty sustaining attention in tasks or play activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does not seem to listen when spoken to directly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does not follow through on instructions and fails to finish schoolwork, tasks or duties (do not include difficulties due to defiance or lack of understanding)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has difficulty organizing or planning tasks and activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Avoids, dislikes or is reluctant to start tasks that require mental effort (such as schoolwork / homework, other assignments)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Loses things necessary for tasks or activities (pencils, books, toys)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is easily distracted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is forgetful in daily activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Fidgets with hands or feet and / or squirms in seat (sits uneasily)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Leaves seat in classroom or in other situations in which remaining seated is expected (e.g. at the table or in group gathering)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Runs about or climbs excessively in situations in which it is inappropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Has difficulty playing or engaging in leisure activities quietly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Is "on the go" or acts as if "driven by a motor"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Talks excessively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Blurts out answers before questions have been completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Has difficulty awaiting his/her turn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Interrupts or intrudes on others, such as in conversation or play (*)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Loses temper (tantrums)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Argues with adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Actively defies or refuses to comply with adults' requests or rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Deliberately annoys people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Blames others for his/her mistakes or misbehaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Is touchy or easily annoyed by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Is angry and resentful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Is spiteful or vindictive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. The questions below are about how your child has felt or behaved recently.*(Mark one box per line.)*

	Not true	Sometimes true	Often true
1. My child gets really frightened for no reason at all	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My child is afraid to be alone in the house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. People tell my child that he/she worries too much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. My child is scared to go to school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. My child is shy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

About your child's ability to communicate and interest in others**15. Your child's use of language with others***(Mark one box for each question whether you think it applies for your child or not)*

	Ja	Nei
1. Is he/she now able to talk using short phrases or sentences?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you have a to and fro "conversation" with her/him that involves taking turns or building on what you have said?	<input type="checkbox"/>	<input type="checkbox"/>
3. Does she/he ever use odd phrases or say the same thing over and over in almost exactly the same way (either phrases that she/he hears other people use or ones that she/he makes up)?	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your child ever use socially inappropriate questions or statements? For example, does your child ever regularly ask personal questions or make personal comments at awkward times?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does your child ever get his/her pronouns mixed up (i.e. saying "you" or "he/she" instead of "I")?	<input type="checkbox"/>	<input type="checkbox"/>
6. Does your child ever use words that he/she seems to have invented or made up himself/herself, put things in odd, indirect ways or use metaphorical ways of saying things? (e.g. saying "hot rain" for "steam")	<input type="checkbox"/>	<input type="checkbox"/>
7. Does your child ever say the same thing over and over in exactly the same way or insist that you say the same thing over and over again?	<input type="checkbox"/>	<input type="checkbox"/>

16. Your child's behavior*(Mark one box for each question whether you think it applies for your child or not)*

	Ja	Nei
8. Does your child ever have things that he/she seems to have to do in a very particular way or order, or rituals that the child insists that you go through?	<input type="checkbox"/>	<input type="checkbox"/>
9. Does your child's facial expression usually seem appropriate to the particular situation, as far as you can tell?	<input type="checkbox"/>	<input type="checkbox"/>
10. Does your child ever use your hand like a tool or as if it were part of his/her own body (e.g. pointing with your finger or putting your hand on a doorknob to get you to open the door)?	<input type="checkbox"/>	<input type="checkbox"/>
11. Does your child ever have any interests that preoccupy him/her and might seem odd to other people (e.g. traffic lights, drainpipes or timetables)?	<input type="checkbox"/>	<input type="checkbox"/>
12. Does your child ever seem to be more interested in parts of a toy or an object, rather than in using the object as it was intended (e.g. spinning the wheels of a car)?	<input type="checkbox"/>	<input type="checkbox"/>

	Ja	Nei
13. Does your child ever have any special interests that are unusual in their intensity, but otherwise appropriate for his/her age and peer group (e.g. trains or dinosaurs)?	<input type="checkbox"/>	<input type="checkbox"/>
14. Does your child ever seem to be unusually interested in the sight, feel, sound, taste or smell of things or people?	<input type="checkbox"/>	<input type="checkbox"/>
15. Does your child ever have any mannerisms or odd ways of moving his/her hands or fingers, such as flapping or moving his/her fingers in front of his/her eyes?	<input type="checkbox"/>	<input type="checkbox"/>
16. Does your child ever have any complicated movements of his/her whole body, such as spinning or repeatedly bouncing up and down?	<input type="checkbox"/>	<input type="checkbox"/>
17. Does your child ever injure himself/herself deliberately, such as by biting his/her arm or banging his/her head?	<input type="checkbox"/>	<input type="checkbox"/>
18. Does your child ever have any objects that he/she has to carry around (other than a soft toy or comfort blanket)?	<input type="checkbox"/>	<input type="checkbox"/>
17. About social development and interest in others		
<i>(Mark <u>one box</u> for each question whether you think it applies for your child or not)</i>		
	Ja	Nei
19. Does your child have any particular friends or a best friend?	<input type="checkbox"/>	<input type="checkbox"/>
20. Does your child ever talk with you just to be friendly (rather than to get something)?	<input type="checkbox"/>	<input type="checkbox"/>
21. Does your child ever spontaneously copy you (or other people) or what you are doing (such as vacuuming, gardening or mending things)?	<input type="checkbox"/>	<input type="checkbox"/>
22. Does your child ever spontaneously point at things around him/her just to show you things (not because he/she wants them)?	<input type="checkbox"/>	<input type="checkbox"/>
23. Does your child ever use gestures, other than pointing or pulling your hand, to let you know what he/she wants?	<input type="checkbox"/>	<input type="checkbox"/>
24. Does your child nod his/her head to indicate yes?	<input type="checkbox"/>	<input type="checkbox"/>
25. Does your child shake his/her head to indicate no?	<input type="checkbox"/>	<input type="checkbox"/>
26. Does your child usually look at you directly in the face when doing things with you or talking with you?	<input type="checkbox"/>	<input type="checkbox"/>
27. Does your child smile back if someone smiles at him/her?	<input type="checkbox"/>	<input type="checkbox"/>
28. Does your child ever show you things that interest him/her to engage your attention?	<input type="checkbox"/>	<input type="checkbox"/>
29. Does your child ever offer to share things other than food with you?	<input type="checkbox"/>	<input type="checkbox"/>
30. Does your child ever seem to want you to join in his/her enjoyment of something?	<input type="checkbox"/>	<input type="checkbox"/>
31. Does your child ever try to comfort you when you are sad or hurt?	<input type="checkbox"/>	<input type="checkbox"/>
32. If your child wants something or wants help, does he/she look at you and use gestures with sounds or words to get your attention?	<input type="checkbox"/>	<input type="checkbox"/>
33. Does your child show a normal range of facial expressions?	<input type="checkbox"/>	<input type="checkbox"/>
34. Does your child ever spontaneously join in and try to copy the actions in social games, such as "The Mulberry Bush" or "London Bridge is Falling Down"?	<input type="checkbox"/>	<input type="checkbox"/>
35. Does your child play any pretend or make-believe games?	<input type="checkbox"/>	<input type="checkbox"/>
36. Does your child seem interested in other children of approximately the same age whom he/she does not know?	<input type="checkbox"/>	<input type="checkbox"/>
37. Does your child respond positively when another child approaches him/her?	<input type="checkbox"/>	<input type="checkbox"/>
38. If you come into a room and start talking to your child without calling his/her name, does he/she usually look up and pay attention to you?	<input type="checkbox"/>	<input type="checkbox"/>
39. Does your child ever play imaginative games with another child in such a way that you can tell that each child understands what the other is pretending?	<input type="checkbox"/>	<input type="checkbox"/>
40. Does your child play cooperatively in games that need some form of joining in with a group of other children, such as hide-and-seek or ball games?	<input type="checkbox"/>	<input type="checkbox"/>

About your child's eating habits

18. How well does this apply to your child?

	Never	Seldom	Sometimes	Often	Always
1. The child enjoys tasting new food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The child gets full up easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The child eats more when he/she is happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Given the choice, the child would eat most of the time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. The child eats slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The child eats more when worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The child takes more than 30 minutes to finish a meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The child gets full before his/her meal is finished	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The child enjoys a wide variety of food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The child is interested in tasting food he/she has not tasted before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. If given the chance, the child would always have food in his/her mouth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The child eats more when anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. If allowed to, he/she would eat too much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. The child eats less when he/she is upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. The child leaves food on his/her plate at the end of a meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. The child eats less when he/she is angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. The child eats more and more slowly during the course of a meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. The child eats more when annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Consider whether this applies to your child during the last 6 months

	No	Yes			
1. Has your child ever eaten what most people would think was a really big amount of food?	<input type="checkbox"/>	<input type="checkbox"/>			
2. Did you have the impression that the child could not stop eating or that the child could not control what or how much he/she was eating?	<input type="checkbox"/>	<input type="checkbox"/>			
	2 times a week or more	1 time a week	More seldom	Never	
3. How often has your child eaten a really big amount of food when you at the same time had the impression that he/she was out of control?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

About language and school

20. How often you think this is typical for your child

	Never or rarely	Sometimes	Often	Very often
1. Forgets words s/he knows – e.g. instead of “rhinoceros” may say “you know, the animal with the horn on its nose...”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Uses terms like “he” or “it” <u>without</u> making it clear what s/he is talking about. For instance, when talking about a film, might say “he was really great” without explaining who “he” is.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Misses the point of jokes and puns (though may be amused by nonverbal humour such as slapstick).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Can be hard to tell if s/he is talking about something real or make-believe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Sjelden eller aldrig	En gang i blant	Regelmessig	Ofte eller bestandig
5. Leaves out past tense – ed endings on words, May for instance say “John kick the ball” instead of “John kicked the ball”, or “Eva buy soda” instead of “Eva bought soda”.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Takes in just 1-2 words in a sentence, and so misinterprets what has been said. E.g. if someone says “I want to go skating next week”, s/he may think they’ve been skating, or want to go now.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Gets the sequence of events muddled up when trying to tell a story or describe a recent event. E.g. if describing a film, might talk about the end before the beginning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Doesn’t explain what s/he is talking about to someone who doesn’t share his/her experiences; for instance, might talk about “Jon” without explaining who he is.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. It is hard to make sense of what s/he is saying, even though the words are clearly spoken.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Uses appropriate language to talk about what s/he plans to do in the future (e.g. what s/he will do tomorrow, or plans for going on holiday).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. You can have an enjoyable, interesting conversation with him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Produces long and complicated sentences such as: “When we went to the park I had a go on the swings”; “I saw this man standing on the corner”.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Uses words that refer to whole classes of objects, rather than a specific item. E.g. refers to a table, chair and drawers as “furniture”, or to apples, bananas and pears as “fruit”.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Speaks fluently and clearly, producing all speech sounds accurately and without hesitation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Explains a past event clearly (e.g. what s/he did at school or what happened at a football game).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. When answering a question, provides enough information without being over-precise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Mark each statement according to how well you think it fits your child.

Try to answer all, even if you are not completely sure. Mark a number between 1 and 5 depending on how well you think it fits your child, even if the statement is only partially right.

Does not fit/ completely wrong
1 2 Both yes and no
3 4 Fits well/ absolutely right
5

1. Mixes up words with similar meaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has difficulty understanding what ordinary words mean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has difficulty answering questions as quickly as others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is often searching for the right words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has difficulty in using complete sentences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is using short sentences when s/he is responding to questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Has difficulty in retelling a story s/he has heard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Forgets words s/he knows the meaning of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. How is your child enjoying school?

Very poor Poor Ok Well Very well

23. How is the school organized?

Open classrooms
 Set classrooms

How many students are there in the child's class?

24. Does your child have a place in an afterschool program?

No Yes, the child spends approximately hours per week at an afterschool program.

25. All children take mandatory tests at school: reading in 1st grade and reading and arithmetic in 2nd grade.

Parents are usually informed of the results during parent-teacher discussions.

What feedback have you gotten about your child?	Has mastered subject well	Must work more but teacher is not concerned	Teacher is concerned	Don't know not discussed with teacher
...Reading skills in 1st grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...Reading skills in 2nd grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...Arithmetic skills in 2nd grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Has an administrative decision been made about your child need for special education?*(Cross off for each line.)*

			If yes, how much help has been allocated?		
	No	Yes	Minimal (less than 3 h/week)	Some (3-5 h/week)	A lot (6 h/week or more)
In Norwegian language?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In arithmetic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In other subjects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your child receive any other educational support?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your child get extra help (e.g., an assistant) at school because of a disability or a developmental problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. About homework

Approximately how many hours per week...	No homework	0 hour	1-2 hours	3-4 hours	5-6 hours	7 hours or more
...does your child spend doing homework at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...does your child get help doing homework at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...does your child get help doing homework at school or afterschool?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. Enter a cross indicating what your child masters:

	Yes	Partially	Not yet
1. Reads simple stories aloud, with ease, when asked.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identifies all lowercase printed letters (i.e. a,b,c) and uppercase (i.e. A,B,C) of the alphabet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Reads (aloud or covertly) and understands texts suitable for 7-8 year olds (e.g. simple children's books, cartoon strips).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Writes simple information/messages at least three sentences long (for example, notes, e-mail, SMS etc.) May make small errors in spelling or sentence structure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Writes reports, papers, or essays at least one page long; may use computer. May make small errors in spelling or sentence structure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. About your child's language skills

	Very difficult 1	2	3	4	Very easy 5
1. How easy is it for <u>you</u> to understand what your child is saying to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How easy is it for <u>strangers</u> to understand what your child is saying?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Very poor	Poor	Average	Good	Very good
3. How do you rate your child's ability to tell a story?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How would you rate your child's ability to communicate his/her own needs in a way understandable to adults and friends?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. How often do you read to your child? Never 1-2 times a week 3-4 times a week 5-6 times a week Every day

31. a) How long does your child like to sit still and be read to? (Mark only one)

- Is never read to
- 5 minutes or less
- 6-15 minutes
- 16-45 minutes
- More than 45 minutes

31. b) How long does your child sit still and read by him/herself?

- Never reads by him/herself
- 5 minutes or less
- 6-15 minutes
- 16-45 minutes
- More than 45 minutes

31. c) What types of books does your child like to read by him/herself? (Mark only the one that is most usual)

- Does not like to read by him/herself
- Picture books (only a few words)
- Simple stories, both images and text on each page
- Books with chapters (almost text only)
- Do not know

32. Consider these statements about cooperation and communication between parents and school

	Very true	Quite true	Not very true	Not true at all
I/we are well informed about our child's curriculum at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I/we get sufficient information about how our child is enjoying and coping at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I/we are not well included in discussions about our child's social development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I/we get little information about how our child learns his/her subjects at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

33. About how many hours does the child usually sleep on weeknights?

- 8 hours or less 9 hours 10 hours 11 hours 12 hours or more

34. On the whole, do you think the child currently has problems in one or more of the following areas?

	No	Yes
Concentration	<input type="checkbox"/>	<input type="checkbox"/>
Behavior	<input type="checkbox"/>	<input type="checkbox"/>
Emotions	<input type="checkbox"/>	<input type="checkbox"/>
Getting along with others	<input type="checkbox"/>	<input type="checkbox"/>
Language	<input type="checkbox"/>	<input type="checkbox"/>

	No	Yes, a little	Yes, a lot
1. If yes, is the child disturbed or bothered by these problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do these problems affect the child's daily life in any of the following areas?			
- At home/with the family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- In relationships with friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Learning at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ABOUT YOU

Work, household

35. Are you currently in paid employment?

- Yes
 Yes, but I am on partial sick leave
 Yes, but I am on full sick leave
 No

36. What is your highest level of completed education?

- 9-year elementary education
 1 – 2 years in high school
 Vocational high school
 General studies, 3-year high school
 College, university up to 4 years
 College, university more than 4 years

37. How many children (under 20) live in your household?

Number of children

38. Who do you live with, other than your own child?

- Spouse Partner Other children Other people No one

39. Do you live with the child's father?

- Yes No, we have separated No, I have never lived with the child's father

If you have separated, how old was your child when you split up? The child was years

About exercise, weight and eating

40. How physically active are you? Here we ask about how long you do activities in which you become short of breath or sweat. Include activities both at home and at work. (Mark one box per line.)

Duration of activity where you become breathless or sweaty (Cross off for each line)	How often?					
	Never	Less than once per week	Once per week	2 times per week	3-4 times per week	5 times or more per week
Less than 30 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Between 30-60 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More than 60 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

41. What is your current height and weight?

Height cm Weight kg

42. Have you ever had a period of time where you weighed much less than others thought you should?

No, go to question 43

Yes, I was years old, weighed kg, and was cm high

- | | Not at all | A little | Vert much |
|--|--------------------------|--------------------------|--------------------------|
| 1. During that time, did you feel fat? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. During that time, were you afraid that you might gain weight or become fat? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. When was the last time you weighed so little, and yet felt fat and/or were afraid about gaining weight?

I was years old ...Is this still the case? No Yes

43. During the last year, have you ever had eating binges when you ate what most people would regard as an unusually large amount of food in a short period of time?

No (go to question 44)

Yes

In the period when you had the most number of eating binges, how many times did this happen in the course of one month?

--	--

Did you feel that your eating was out of control?

- No
 Yes, somewhat out of control
 Yes, absolutely out of control

How upset or distressed did binge eating usually make you feel?

- Not at all
 Somewhat
 Very much

44. During the last year, have you used any of the following methods to control your shape or weight?

	Never	Some-times	Weekly	Several times per week
Make yourself vomit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use laxatives or diuretic pills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fast or not eat for 24 hours or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use diet pills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise more than two hours per day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

45. In general, how important is shape and weight for your self-esteem?

	1	2	3	4	5	
Not important at all	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The most important thing

Pregnancy and illness

46. Are you pregnant now? No Yes

47. Have you given birth in the past year? No Yes

48. Do you have/ have you had any of the following disorders/ illnesses?

	No, never	Not now, but in the past	Yes, now	Have you been treated for the problem/illness?	
				No	Yes
1. ADHD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Reading and writing difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Anorexia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Bulimia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have or have you had any other serious illness or health problem?

No Yes If yes, what was the name of the illness (es)? _____

A little more about how you are now

49. How much have the following problems bothered you during the past week? (Mark one box per line.)

	Not at all	A little bit	Some-what	Very much	Ekstre-mely
1. Fear of embarrassment cause me to avoid doing things or speaking to people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I avoid activities in which I am the centre of attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Being embarrassed or looking stupid are among my worst fears	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

50. How much do you agree with these descriptions? ()***(Mark one box per line.)*

	Strongly dis-agree	Dis-agree	Slightly dis-agree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1. In most ways my life is close to my ideal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The conditions of my life are excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am satisfied with my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. So far I have gotten the important things I want in life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If I could live my life over, I would change almost nothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

51. In the past 6 months have you experienced any of the following?

	Yes	No
1. A spell or attack when all of sudden you felt frightened, anxious or very uneasy?	<input type="checkbox"/>	<input type="checkbox"/>
2. Spells or attacks when for no reason your heart suddenly began to race, you felt faint, or you couldn't catch your breath?	<input type="checkbox"/>	<input type="checkbox"/>
3. If you have had such attacks, did they ever happen in a situation where you were not in danger or not the center of attention?	<input type="checkbox"/>	<input type="checkbox"/>

52. During the last 2 weeks have you been bothered by any of the following? ()***(Mark one box per line.)*

	Not at all	A little	Quite a bit	Extremely
1. Constantly fearful or anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervousness or shakiness inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Feeling hopeless about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Worrying too much about things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling that everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

53. Do you have anyone other than your spouse / partner who you can ask advice from in a difficult situation?

- No
 Yes, 1-2 people
 Yes, more than 2 people

54. How often do you meet or talk on the telephone with family (outside the household) or close friends?

- Several times per week
 1-4 times per month
 Less often

55. Below are a number of statements about your family. The statements may not describe how you are in your family. Nonetheless, please rate each item according to how often it typically occurs in your home.*(Mark one box per line.)*

	Never	Almost never	Some-times	Often	Always
1. You let your child know when he / she is doing a good job with something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. You threaten to punish your child and then do not actually punish him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Your child fails to leave a note or let you know where he /she is going	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your child talks you out of being punished after he/she has done something wrong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your child stays out in the evening after the time he / she is supposed to be home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. You compliment your child after he / she has done something well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. You praise your child if he / she behaves well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Your child is out with friends you do not know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. You let your child out of a punishment early (like lift restrictions earlier than you originally said)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Alcohol and smoking

56. Do you smoke now? If yes, how many cigarettes?

Do not smoke

Smokes sometimes,
no. of. cigarettes per week:

Smoke daily, no. of. cigarettes daily:

57. Does the child's father smoke? If yes, how many cigarettes?

Does not smoke

Smokes sometimes,
no. of. cigarettes per week:

Smoke daily, no. of. cigarettes daily:

58. How often do you drink alcohol now?

About 6-7 times per week

About 1-3 times per month

About 4-5 times per week

Less than once a month

About 2-3 times per week

Never

About once per week

Units of alcohol

In order to compare amounts of different types of drinks, we ask you about consumption of what is called alcohol units (= 1,5cl pure alcohol). In practice that means:

1 glass (1/3 litre) of beer = 1 unit

1 glass of red or white wine = 1 unit

1 small glass of sherry or other fortified wine = 1 unit

1 drink of liquor or liqueur = 1 unit

1 bottle of alcopops or cider = 1 unit

59. How many alcohol units do you have on a typical day when you are drinking?

10 or more 7-9 5-6 3-4 1-2 Less than 1

60. How often during the last year

	Never	Less than monthly	Monthly	Weekly	Daily/ almost daily
....have you had 6 or more drinks on one occasion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
....have you found that you were not able to stop drinking once you had started?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
....have you failed to do what was normally expected from you because of drinking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
....have you needed a first drink in the morning to get yourself going after a heavy drinking session?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
....have you had a feeling of guilt or remorse after drinking alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
....have you been unable to remember what happened the night before because you had been drinking alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	No		Yes, but not i the last year		Yes, during the last year
Have you or someone else been injured as a result of you drinking?	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Has a relative, friend or doctor (or other health worker) been concerned about your drinking or suggested that you cut down?	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Notes:

(*): The phrasing differs somewhat from the official English version of the instrument. Please see further explanation in the documentation report.

(**): In this questionnaire we have included the original English instrument on which the Norwegian version of the instrument was built. In the earlier questionnaires (pregnancy to 5 years) an English version was created by translating the Norwegian instrument back into English. This is the explanation for some differences between the original and the translated English versions of the instrument. The Norwegian version of the instrument is unchanged.

Appendix M

Ethical approvals from REK and NSD

Region: REK sør-øst	Saksbehandler: Elin Evju Sagbakken	Telefon: 22845502	Vår dato: 09.04.2019	Vår referanse: 2019/339/REK sør-øst A
			Deres dato: 12.02.2019	Deres referanse:

Vår referanse må oppgis ved alle henvendelser

Nina Cecilie Øverby
Fakultet for helse- og idrettsvitenskap

2019/339 En sunn og bærekraftig start på livet

Forskningsansvarlig: Universitetet i Agder
Prosjektleder: Nina Cecilie Øverby

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk (REK sør-øst) i møtet 19.03.2019. Vurderingen er gjort med hjemmel i helseforskningsloven (hforsknl) § 10.

Prosjektbeskrivelse (revidert av REK)

Hensikten med prosjektet er å undersøke sammenhengen mellom mors kosthold i graviditeten og barnets vekstutvikling. Man skal også se på sammenhengen mellom barns kosthold og deres vekt- og vekstutvikling samt deres kognitive og mentale utvikling.

Kilden er kostholdsdata fra mor og barn og data for vekst og mental helse samt kognitiv utvikling om barn som er registrert i Den norske mor og barnundersøkelsen (MoBa), gjennomført i regi av Folkehelseinstituttet i perioden 1999-2008.

I overkant av 100 000 kvinner har deltatt i MoBa undersøkelsen som gir et godt utgangspunkt for å undersøke mulige assosiasjonen mellom mors og barns kosthold og barnets vekt og kognitive utvikling.

Følgende opplysninger skal hentes fra MoBa helseundersøkelse:

- MoBa spørreskjema om kosthold i svangerskapet og barnets kosthold der dette er tilgjengelig på de ulike tidspunkt.
- Data på mors og barnets vekstutvikling/vektutvikling i alle år som er tilgjengelig (alder barn 8 år).
- Barnets kognitive utvikling på alle relevante tidspunkt fra 0 til 8 år.

I tillegg skal man bruke bakgrunnsvariabler som konfunderende eller kovariater på alle relevante tidspunkt: alder, paritet, sosioøkonomiske variabler, BMI, fysisk aktivitet, lengde på svangerskap, kosttilskudd, amming etc.). I tillegg skal det innhentes data på komorbiditet og medisinerings under svangerskapet, og barnets fysiske aktivitet på ulike tidspunkt og barnets skjermbruk.

Målene som er brukt på mental og kognitiv utvikling er internasjonale standardiserte spørsmål som er inkludert i MoBa.

Prosjektgruppen samarbeider med England (Universitetet i Bristol) der en medarbeider som også har en bistilling ved Universitetet i Agder, vil bistå i analyse- og skrivearbeid. En professor ved Deakin University, Australia vil bistå med tolkning av data knyttet til mental helse. Begge disse står oppført som medarbeidere i prosjektgruppen.

Vurdering

Slik komiteen forstår søknad og protokoll vil det være nyttig for samfunnet og folkehelse å vite hvorvidt et sunt og bærekraftig kosthold i svangerskapet er assosiert med barnets vekstutvikling. Det samme vil gjelde for sammenhengen mellom barnets kosthold og vekst og kognitive og mentale utvikling.

Det er et stort fokus på å spise mer bærekraftig mat i dag, denne studien belyser sammenhengen mellom et bærekraftig kosthold og helse.

Det er tidligere innhentet et bredt samtykke for deltakere i MoBa for all informasjon som blir samlet inn i den studien. MoBa studien har konsesjon fra Datatilsynet og prosjektet er tidligere behandlet av REK S-97045 og S-95113.

Komiteen viser til helseforskningsloven § 14 om bredt samtykke, der det i tredje ledd står at deltakere som har avgitt bredt samtykke har krav på jevnlig informasjon om prosjektet. Komiteen ber derfor om at prosjektet beskrives i et av MoBas nyhetsbrev.

For bruk av data for barn som har fylt 18 år forutsettes det at nytt samtykke er innhentet.

Prosjektleder opplyser at de vil være varsomme i hvordan man omtaler resultatene fra denne studien. Det skal ikke brukes som en pekefinger mot noen grupper, men som informasjon til samfunnet for å fremme samfunnets innsats for ev. å tilrettelegge for gode kostvaner blant unge for å kunne fremme god helse for neste generasjon.

Prosjektet vurderes som forsvarlig og nyttig å gjennomføre.

Vedtak

REK har gjort en helhetlig forskningsetisk vurdering av alle prosjektets sider. Prosjektet godkjennes med hjemmel i helseforskningsloven § 10.

Vi gjør samtidig oppmerksom på at etter ny personopplysningslov må det også foreligge et behandlingsgrunnlag etter personvernforordningen. Det må forankres i egen institusjon.

Godkjenningen gjelder til 01.01.2023.

Komiteens avgjørelse var enstemmig.

Av dokumentasjonshensyn skal opplysningene oppbevares i 5 år etter prosjektslutt. Opplysningene skal oppbevares aidentifisert, dvs. atskilt i en nøkkel- og en datafil. Opplysningene skal deretter slettes eller anonymiseres. Prosjektet skal sende sluttmelding på eget skjema, jf. helseforskningsloven § 12, senest et halvt år etter prosjektslutt.

Sluttmelding og søknad om prosjektendring

Prosjektleder skal sende sluttmelding til REK sør-øst på eget skjema senest 01.07.2023, jf. hfl. § 12. Prosjektleder skal sende søknad om prosjektendring til REK sør-øst dersom det skal gjøres vesentlige endringer i forhold til de opplysninger som er gitt i søknaden, jf. hfl. § 11.

Klageadgang

REKs vedtak kan påklages, jf. forvaltningslovens § 28 flg. Klagen sendes til REK sør-øst A. Klagefristen er tre uker fra du mottar dette brevet. Dersom vedtaket opprettholdes av REK sør-øst A, sendes klagen videre til Den nasjonale forskningsetiske komité for medisin og helsefag for endelig vurdering.

Vi ber om at alle henvendelser sendes inn på korrekt skjema via vår portal:

<https://helseforskning.etikkom.no>. Dersom det ikke finnes passende skjema kan henvendelsen rettes på epost til: post@helseforskning.etikkom.no.

Med vennlig hilsen

Knut Engedal
Professor dr. med.
Leder

Elin Evju Sagbakken
Seniorrådgiver

Kopi til: veslemoy.rabe@uia.no, post@uia.no

NSD NORSK SENTER FOR FORSKNINGSDATA

NSD sin vurdering

Prosjekttittel

En sunn og bærekraftig start på livet

Referansenummer

954873

Registrert

04.05.2019 av Nina Cecilie Øverby - nina.c.overby@uia.no

Behandlingsansvarlig institusjon

Universitetet i Agder / Fakultet for helse- og idrettsvitenskap / Institutt for folkehelse, idrett og ernæring

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Nina Cecilie Øverby, nina.c.overby@uia.no, tlf: 38141324

Type prosjekt

Forskerprosjekt

Prosjektperiode

27.05.2019 - 01.01.2023

Status

27.05.2019 - Vurdert

Vurdering (1)

27.05.2019 - Vurdert

BAKGRUNN

Prosjektet er vurdert og godkjent av REK etter helseforskningsloven (hfl.) § 10 (REK sin ref: 2019/339/REK sør-øst).

Det er NSD sin vurdering at behandlingen også vil være i samsvar med personvernlovgivningen, så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 27.05.2019 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde:

https://nsd.no/personvernombud/meld_prosjekt/meld_endringer.html

Du må vente på svar fra NSD før endringen gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle særlige kategorier av personopplysninger om helseforhold og alminnelige kategorier av personopplysninger. Prosjektet avsluttes 01.01.2023. Deretter skal datamaterialet oppbevares frem til 01.01.2028 ved UiA for dokumentasjonshensyn, jf. vedtaket fra REK.

LOVLIG GRUNNLAG

I denne behandlingen skal det innhentes opplysninger om kvinner og barn som har deltatt i Moba-undersøkelsen. Ved deltakelse i Moba-undersøkelsen samtykket deltakerne til at deres opplysninger også kunne brukes til andre forskningsprosjektet.

Det er derfor allerede innhentet samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 nr. 11 og art. 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse, som kan dokumenteres, og som den registrerte kan trekke tilbake.

Lovlig grunnlag for behandlingen vil dermed være den registrertes uttrykkelige samtykke, jf. personvernforordningen art. 6 nr. 1 a), jf. art. 9 nr. 2 bokstav a, jf. personopplysningsloven § 10, jf. § 9 (2).

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

Deltakerne mottok informasjon i forbindelse med deltakelse i Moba-undersøkelsen. NSD forstår det slik at FHI skal legge ut informasjon om dette prosjektet på sine nettsider om Moba-undersøkelsen. Samlet sett vurderer vi at deltakerne har fått informasjon som oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp underveis og ved planlagt avslutning for å avklare om behandlingen av personopplysningene pågår i tråd med den behandlingen som er dokumentert.

Lykke til med prosjektet!

Kontaktperson hos NSD: Belinda Gloppen Helle

Tlf. Personverntjenester: 55 58 21 17 (tast 1)