

# Master's Thesis

**Public Health Nutrition** 

May 2021

School children's participation in a free school meal scheme: Experiences from a pilot project in the Oslo school.

Name: Sandra Mauer

Course code: MAME 5910

Word count: 29210

**Faculty of Health Sciences** 

OSLO METROPOLITAN UNIVERSITY STORBYUNIVERSITETET

#### Preface and acknowledgements

When I started my master's study in Public Health Nutrition in the autumn of 2019, I did an externship at the Agency for Health in Oslo, which means to get a glimpse into the real-life workplace through shadowing an employee from the same field and observing the jobsite. In connection to that externship I got the opportunity to write my master's thesis on the pilot project for free school meals, that was launched in that year. Free school meals are politically strongly debated and I found the topic very exciting. When I decided to write my master's thesis on that topic, I also applied for a place in the Health Science Research Programme at OsloMet. The application process led to the early planning of the project already in the autumn of 2019. It was inspiring and instructive to be involved from the beginning of the planning phase of the research project. The Covid-19 pandemic required several changes and adjustments. Undoubtedly, the past year has been intense and demanding with many challenges, especially related to Covid-19 and the data collection. After all, this year was the most exciting and instructive year in my life, and I am grateful for everything I have experienced and learned. I have planned and carried out my own research project with the best professional support one could get. I would therefore like to extend a special thanks to my two supervisors, Associate Professor Laura Terragni and Professor Liv Elin Torheim, who have given me excellent professional guidance and good support and motivation throughout the whole research process. I would also like to thank the project staff from the Agency for Health in Oslo and the Education Agency for their good cooperation. I would also like to thank all the informants who participated in this study. A special thanks to the school management for good collaboration. They were patient and facilitated and helped me with the recruitment, even when they have been in a very demanding situation through the pandemic. Finally, I also want to thank my boyfriend, who has motivated and supported me throughout the whole process.

Oslo, Mai 2021

Sandra Mauer

#### Summary

**Introduction:** The City Council of Oslo has decided to introduce a free school meal for pupils in the Oslo School. In preparation for this, three schools in the Municipality of Oslo conducted a pilot of three different school meal schemes in 2019-2021. The purpose of this qualitative study was to explore factors influencing pupils' participation in free school meal schemes by investigating pupils', school staff's and parents' experiences with and views on the school meals at two of the pilot schools.

**Method:** The study was inspired by a Grounded Theory research design. A total of 20 focus group interviews were conducted with 39 pupils (5<sup>th</sup> -10<sup>th</sup> grade), 15 parents, and 12 school employees in October-December 2020. Participant observations during breakfast and lunch and food production were also conducted at both schools. Line-by-line coding, memo writing and a constant comparative technique were used to analyse the data and identify emerging factors related to pupils' participation in school meals.

**Findings:** The most relevant factors found in this study were the popularity of the food served, the attraction to the nearby store or fast-food restaurants, and social factors like eating together with friends. Continuity in the offer, predictability of the menus, involvement of the pupils and parents, and time were highlighted as other important factors affecting whether the pupils took part in the school meals. The restrictions caused by Covid-19 had of course an impact as well.

**Conclusion:** To ensure pupils' participation in free school meal schemes, schools have to meet the challenges to finding a balance between healthy but often unpopular options and popular food, often more unhealthy. In addition, it is important to create a social friendly eating environment. Further research is needed to investigate what it takes for those who do not attend free meals to participate in free school meal schemes.

**Keywords:** School Meal Programs, Schools, Nutrition, Pupils, Children, Adolescents, Social inequality, Oslo, Qualitative study

#### Sammendrag

**Introduksjon:** Byrådet i Oslo har besluttet å innføre et gratis skolemåltid for elever i Osloskolen. Som forberedelse til dette gjennomførte tre skoler i Oslo kommune en pilot av tre forskjellige skolematordninger i perioden 2019-2021. Hensikten med denne kvalitative studien var å utforske faktorer som påvirker elevers deltakelse i gratis skolemåltidsordninger ved å undersøke elevenes, skolepersonellets og foreldrenes erfaringer med og synspunkter på skolemat på de to pilotskolene i Oslo kommune.

**Metode:** Studien har en «Grounded Theory» inspirert forskningsdesign. Det ble gjennomført 20 fokusgruppeintervjuer med 39 elever (5.-10. klasse), 15 foreldre og 12 skoleansatte i perioden oktober-desember 2020. Deltakende observasjoner under frokost og lunsj samt matproduksjon ble også gjennomført på begge skolene. En sosialkonstruktivistisk Grounded Theory-tilnærming ble brukt. Line-by-line koding, memo-skriving og en konstant komparativ metode ble brukt for å analysere dataene og identifisere relevante faktorer som kunne forklare elevers deltakelse i skolematordningen.

**Resultater:** De mest relevante faktorene som ble funnet i denne studien var popularitet av maten som ble servert og tiltrekningen til nærliggende butikker eller fast-food restauranter, og sosiale faktorer som å spise sammen med venner. Kontinuitet i tilbudet, menyenes forutsigbarhet, involvering av elevene og foreldrene, og tid ble fremhevet som andre viktige faktorer som påvirket om elevene deltok i skolematordningen. Covid-19 hadde selvsagt også en påvirkning.

**Konklusjon:** For å sikre elevenes deltakelse i gratis skolemåltid, må skolene klare å løse utfordringene med å finne en balanse mellom sunne, men ofte upopulære alternativer og populær mat som ofte er mer usunn, i tillegg til å skape sosiale og vennlige spiseomgivelser. Det er behov for videre forskning for å undersøke hva som skal til for at elever som ikke pleier å spise de gratis måltidene, skal delta i skolematordningene.

Nøkkelord: Skolemåltidsprogrammer, Skoler, Ernæring, Elever, Barn, Ungdom, Sosial ulikhet, Oslo, Kvalitativ studie

| T  | able ( | of contents   |      |
|----|--------|---|------|
| P  | REFAC  | E AND ACKNOWLEDGEMENTS  | I    |
| S  | UMMA   | RY  | II   |
| S. | AMME   | NDRAG   | III  |
| Т  | ABLE ( | DF CONTENTS   | IV   |
| L  | IST OF | APPANDICES  | VIII |
| L  | IST OF | TABLES  | IX   |
| L  | IST OF | FIGURES   | IX   |
| L  | IST OF | ABBREVIATIONS AND ACRONYMS  | IX   |
| D  | EFINIT | IONS  | X    |
| 1  | INT    | RODUCTION   | 1    |
|    | 1.1    | CONTEXT FOR THE MASTER'S THESIS   | 2    |
|    | 1.2    | OBJECTIVES AND RESEARCH QUESTIONS   | 3    |
| 2  | EXI    | STING KNOWLEDGE AND PREVIOUS RESEARCH   | 4    |
|    | 2.1    | CHILDREN AND ADOLESCENTS AS A GROUP WITH A PARTICULAR NEED FOR GOOD NUTRITION | 4    |
|    | 2.2    | NORWEGIAN CHILDREN AND ADOLESCENTS' DIETARY HABITS                            | 4    |
|    | 2.3    | WHAT INFLUENCES CHILDREN AND ADOLESCENT'S DIETARY INTAKE?                     | 6    |
|    | 2.4    | Social inequality in health and diets in Norway                               | 7    |
|    | 2.5    | SCHOOLS AS AN ARENA FOR PROMOTING HEALTHY DIETARY HABITS                      | 9    |
|    | 2.6    | SCHOOL MEAL SCHEMES IN THE NORDIC COUNTRIES                                   | 11   |
|    | 2.6.   | School meals in the Nordic countries  | 12   |
|    | 2.6.   | 2 School meals in Norway  | 13   |
| 3  | ME     | THODS   | 16   |
|    | 3.1    | CHOICE OF THE RESEARCH DESIGN   | 16   |
|    | 3.1.   | l Qualitative research design   | 16   |

|   | 3.1.2 | Grounded theory approach   | 16 |
|---|-------|--|----|
|   | 3.1.3 | Social constructivism  | 17 |
|   | 3.2   | METHODS FOR DATA COLLECTION  | 18 |
|   | 3.2.1 | Development of the observation- and interview guides                                 | 19 |
|   | 3.3   | SAMPLING AND RECRUITMENT   | 20 |
|   | 3.3.1 | Sampling of pupils   | 21 |
|   | 3.3.2 | Sampling of the school staff   | 22 |
|   | 3.3.3 | Sampling of parents  | 22 |
|   | 3.4   | PILOTING   | 22 |
|   | 3.5   | CONDUCTING PARTICIPANT OBSERVATIONS AND THE INTERVIEWS                               | 22 |
|   | 3.5.1 | Conducting participant observations  | 23 |
|   | 3.5.2 | Focus group interviews   | 24 |
|   | 3.5.3 | Audio recording  | 25 |
|   | 3.5.4 | Transcription  | 25 |
|   | 3.6   | Analysis   | 26 |
|   | 3.6.1 | Initial coding   | 26 |
|   | 3.6.2 | Focused coding   | 27 |
|   | 3.6.3 | Making sense of the data   | 27 |
|   | 3.7   | THE RESEARCHER'S ROLE AND PRECONCEPTIONS   | 28 |
|   | 3.8   | ETHICAL ISSUES   | 29 |
| 4 | FINE  | PINGS  | 31 |
|   | 4.1   | DECISION ABOUT WHAT MEALS TO PROVIDE AND ORGANIZATION OF THE MEALS                   | 32 |
|   | 4.1.1 | The children need energy in the morning: the breakfast meal                          | 32 |
|   | 4.1.2 | Providing a social and healthy alternative to "shopping center" food: the lunch meal | 34 |

|   | 4.2   | WHO PARTICIPATED IN THE SCHOOL MEAL SCHEME?                                | 35 |
|---|-------|--|----|
|   | 4.3   | FACTORS INFLUENCING THE PARTICIPATION IN THE SCHOOL MEALS                  | 38 |
|   | 4.3.1 | Popularity of food   | 38 |
|   | 4.3.2 | Eating food together: the sociality of meals at school                     | 44 |
|   | 4.3.3 | Competition with other options: the temptation of the nearby grocery store | 47 |
|   | 4.3.4 | Predictability and information   | 50 |
|   | 4.3.5 | Time   | 53 |
|   | 4.4   | PUPILS' PERCEPTION OF HEALTHY AND UNHEALTHY FOOD                           | 55 |
| 5 | DISC  | CUSSION  | 59 |
|   | 5.1   | DISCUSSION OF THE FINDINGS   | 59 |
|   | 5.1.1 | Summary of the findings  | 59 |
|   | 5.1.2 | Popularity of food   | 59 |
|   | 5.1.3 | Social aspects: eating food together                                       | 63 |
|   | 5.1.4 | Routines when implementing free school meal schemes                        | 64 |
|   | 5.1.5 | Who participated in the schemes?   | 65 |
|   | 5.1.6 | The lack of information  | 66 |
|   | 5.2   | METHODOLOGICAL CONSIDERATION   | 67 |
|   | 5.2.1 | Grounded theory approach as method   | 67 |
|   | 5.2.2 | Strength and limitations of the data collection                            | 68 |
|   | 5.2.3 | Analysis of the transcripts and transferability of the results             | 71 |
|   | 5.2.4 | Ethical issues   | 73 |
| 6 | CON   | CLUSIONS   | 74 |
|   | 6.1   | RESEARCH SUMMARY   | 74 |
|   | 6.2   | PRACTICAL IMPLICATIONS   | 74 |

|   | 6.3  | SUGGESTIONS FOR FURTHER RESEARCH  | 75  |
|---|------|---|-----|
| 7 | RE   | FERANSER  |     |
| 8 | AP   | PENDICES  |     |
|   | 8.1  | APPENDIX 1: ETHICAL APPROVAL FROM NORWEGIAN SOCIAL SCIENCE DATA SERVICES  | 86  |
|   | 8.2  | Appendix 2: Information letter and consent form to school principals      |     |
|   | 8.3  | APPENDIX 3: INFORMATION LETTER AND CONSENT FORM TO PUPILS                 | 94  |
|   | 8.4  | APPENDIX 4: INFORMATION LETTER AND CONSENT FORM TO PARENTS                |     |
|   | 8.5  | APPENDIX 5: INFORMATION LETTER AND CONSENT FORM TO PARENTS (DIGITAL)      | 102 |
|   | 8.6  | Appendix 6: Information letter and consent form to parents (participants) | 105 |
|   | 8.7  | Appendix 7: Interview guide pupils primary school                         | 108 |
|   | 8.8  | APPENDIX 8: INTERVIEW GUIDE PUPILS SECONDARY SCHOOL                       | 110 |
|   | 8.9  | Appendix 9: Interview guide parents secondary school                      | 111 |
|   | 8.10 | APPENDIX 10: INTERVIEW GUIDE PARENTS PRIMARY SCHOOL                       | 112 |
|   | 8.11 | Appendix 11: Interview guide teachers secondary school                    | 113 |
|   | 8.12 | Appendix 12: Interview guide teachers primary school                      | 114 |
|   | 8.13 | Appendix 13: Interview guide school staff primary school                  | 115 |
|   | 8.14 | Appendix 14: Interview guide school management primary school             | 116 |
|   | 8.15 | Appendix 15: Interview guide school management secondary school           | 118 |
|   | 8.16 | Appendix 16: Observation guide  | 119 |
|   | 8.17 | Appendix 17: Mandate  | 120 |

#### **List of Appandices**

Appendix 1: Ethical approval from Norwegian social science data services

- Appendix 2: Information letter and consent form to school principals
- Appendix 3: Information letter and consent form to pupils
- Appendix 4: Information letter and consent form to parents
- Appendix 5: Information letter and consent form to parents (digital)
- Appendix 6: Information letter and consent form to parents (participants)
- Appendix 7: Interview guide pupils primary school
- Appendix 8: Interview guide pupils secondary school
- Appendix 9: Interview guide parents secondary school
- Appendix 10: Interview guide parents primary school
- Appendix 11: Interview guide teachers secondary school
- Appendix 12: Interview guide teachers primary school
- Appendix 13: Interview guide school staff primary school
- Appendix 14: Interview guide school management primary school
- Appendix 15: Interview guide school management secondary school
- Appendix 16: Observation guide
- Appendix 17: Mandate

## List of tables

Table 1: Detailed information about the conducted focus group interviews

Table 2: Sociodemographic characteristics of the participants

## List of figures

Figure 1: Factors for pupils' participation in the school meal schemes and their relationships to each other

## List of abbreviations and acronyms

| AKS   | The before- and after-school program                     |
|-------|--|
| COREQ | Consolidated criteria for Reporting Qualitative research |
| DBC   | Daily Breakfast Consumption                              |
| FAU   | Parents' Council's working committee                     |
| FHI   | Norwegian National Institute of Public Health            |
| GT    | Grounded theory  |
| HBSC  | Health Behaviour in School-aged Children                 |
| HPS   | Health-promoting school                                  |
| NCD   | Non-communicable diseases                                |
| SEP   | Socioeconomic position                                   |
| WHO   | World Health Organization                                |

## Definitions

| Covid-19:                  | Covid-19 stands for "Coronavirus disease 2019", which is an infection                          |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|
|                            | with the virus SARS-CoV-2. The disease primarily affects the                                   |  |  |  |  |  |
|                            | respiratory tract, but also other organ systems.   |  |  |  |  |  |
| Halal:                     | Halal is an Arabic word meaning "permitted, lawful". The word is used                          |  |  |  |  |  |
|                            | in the quran and is used for both actions and things. The term halal is                        |  |  |  |  |  |
|                            | used for food and drink and means plant food and meat from livestock                           |  |  |  |  |  |
|                            | such as sheep, goats and camels. There is an explicit ban on pork, blood                       |  |  |  |  |  |
|                            | food, dead animals and animals dedicated to other gods.  |  |  |  |  |  |
| Education in Norway        | Primary and secondary education in Norway normally lasts for                                   |  |  |  |  |  |
|                            | 13 years. There are three main parts: primary school (years 1–7),                              |  |  |  |  |  |
|                            | lower secondary school (years 8–10), and upper secondary                                       |  |  |  |  |  |
|                            | school (years 11–13).  |  |  |  |  |  |
| 1 -10 <sup>th</sup> school | A number of new schools are now being built with a co-location of all                          |  |  |  |  |  |
|                            | grades from 1 <sup>st</sup> to 10 <sup>th</sup> grade and with a common principal and teaching |  |  |  |  |  |
|                            | staff.   |  |  |  |  |  |
| Public health work:        | Society's efforts to influence factors that directly or indirectly promote                     |  |  |  |  |  |
|                            | the population's health and well-being, prevent mental and somatic                             |  |  |  |  |  |
|                            | illness, injury or disorder, or that protect against health threats, as well                   |  |  |  |  |  |
|                            | as work for a more even distribution of factors that directly or indirectly                    |  |  |  |  |  |
|                            | affect health.   |  |  |  |  |  |
|                            |  |  |  |  |  |  |

#### 1 Introduction

Children's dietary intake is important for their current and future health (Brown, 2014). In addition, food and meals play a significant cultural, social and developmental role in children's lives (Brown, 2014; Holm & Tange Kristensen, 2012). Children and adolescents spend many hours every day at school, and thus the food environment in this arena is of great importance for growth and development and for being exposed to healthy food environments (Micha et al., 2018).

Recent studies show that many Norwegian school children eat too little fruit and vegetables in relation to recommendations. Forty-six per cent of pupils in secondary school do not eat fruits or vegetables during school hours (Skuterud Kløvstad, 2018). Data from the Youth in Oslo survey (Ung i Oslo-undersøkelsen) show that only 37 % of adolescents in Oslo eat vegetables daily, and only 32 % eat fruits and berries every day (Bakken, 2018). Research also shows that many Norwegian adolescences do not eat breakfast. A study conducted among adolescents between 2002 and 2010 across the country shows that only 64 % of Norwegian adolescents ate breakfast every day (Lazzeri et al., 2016). Studies also show that many children and adolescents do not eat the packed lunches they bring with them and instead buy unhealthy snacks and sugary drinks (Bugge, 2007; Gebremariam et al., 2016; Haug et al., 2020; Lazzeri et al., 2016).

Diet and eating habits are affected by several factors, including socioeconomic position (SEP) status, which may help to explain social inequality in health (Dahl et al., 2014). Research shows that children of parents with high SEP, in general, have healthier eating habits than children of low SEP (Samdal et al., 2012, p. 35). There is also a positive correlation between breakfast consumption and the parent's level of education (Gebremariam et al., 2017). Although school children's diets have generally changed in a more positive direction in recent years, the socioeconomic gradient has remained unchanged in fruit and vegetable intake (Bakken, 2019; Skeie et al., 2019).

In addition to parental influence, the food environment in and around the school is an important determinant for what the children eat during, before and after school time. A study that examined consumption habits among Norwegian adolescents showed that pupils who often bought food in the canteen or grocery stores outside the school ate more unhealthily.

The survey also showed that pupils themselves demand healthier food environments and food alternatives (Chortatos et al., 2018).

Food and meals in school can impact pupils' diets, eating habits, well-being and learning environment (Helsedirektoratet, 2015a). A study that examined the relationship between school meals and concentration in 8 to 11-year-old Danish school children showed improved pupils' reading skills after eating a healthy school meal (Sørensen et al., 2015).

It is essential to form healthy eating habits from an early age, which can have a long-term positive effect on preventing diet-related diseases such as overweight and obesity, type 2 diabetes, cardiovascular disease, and various types of cancer. Children are an important target group for public health promotion interventions, partly because dietary habits formed early in life tend to persist even in adulthood (Dahl et al., 2014). Thus, schools can be an essential arena for health promoting measures.

Successfully implementing free school meals depends on whether the food offered actually meets the preferences and needs of the pupils. Therefore, it is interesting to gain more insight into what influences Norwegian pupils positively or negatively to participate in free school meal schemes. This knowledge could be useful when municipalities like Oslo starts implementing free school meals on a larger scale.

#### 1.1 Context for the master's thesis

Oslo Municipality's commitment to a free meal in schools was announced in the Platform for City Government 2019-2023 (*Plattform for byrådssamarbeid*). The City Council of Oslo stated that they wanted to introduce a meat-free school meal free-of-charge every day for pupils in the Oslo School (Oslo Arbeiderparti et al., 2019, p. 27).

To reach this aim, the Department of Health, Ageing and Municipal Services adopted a mandate for the "Project school fruit and school meals" on 11.12.18 (see Appendix 17). The mandate gave the Agency for Health in Oslo the responsibility for coordinating a two-year pilot project, in collaboration with the Education Agency, with the reintroduction of fruit and vegetables to approximately 18,000 pupils in schools with lower secondary levels. It was also decided that a two-year project with school meals would be carried out in three selected schools with primary and lower secondary levels in the time period 2019 - 2021, where

different meal models and dishes would be tested. The project had a total budget of 15 million NOK.

According to that mandate, this school meal project is anchored in the public health plan for Oslo, which states that many pupils at secondary school in Oslo do not eat breakfast every day. Furthermore, it is stated that the project's goal is to reduce social inequalities.

The Agency for Health in Oslo contacted OsloMet to collaborate on evaluating the part of the project that deals with school meals. This was regarded as a relevant task for a master's thesis in Public Health Nutrition and useful for the Agency for Health's evaluation of this pilot project.

### 1.2 Objectives and research questions

The main objective of this master's thesis was to explore factors influencing pupils' participation in free school meal schemes by investigating pupils', school staff's and parents' experiences with and views on free school meals introduced at two pilot schools in the Municipality of Oslo.

Furthermore, the following research questions were addressed:

- What was the rationale behind the choice of introducing the school meals?
- Who were using the school meal schemes?
- If pupils did not use the free meal, what were their reasons and what did they eat instead?
- How did pupils, parents, and school staff experience the school meal schemes?
- How did pupils and school staff experience the eating environment and socialization?
- How did the pupils and parents experience involvement in the school meal project?

#### 2 Existing knowledge and previous research

## 2.1 Children and adolescents as a group with a particular need for good nutrition

Children and adolescents are regarded as a vulnerable group as they are in a phase of life where they experience many biological, psychosocial, and cognitive changes (Brown, 2014). Especially during puberty, adolescents experience strong physical growth and development with a consequently high need for energy, especially proteins, vitamins, and minerals (Brown, 2014, p. 362). These nutritional needs, which are higher per kg of body weight for children and adolescents than for adults, are also considered in the recommendations for energy and nutrient intake (Nordic Council of Ministers, 2014). While their parents still control children's diets, adolescents show development towards more independence, which may lead to unhealthy eating behaviours, such as meal skipping, excessive dieting, use of supplements, and slimming (Brown, 2014, p. 362). A systematic review about the tracking of obesityrelated behaviours from childhood to adulthood found that unhealthy eating habits that are formed early in life tend to persist into adulthood and can lead to an increased risk of overweight and obesity and additional risks for other non-communicable diseases (NCDs) (Craigie et al., 2011). This review also found evidence that behaviours such as food choices and physical activity can be changed towards a healthier behaviour, especially when changed from childhood. It can lead to a healthier lifestyle in adults that can help reduce the risk of obesity and obesity-related illness (Craigie et al., 2011).

#### 2.2 Norwegian children and adolescents' dietary habits

The Norwegian Directorate of Health's advice is to have a varied diet with lots of vegetables, fruits and berries, whole grains and fish, and limited amounts of processed meat, red meat, salt, and sugar (Helsedirektoratet, 2016). The third nationwide dietary survey (Ungkost 3) among school children in 4<sup>th</sup> and 8<sup>th</sup> grade showed that 9- and 13-year-olds in Norway mostly eat in line with the recommendations. Nevertheless, there are still some nutritional challenges: they have a too high intake of saturated fats and foods with added sugar, and they eat too little fruits, vegetables, and fish (Hansen et al., 2016). The study also showed that vitamin D and iron intake were below the recommended levels, especially among girls. A report on the risk of iodine deficiency in Norway also pointed out that 9-year-old girls and 13-year-old boys and

girls had an average iodine intake below the recommended intake (Nasjonalt råd for ernæring, 2016). A study on "Health Behaviour in School-aged Children. A WHO collaborative Crossnational study" was conducted in 2018 (Haug et al., 2020). The study showed that Norwegian boys and girls in the age groups 11, 13, and 15 years reported good health but also some challenges, especially with physical activity and dietary habits. More than half of the children and adolescents did not follow the recommended daily intake of fruits and vegetables. Half of the Norwegian children and adolescents did not have a joint family meal every day. Furthermore, 11-year-old girls ate less fruit and more sweets than before, and the 11-year-olds generally had healthier eating habits than the 15-year-olds. Moreover, 15-year-old Norwegian boys had a higher sugar intake than 15-year-old Nordic boys (Haug et al., 2020). The latest report about citizens' health condition in Oslo shows that about half of Oslo's adult population does not meet the Norwegian Directorate of Health's recommendations for physical activity or the recommendation for at least five portions of fruit and vegetables per day. The proportion that does not follow this advice is higher among adolescents (Oslo kommune Helseetaten, 2020).

Various studies show that pupils' meal patterns change with age. "Ungkost 3" showed that fewer 8<sup>th</sup> graders than 4<sup>th</sup> graders ate breakfast every day (81 % and 92 %, respectively) (Hansen et al., 2016). A nationwide survey (Sjekk skolematen) with 10,000 school children conducted by the Research Council of Norway showed similar results. The older the pupils, the lower the prevalence of breakfast consumption. Respectively 9 % of pupils in 1st -4th grade, 11 % in 5<sup>th</sup> -7<sup>th</sup> grade, and 20 % of pupils in 8<sup>th</sup> -10<sup>th</sup> grade stated that they had not eaten breakfast on the day of the school meal survey (Norges forskningsråd & Nettverk for miljølære, 2018). An extensive research study showed trends from 2002 to 2010 in daily breakfast consumption (DBC) and its socio-demographic correlates in adolescents across 31 countries participating in the Health Behaviour in School-aged Children (HBSC) Study (Lazzeri et al., 2016). The results showed that Norway was one out of eleven countries that had a significant decrease in daily breakfast consumption in that period, and an average of 64 % of the children across each of the three rounds of the survey (2002, 2006 and 2010), reported consuming breakfast every day. Interestingly, Norway was the only Nordic country with a decrease in DBC, while Finland, Denmark, and Sweden showed no changes in the same period (Lazzeri et al., 2016). The ESSENS study among 8th graders showed similar results: 62 % ate breakfast daily, and 48 % were breakfast skippers (Gebremariam et al., 2017).

It is common for pupils to bring a packed lunch to school in Norway, which they eat during the lunch break. The "Ungkost 3" study showed that as many as 97 % of the 4<sup>th</sup> graders brought a packed lunch five days a week, while this was the case for only 71% of the 8<sup>th</sup> graders. Among the 8<sup>th</sup> graders, 27 % reported that they bought lunch in a canteen one day a week, and 9 % bought lunch in a food store or kiosk one day a week (Hansen et al., 2016). The survey "Sjekk skolematen" also showed the same pattern for lunch as for breakfast. The study showed that 85 % of all pupils usually bring a packed lunch from home. The packed lunch typically contains two or three slices of bread with cold cuts or white cheese (Norges forskningsråd & Nettverk for miljølære, 2018). A survey of adolescents' (15-24 years) eating habits at school also show that most (69 %) in Norway brought a packed lunch three days or more often a week, and approximately 19 % rarely or never brought a packed lunch (Bugge, 2007). The latter group most often bought school food either in a shop, canteen or kiosk. There were various reasons why the pupils did not have a packed lunch, such as that they thought the food was getting warm and indelicate in the bag, not having enough time or bother making packed lunch at home, while others lacked appetite or wanted to lose weight (Bugge, 2007).

In the "Ungkost 3" survey, the majority of the 4<sup>th</sup> graders (94 %) and the 8<sup>th</sup> graders (92 %) reported that they ate dinner every day (Hansen et al., 2016).

Another study conducted among Norwegian children and adolescents showed significant increases in meal skipping among children between 4<sup>th</sup> and 7<sup>th</sup> grade. The results also indicate that those who ate regular meals in 4<sup>th</sup> grade but skipped meals in the 7<sup>th</sup> grade had more overweight than those who did not skip meals (Stea et al., 2015). Therefore, it is crucial to improve Norwegian children and adolescent's today's eating habits to prevent unhealthy eating habits and a higher risk of diet-related lifestyle diseases in adulthood.

#### 2.3 What influences children and adolescent's dietary intake?

For getting interventions such as school meals to be successful, so that they are eaten, it is crucial to know what influences children and adolescents' food choices. Many influencing factors can be explained with the social-ecological model (Contento, 2016, pp. 31-52). The model explains people's food choices and dietary behaviours as influenced by biology and experience with food, person-related factors like beliefs, norms, attitudes, skills, and social and environmental factors.

At the individual level, liking the sweet taste and rejecting sour and bitter tastes are biological predispositions that humans have from birth. Energy-dense foods with sweet, salt and fat tastes are specific preferences that make food attractive and influencing food choices, particularly in children and adolescents. Children have to learn over time through being exposed to new tastes, flavours, and textures (Bawajeeh et al., 2020; Contento, 2016; Fitzgerald et al., 2010; Waddingham et al., 2018).

Interpersonal factors like the family, peers, and social and cultural norms are also relevant. Parental modelling, parental rules, and perceived accessibility are found to be the most important correlates of adolescents' dietary behaviours (Gebremariam et al., 2016). Contento (2016, pp- 38-40) points to a study that showed that most adolescents had similar food choices to their parents, making parents essential influencers as they are role models for their children. Exposure, accessibility, and portion sizes of food provided by parents can be positive or negative factors for their children's dietary behaviours (Contento, 2016, pp. 31-37).

Important factors influencing the food choices of children and adolescents are also social and environmental determinants. These include the availability and accessibility of foods like shopping centers and malls in the neighbourhood, homes and school food environments, away-from-home eating, meal patterns, and peer pressure. A critical determinant for influencing children and adolescents in food choices is the media like television viewing, websites, and influencers on social media and advertising on the internet, TV, and video games (Contento, 2016, pp. 40-45; Fitzgerald et al., 2010; Neumark-Sztainer et al., 1999; Waddingham et al., 2018). Other factors, especially for adolescents, are convenience, time constraints, and costs (Fitzgerald et al., 2010). Today, many adolescents also experience pressure related to body image, possibly because the value of having a slim body has escalated and that a large body has become increasingly stigmatized (Bugge, 2007; Neumark-Sztainer et al., 1999).

#### 2.4 Social inequality in health and diets in Norway

The Norwegian Directorate of Health defines social inequalities in health as systematic differences in the state of health and which follow social and economic categories, particularly occupation, education, and income (Helsedirektoratet, 2018). Although Norway is a prosperous country with generally good health and long life expectancy, there are relatively large social inequalities in health (Folkehelseinstituttet, 2018; Haug et al., 2020). The so-

called social gradient in health means that people with higher SEP have better health and longer lives. People with shorter education, lower income, and lower occupational status have poorer health and shorter life expectancy (Dahl et al., 2014; Folkehelseinstituttet, 2018).

There has been a broad political agreement in Norway over the last two decades that social inequality in health is a problem, which led in 2007 to a national strategy to levelling out social health inequalities (Helse- og omsorgsdepartementet, 2007). These objectives are also rooted in several other political documents (Helse- og omsorgsdepartementet, 2015, 2017, 2019). In a Norwegian knowledge review about social inequalities in health, Dahl et al. (2014, p. 13-14) pointed at universal measures implemented early in life, targeting the entire population as being most effective in reducing health inequalities.

Dietary habits are also associated with SEP and can lead to social inequalities in health. For example, research shows that children from families with high SEP generally eat healthier by eating more fruits and vegetables, less sugary drinks and sweets, and eat breakfast more often than children from families with low SEP (Fismen et al., 2014; Gebremariam et al., 2017; Lazzeri et al., 2016; Samdal et al., 2016; Totland et al., 2013). A study conducted to investigate the changes and tracking of dietary behaviours in Norwegian 11-year-olds found an inverse association between parental education and soft drink and squash consumption stability during 20 months (Totland et al., 2013).

A systematic review on socioeconomic differences in the association between the school food environments and dietary behaviours found that children from families with lower SEP are more likely to adopt unhealthy dietary behaviours in an unhealthy food environment than children from families with higher SEP (Mackenbach et al., 2019). A recently published qualitative study conducted in Oslo explored possible causes of these differences, focusing on the neighbourhood environment (Havdal et al., 2021). The more unhealthy dietary behaviours of adolescents from areas with lower SEP was mentioned as caused by using shopping malls or fast-food restaurants as a social arena in their leisure time. These areas were often characterized by having fewer opportunities for involvement in either leisure-time physical activities or youth clubs (Havdal et al., 2021).

The Norwegian Council on Social Inequalities in Health has published recommendations for reducing social inequalities in health. The measures recommended are to "provide free healthy meals to all school children in Norway on a daily basis", and that measures such as

school fruit and school meals should be free of charge to be effective (Arntzen et al., 2019, p. 603). It can be assumed that if such measures are parent-financed, even if they are subsidized, they can increase social differences when children cannot participate in such schemes because their parents cannot afford them (Helland et al., 2019). Subsidized measures can also lead to stigma (Sahota et al., 2014). In 2015, the Norwegian Directorate of Health presented a socioeconomic assessment of whether the costs of offering free fruit and vegetables in schools are in a "reasonable ratio" to the long-term population health benefits and concluded that free fruit and vegetables could be an excellent example that pays to prevent rather than treat (Sælensminde et al., 2016).

The latest report about the health conditions of citizens in Oslo points to social inequality in health as a major public health challenge. There are significant differences in mortality rates and life expectancy between different districts in Oslo (Oslo kommune Helseetaten, 2020). To a large extent, social inequality in health generally follows an east-west divide in the city. Oslo also has a relatively larger youth population than other Norwegian cities and a larger proportion of immigrants. Child poverty is more prevalent in the capital than in the rest of the country (Gotaas, 2020). One of the three main focus areas in Oslo's public health plan (Folkehelseplan for Oslo) is to ensure a safe and healthy upbringing for all children and adolescents (Oslo kommune, 2017). The plan contains the nutrition-related measure to develop a guide for diet and physical activity for kindergartens, schools, and activity schools (Oslo kommune, 2017).

#### 2.5 Schools as an arena for promoting healthy dietary habits

The school is internationally recognized as a health promoting arena with the potential to promote positive health behaviour in children and adolescents and prevent lifestyle diseases later in life (Langford et al., 2015; Wang & Stewart, 2013). The World Health Organization (WHO) defines a health-promoting school (HPS) as "a school that constantly seeks to strengthen its capacity to promote healthy living, learning and working conditions" (WHO, 2017). WHO states that HPS is an effective approach that takes early action on the four key NCD risk factors found in children and adolescents: unhealthy diet, tobacco use, alcohol use, and physical inactivity. The six components included in that HPS approach are the following: engaging of education and community leaders, providing of a safe and healthy environment, providing skills-based health education, providing access to health services, improving health promoting policy and practices, and improving the health of the community (WHO, 2017).

According to a systematic review, school-based nutrition-promotion programs that use the HPS approach are effective and can increase pupils' intake of fiber, healthier snacks, milk, water, fruits, and vegetables, and reduce breakfast-skipping and consumption of sweets (Wang & Stewart, 2013). Another systematic review on the effectiveness of the HPS framework showed that nutrition interventions were effective on average in increasing reported fruit and vegetable intake among pupils, but not reducing fat intake (Langford et al., 2015). The effects were reported as small but could be beneficial on a population level.

An overview of systematic reviews that examined the effectiveness of interventions preventing overweight and obesity showed a dearth of research about school meals' effect on different outcome measures among adolescents. The results showed little or no effect on BMI, but some reviews showed possible beneficial effects on dietary behaviours, like the consumption of sugar-sweetened beverages (Flodgren et al., 2020).

A review article examined whether school meals are a viable and sustainable tool for improving the health and sustainability of children's diet and food consumption. The results indicate that the school food environment has a strong impact in a short-term perspective but lacks long-term research. The authors suggest that school meal programs are valuable tools for healthy and sustainable societies in the future (Oostindjer et al., 2017).

A systematic review of the impact of multi-strategy nutrition education programs on adolescents' health and nutrition highlighted the critical role of schools in improving adolescent nutrition. Results showed that combining nutrition education interventions with other strategies to support dietary behaviour change had a significant impact when the nutrition education was theoretically based and facilitated by school staff in conjunction with parents and families and included changes to the school food environment (Meiklejohn et al., 2016).

Since universal measures are most effective to promote public health and equal out social inequalities in health (Dahl et al., 2014), food and health education in schools, which are aimed at both primary and secondary schools, can be considered as an essential measure for good and healthy diets (Øverby et al., 2019, p. 190) and contribute schools being a health promoting arena.

Studies from Norway also shows that free school fruit can increase pupils' intake of fruit and vegetables (Hovdenak et al., 2019). An intervention study of one-year free school fruit and

seven years of follow-up showed a significant increase in fruit and vegetable intake and a reduced intake of unhealthy snacks in pupils with low SEP. Even though the effect weakened for intake of fruit and vegetables, it reduced the intake of unhealthy snacks, which consisted over time (Bere et al., 2015). Accessibility in the home seems to be the most crucial intermediary for connecting children's fruit and vegetable intake and parents' education and income (Bere et al., 2008).

A non-randomized controlled trial, conducted among 10 to 12-year-old Norwegian school pupils that lasted one year, showed that a free school meal a day could even out social dietary differences. Children in the intervention group with lower SEP had a significantly higher intake of healthy foods than children in the control group with correspondingly low SEP (Vik et al., 2019).

One study from Denmark evaluated the effect of implementing a school meal program on the dietary quality of lunches consumed by school children aged 7-13 years compared with packed lunches brought from home. The results showed a positive effect on the lunches' dietary quality when the food served was free of charge, but no effect when the food was paid for (Sabinsky et al., 2019).

School meals can help improve pupils' nutritional knowledge and diet and thus lay a good foundation for a healthy lifestyle as an adult later in life. (Helse- og omsorgsdepartementet, 2019, p. 31). It can be an arena for learning about where the food is coming from, how it is produced, food waste, and sustainability (Oostindjer et al., 2017).

#### 2.6 School meal schemes in the Nordic countries

Although the Nordic countries, compared internationally, are quite similar concerning kindergartens and schools in general, there are significant differences in food and meals at school in each country (Dahl & Jensberg, 2011, p. 63). The most important differences are how the countries regulate and finance the school meal schemes at a national level. For example, as the only two countries globally, in Finland and Sweden, free school meals are statutory, and funding is municipal. School meals are also statutory in Iceland, but it is not required to be free, while there are no statutory schemes in Denmark and Norway.

#### 2.6.1 School meals in the Nordic countries

by As early as 1948, immediately after the Second World War, Finland established a national school meal scheme, which led to all pupils being served a hot meal during the school day. Finnish legislation determined requirements for the food content, how it should be offered and that teachers should supervise pupils. Thus, the school meal is also given a pedagogical purpose: a learning arena for good food culture and socializing. Although Finland has a well-established and regulated system that includes everyone, the main challenges in 2011 were that not all pupils used the offer. Also, Finnish young people eat too little fruit and too much unhealthy snacks during the school day (Dahl & Jensberg, 2011, pp. 65-71). A study carried out by the Finnish National Institute for Health and Welfare and published in 2018 showed that almost 90 % of all 6<sup>th</sup> graders and 70 % of 8<sup>th</sup> graders ate the school meal every day. The main challenge was that not all components of the meals were eaten. The most common components left out were milk/buttermilk, salad, fresh vegetables, and bread. The most common reason for not eating the meals was that pupils did not like the school food (Finnish institute for health and welfare, 2018). School lunch in Finland typically includes a hot meal, vegetables, fruit, bread, a spreadable fat, and water or milk as a drink (Waling et al., 2016).

As in Finland, school meals in Sweden are regulated by law. Although school meals have a long tradition in Sweden, dating back to 1937, it was not until 1997 that it was legislated that all pupils in primary school should have the right to free school meals. Sweden has also developed national guidelines that say something about what the various actors around school food should do, what the canteens should and should not sell, and recommendations regarding the content of the school meals, how, when, and how often it should be served. The guidelines have a clear focus on nutritional content and health aspects. Also, in Sweden, there are challenges that not all pupils are using the offer, that there are socioeconomic differences in relation to those who use the scheme versus those who do not use the offer and that the majority of pupils do not eat the recommended amount of fruit and vegetables (Dahl & Jensberg, 2011, pp. 71-74). Typical school lunch in Sweden includes a warm meal, different kinds of vegetables or salads, fruits, crispbread, and water or milk as a drink (Waling et al., 2016).

In Denmark, the school meal scheme is not statutory, which means the responsibility lies with the school owners (municipalities), which also applies to the food content. The municipalities can introduce voluntary schemes, and it is up to each school or school owner to design their

offers. The municipalities are also responsible for developing rules and guidelines for food in schools (Dahl & Jensberg, 2011). Denmark has developed a national strategy and implemented free school fruit, vegetables and drinks every day in all primary and secondary schools for 2017-2023 as part of Denmark's participation in the EU's school scheme for fruit, vegetables and milk (European Commission, 2017).

In Iceland, school meals are regulated by law since 1995, but the meal is not required to be free of charge. Since 2008, the legislation requires that school meals should meet the Icelandic nutrient and food-based recommendations. School meals in Iceland typically include a hot meal, water as a drink, and fruit and vegetables. The school lunch is mainly parent-financed but subsidized the municipalities (Waling et al., 2016).

#### 2.6.2 School meals in Norway

In Norway, as in Denmark, school meals are not statutory, but there is a state-funded support scheme for fruit and vegetables and school milk, and it is up to each school to decide whether they participate in this scheme and if it should be financed by parents or municipalities or both (Opplysningskontoret for frukt og grønt & Helsedirektoratet, 2020).

The history of school meals in Norway dates back to the 1890s, when the main reason for introducing school meals, similar to other European countries, was poverty and hunger; compulsory schooling which led to authorities responsible for the well-being of children during school hours, and for providing the growing generation with good nutrition to promote its health (Andresen & Elvbakken, 2007). Thus, both Bergen's and Oslo's authorities introduced a school food system where the pupils who needed it got a hot meal three to four times a week through autumn and winter. The school doctor Carl Schiøtz was concerned about the hot food's nutrient content, which he thought was insufficient (Oslo Skolemuseum, 2020). Based on the current scientific knowledge in nutrition at that time, dr. Carl Schiøtz's school breakfast model was introduced to all pupils in Oslo in 1932, after being tested in Bergen and Oslo. The breakfast meal replaced the hot lunch and consisted of crispbread, margarine, cheese or sausage, an apple, a raw carrot or orange, milk, and a teaspoon of cod liver oil. The "Oslo breakfast" was implemented by the city council in 1935 as a universal initiative free for all children. In addition to nutritional needs, the "Oslo breakfast" should also help teach the children good behaviour and choose healthy food (Andresen & Elvbakken, 2007). However, these interventions were costly, and in the post-war period, low budgets and improved nutritional status in the population led to the responsibility for feeding the children

being returned to the parents. It was recommended to give the children a packed lunch similar to the "Oslo breakfast". Therefore, in the 1950s, school meals as a universal intervention were stopped in Oslo with the argument that there were no longer material or learning needs (Andresen & Elvbakken, 2007).

A mapping of the food and meal situation in schools in Norway showed that school milk was found at most primary schools and combined 1 -10<sup>th</sup> grade schools (Federici et al., 2017). Just over half of the secondary schools that had answered the questions stated that they offered school milk. School fruit with a subscription scheme was found in half of the primary schools, while only 10 % offered free fruit. Free school fruit was offered to a greater extent at the smaller primary schools, while several larger ones had school restaurants (Federici et al., 2017).

From 2007 to 2014, free school fruit for all secondary school pupils was legislated and financed through the state, but this scheme was discontinued in 2014 after the government's change in 2013 and replaced by a subscription scheme (Opplysningskontoret for frukt og grønt & Helsedirektoratet, 2020). However, when the free scheme became a parent-financed scheme, the number of pupils subscribed to a subscription decreased to 10 % in 2016 (Helse-og omsorgsdepartementet, 2017, p. 33).

In 2015, The Norwegian Directorate of Health launched new national guidelines for food and meals in schools (Helsedirektoratet, 2015b). These guidelines were based on the previous guidelines from 2003 but are more concrete and broader. The guidelines are anchored in the Education Act from 1998, which states that all pupils have the right to a safe and good school environment that promotes health, well-being, and learning (Opplæringslova, 1998, § 9). The guidelines aim to ensure a good framework for meals and good nutritional quality of food and drinks in schools (Helsedirektoratet, 2015b). The guidelines' target group are school owners (municipalities), school leaders (principals), teachers, and other school employees. The guidelines should be anchored in the schools' management documents, and it is strongly recommended to involve parents and school children's participation (Helsedirektoratet, 2015b). Central aspects of the guidelines are that the pupils should be given a minimum of 20 minutes lunch break, full supervision during the lunch break in 1<sup>st</sup> –4<sup>th</sup> grade but preferably also at higher grade levels, fruits and vegetables, school milk, simple bread, access to cold drinking water, a pleasant dining environment, maximum 3-4 hours between meals, and canteen or food purchasing at lower and higher secondary schools.

A mapping showed significant variation in the knowledge and follow-up of the National guidelines for food and meals in school (Federici et al., 2017). The survey showed that around 60 % of the schools stated that the guidelines were followed. As many as 77 % of the schools answered that they did not have routines for introducing newly employed teachers to the National guidelines for food and meals in schools. The majority of school leaders stated that they had not changed the framework for meals in recent years (Federici et al., 2017, pp. 91-94).

In 2017, the government presented a national action plan for better diets, emphasizing the importance of school food for health and learning (Helse- og omsorgsdepartementet, 2017). The government focuses on children and adolescents in this action plan and has set particular quantitative goals for this target group. The proportion of adolescents who eat fruit and vegetables daily should be increased by 50 %, the proportion who eats fish shall be increased by 20 %, the proportion who eats breakfast daily shall be increased by 30 %, and obesity among young people should not increase (Helse- og omsorgsdepartementet, 2017). Apart from subscription schemes for school fruit and school milk, courses for canteen employees and some small projects, no major measures were mentioned under the section for promoting good meals and meal arrangements in schools, about how to achieve these ambitious goals.

There have been political debates about free school meals ever since the packed lunches in the 1950s replaced them. Today's political debate is about perceptions of whether the state or the parents should take responsibility for providing good and adequate food for the children.

The existing knowledge and previous research presented in this chapter show that free school meals could potentially promote children and adolescents' health and well-being and reduce inequality in health and diets. Nevertheless, healthy food is not healthy before it is eaten. Therefore, this master's thesis aims to understand better what influences pupils to participate in free school meal schemes.

#### 3 Methods

In this chapter, the research process of this study will be explained. The first part presents the research design and explains why a grounded theory approach was used as a methodological orientation. In the second part, the methods for data collection will be explained, followed by a description of how the participants were selected, including sampling and recruitment procedures. Furthermore, it will be explained how the data collection took place and how the analysis was conducted. Finally, the researcher's role and preconceptions, as well as ethical issues, will be addressed.

#### 3.1 Choice of the research design

#### 3.1.1 Qualitative research design

This study has adopted a qualitative research design. Qualitative research methods are exploratory and consent to achieve a broader and deeper understanding of the participants' perspectives (Moen et al., 2015, p. 324). Maxwell (2013) describes qualitative research as an inductive and reflective process. One may need to re-evaluate or make changes in various components of the design throughout the research process depending on how the study develops and changes. According to Maxwell, in qualitative research, the main five elements in a research design, namely a research question, objectives, method, theoretical framework and validity, are not determined in a fixed specific order. However, the research process is not linear but moves back and forth between the various components of the research design (Maxwell, 2013, p. 3). This offers the opportunity to integrate new knowledge, reflect on preliminary findings, and readjust each question to be relevant to the studied phenomenon. This approach appears particularly relevant for this study, which did not start with a specific hypothesis but aimed to explore factors influencing pupils' participation in free school meal schemes by investigating pupils', school staff's and parents' experiences with food provision.

The choice of using an approach inspired by grounded theory (GT) in the research design appears in line with this purpose.

#### 3.1.2 Grounded theory approach

Grounded theory is defined as "a rigorous method of conducting research in which researchers construct conceptual frameworks of theories through building inductive theoretical analyses from data and subsequently checking their theoretical interpretations. Thus, researchers' analytic categories are directly "grounded" in the data" (Charmaz, 2014, p. 343). The GT approach consists of data collection and analysis guidelines, which are both systematic and flexible, intending to construct concepts and theories from the data. Grounded theory has the objective to develop an explanatory theory of fundamental social processes in the natural environments of the people studied (Starks & Brown Trinidad, 2016).

To explore multiple dimensions of the social processes in GT it is often used a theoretical sampling of between 10 to 60 participants with differing experiences (Starks & Brown Trinidad, 2016).

#### 3.1.3 Social constructivism

In grounded theory, the social constructionist approach of Charmaz is currently recommended (Charmaz, 2008, 2014). According to Charmaz (2008, p.398), a researcher that has developed further the grounded theory approach proposed by Strauss and Corbin (Strauss & Corbin, 1997), social constructionism "includes examining (1) the relativity of the researcher's perspectives, positions, practices, and research situation; (2) the researcher's reflexivity; and (3) depictions of social constructions in the studied world".

The social constructivist grounded theory presented by Charmaz (2008) is based on four principles. These principles are to "treat the research process itself as a social construction", "scrutinize research decisions and directions", "improvise methodological and analytic strategies throughout the research process", and "collect sufficient data to discern and document how research participants construct their lives and worlds" (Charmaz, 2008, p. 403). The first strategy means that the researcher considers new upcoming information and new interpretations while analyzing the data. These processes and results depend on the researcher's epistemological view, which position the researcher has relative to the participants, and how the research situation is constructed. The second principle means that the researcher is his/her own measuring instrument. The third principle indicates that the research process is a constant learning process where the researcher improves his/her methods and strategies. The fourth principle means that the researcher needs to be able to familiarize him-/herself with the standpoints of the participants. The researcher is hence focusing on "what" and "how" questions, which are the basis for answering the "why" questions. With the social

constructivist grounded theory approach, the researcher can conduct thick analyses and construct conceptual understanding (Charmaz, 2008).

One crucial core element in grounded theory is that the analysis goes alongside the data collection. That means that the analysis is starting immediately with data collection, and already after a few interviews, possibly, new insights can be taken into new interviews. Writing memos, which are informal analytic notes, is an essential element in GT to help to analyze data early in the research process (Charmaz, 2014, p. 162).

#### 3.2 Methods for data collection

Participant observations and focus group interviews were the methods used for data collection. In addition, the project descriptions written by the schools to get funding from the Oslo Municipality were utilized as a source of information.

Observation is an important method in qualitative research where the observer uses his/her five senses to recognize actions or interactions in the field, usually by taking notes or recording them (Creswell & Poth, 2018, p. 166). Thus, through participant observation, the researcher has "the opportunity to learn through seeing, listening, talking, discussing, feeling, touching, moving and doing" (Moen et al., 2015, p. 348). This method is also suitable for studying a group of people and their routines and culture by actively participating in their daily activities and interactions (DeWalt & DeWalt, 2011). Observation is a method in which the researcher studies social situations and systematically observes which actions participants in the field perform (Thagaard, 2018, p. 63). The purpose of participant observations in the current study was to get an insight into how the food was produced, what was going on during the school meals and how pupils and school staff interacted and related to each other in these social situations.

According to Kvale and Brinkmann, an interview is where knowledge is constructed in the interaction between the interviewer and the interviewee (Kvale et al., 2015, p. 22). Focus groups are suitable for gathering information about opinions and getting a better understanding of the participants' perceptions, thoughts, and feelings about an issue (Krueger & Casey, 2015, p. 2). The typical characteristics of focus groups are that the researcher achieves a better understanding of different aspects of a phenomenon through discussions focused on a specific phenomenon or issue. Focus group interviews have specific characteristics regarding the number of participants and the use of the moderator. Although

the number of participants can vary, most of the literature indicates that focus groups need to have about 6-8 participants, and the use of a moderator, in addition to a researcher, is also recommended (Krueger & Casey, 2015, p. 6). As this prerequisite was not always reached (the number of participants in 17 out of 20 interviews was less than four), in this study, we use in addition to "focus groups interviews" also the expression "group interviews". Moreover, one of the interviews was with only one participant. The possible limitations of variation in the number of participants will be brought up in the method's discussion (see chapter 5.2.2).

#### 3.2.1 Development of the observation- and interview guides

#### **Observation guide**

The purpose of an observation guide is to have a plan about what is to be observed to ensure to make analytical descriptions of the situations we observe (Thagaard, 2018, p. 69). Thagaard describes that observations can be categorized as: who does what with whom, what the interaction is about, and finally, why the participants interact and what skills they bring into the interaction (Thagaard, 2018).

The grounded theory perspective's basic thinking is that concepts and theory should grow naturally out of the data (Fangen, 2010, p. 34). With this principle in mind, that research questions and what is observed can change in the research process, the questions in the observation guide were adjusted a bit in the process. After the first observation of the school breakfast, for instance, it was discovered that what some pupils chose from the buffet was not so healthy. For example, a girl had a slice of polar bread with five packs of butter on it. Another girl ate 4 slices of bread with only jam, whereas others ate only the unhealthy varieties of cereals. Thus, the focus in the following observations was not only on the offer of food but also on what the pupils actually had on their plates. It was also relevant to focus on how something was done, like the food production and the organization of the food servings. Examples of what was observed included the eating environment, what kind of food, how it was served, and how the pupils socialized during the meal. The full observation guide is provided under Appendix 16.

#### Interview guide

When developing the interview guides for focus groups (see Appendix 7-15), it was important to ask questions that could answer the research questions and key topics in the study and at

the same time provide the flexibility to change the direction or pursue new topics that the interview participants could come up with (Thagaard, 2018, p. 95). Therefore, a semi-structured interview guide was developed, where questions could change in order and where it was possible to adapt the questions to the different groups and add new topics, if relevant.

Developing the interview guides began with discussing the needs and topics of interest with the Agency for Health in Oslo Municipality and the supervisors from OsloMet. The interview guides' central questions were aimed at capturing experiences and views. Some "probes" were also prepared, which are questions or comments that express that we are listening, encouraging the interviewee to deepen more (Thagaard, 2018, p. 96). In line with a GT approach, the interview guides were adjusted before new interviews were conducted. For example, one additional question was added after some primary school pupils expressed the challenge of getting up earlier to reach the school breakfast.

#### 3.3 Sampling and recruitment

The sampling strategy in qualitative studies differs from strategies used in quantitative research. In qualitative research, a purposeful sampling includes people who have characteristics or experiences that are strategically relevant concerning what is being investigated and who could shed light on relevant issues (Thagaard, 2018).

Schools participating in Oslo Municipality's pilot project were invited to participate in the study. Of the three schools, two agreed to participate.

In the grounded theory approach, a theoretical sampling with maximum variation is commonly used to examine multiple dimensions of the social processes and what the researcher is interested in using informants with a wide range of experiences (Starks & Brown Trinidad, 2016, p. 1375). Following the GT approach, theoretical sampling was chosen, identifying groups with different experiences with the free school meal schemes in the two schools. In this current study, three different groups were targeted at each school: pupils, school staff and parents. In one of the schools, we interviewed two groups of pupils: one that produced the food and another group, consisting of representatives from the pupils' council, who were participating in the school lunch and eating the meals. One key aspect in theoretical sampling is to start analyzing while gathering data, which means focusing early for additional information needed, and to collect more data for elaborating and refining categories following emerging leads in the analysis to develop a theory (Charmaz, 2014, p. 192). As new

investigative aspects could emerge from the interviews, the exact number of interviews was not decided beforehand. However, considerations were made for adapting this approach to the time and resource constraints of a master's thesis. The plan was to conduct three to five focus group interviews with pupils from each school, one focus group interview with school staff per school, and one in-depth interview with the school management on each school. During the research process, it was also decided to conduct three to four focus group interviews with parents from each school. To get the topic covered from as many sides as possible, and as part of a GT theoretical sampling strategy, it was also desirable to include pupils who did not use the school meal scheme. After including all these different samples, it was expected to have reached adequate saturation. Saturation is reached when no new information emerges from the data (Krueger & Casey, 2009, p. 21; 2015).

#### **Recruitment procedures**

Recruitment of the informants took place by first establishing contact with the principals or assistant principals at the two schools via e-mail with an information letter about the project (see Appendix 2). The school management at both schools gave permission, approval and consent to the school's participation in the research project. Furthermore, in a digital meeting with the school management, it was discussed how the observations and focus group interviews would be carried out in practice and how parents could be recruited.

All participants from the three samples received a customized information letter (see Appendix 2-6) with the main purpose of the study, and information about data collection procedures and the right to voluntarily withdraw from the study at any time. The last part of the information letter included the consent form with the signature of the participants. It was also obtained consent forms from the parents for all participating pupils because the pupils were below 16 years of age (Fossheim et al., 2013, p. 136). For each group interview, two to ten people were recruited. The inclusion criteria are described for each sample.

#### 3.3.1 Sampling of pupils

The school management of the two schools contacted the teachers for 5<sup>th</sup> to 7<sup>th</sup> grade in the primary school and 8<sup>th</sup> to 10<sup>th</sup> grade in the secondary school to get help in recruiting pupils. It was desired to obtain a gender balance with the strategy to recruit two pupils from each class, a boy and a girl, whom the teachers believed could talk on behalf of their class, and who

wanted to participate in the focus groups. In total, 47 informants were contacted by the master's student, and 39 participated.

#### 3.3.2 Sampling of the school staff

The study population in this sample consisted of relevant school staff who had practical experience with the school meal project, e.g. teachers, principals, and those responsible for canteens/cooking. The school management recruited school employees. In total, 13 informants were contacted, and 12 participated in the study.

#### 3.3.3 Sampling of parents

The study population in this sample consisted of parents recruited through the school management by inviting them by e-mail. Inclusion criteria were parents who had children who were offered free school meals. It was desirable to include parents who represented a balance of pupils from all school levels. Initially, it was intended to include only parents from the Parents' Council's working committee (FAU) and the class contacts, but it was challenging to recruit enough participants. In total, about 660 parents were invited, and 15 participated.

#### 3.4 Piloting

To avoid unclear language, it is recommended to review the questions by people similar to the informants (Krueger & Casey, 2015, p. 42). Before the first focus group, the interview guides were discussed with the Education Agency and the Agency for Health in Oslo. Also, the questions from the interview guides were discussed with two teachers working in other schools than the pilot schools. One pilot interview with a 9<sup>th</sup> grade pupil from another school was conducted to test the pupils' interview guide questions. Another pilot interview was performed with one parent to test the parents' interview guide.

#### 3.5 Conducting participant observations and the interviews

Three days of observation during school breakfast at the primary school and five days of observation of lunch and food production at the secondary school were conducted. The Covid-19 pandemic created great challenges to the data collection. The observations and interviews had to be postponed several times because the entire classes had to be quarantined, and the schools had very strict Covid-19 restrictions. As a result, the first four interviews were conducted face-to-face at the secondary school, while the remaining interviews were

conducted digitally over zoom. Table 1 provides a more detailed overview of the interviews, including the number of participants, sex, duration, setting, and whether an assistant moderator was present.

| Interview            | Number of               | Grade  | ade Sex   |            | Duration | Setting | Assistant |  |
|----------------------|-------------------------|--|-----------|------------|----------|---------|-----------|--|
|                      | participants            |  | Male      | Female     | (min)    |         | moderator |  |
|                      | Pupils secondary school |  |           |            |          |         |           |  |
| 1                    | 9                       | 9 <sup>th</sup>                                    | 5         | 4          | 44       | School  | Yes       |  |
| 2                    | 9                       | 8 <sup>th</sup> ,9 <sup>th</sup> ,10 <sup>th</sup> | 1         | 8          | 36       | School  | Yes       |  |
| 3                    | 9                       | 8 <sup>th</sup> ,9 <sup>th</sup> ,10 <sup>th</sup> | 1         | 8          | 41       | School  | Yes       |  |
|                      |                         | Pu   | pils prim | ary schoo  |          |         |           |  |
| 4                    | 2                       | 5 <sup>th</sup>                                    | 2         | -          | 32       | Zoom    | Yes       |  |
| 5                    | 3                       | 5 <sup>th</sup>                                    | 1         | 2          | 28       | Zoom    | No        |  |
| 6                    | 3                       | 6 <sup>th</sup>                                    | -         | 3          | 47       | Zoom    | No        |  |
| 7                    | 2                       | 7 <sup>th</sup>                                    | -         | 2          | 34       | Zoom    | Yes       |  |
| 8                    | 2                       | 7 <sup>th</sup>                                    | 2         | -          | 44       | Zoom    | No        |  |
|                      |                         | Pare   | nts secor | ndary scho | ool      |         |           |  |
| 9                    | 3                       | -  | -         | 3          | 46       | Zoom    | No        |  |
| 10                   | 3                       | -  | 1         | 2          | 46       | Zoom    | No        |  |
| 11                   | 2                       | -  | -         | 2          | 53       | Zoom    | No        |  |
|                      |                         | Par  | ents prin | nary scho  | ol       |         |           |  |
| 12                   | 2                       | -  | -         | 2          | 44       | Zoom    | No        |  |
| 13                   | 2                       | -  | -         | 2          | 36       | Zoom    | Yes       |  |
| 14                   | 1                       | -  | -         | 1          | 22       | Zoom    | No        |  |
| 15                   | 2                       | -  | 1         | 1          | 31       | Zoom    | No        |  |
|                      |                         | Sta  | ff second | lary schoo | bl       |         |           |  |
| 16                   | 2                       | -  | -         | 2          | 52       | School  | Yes       |  |
| 17                   | 3                       | -  | 1         | 2          | 36       | Zoom    | No        |  |
| Staff primary school |                         |  |           |            |          |         |           |  |
| 18                   | 2                       | -  | 1         | 1          | 51       | Zoom    | Yes       |  |
| 19                   | 3                       | -  | 1         | 2          | 26       | Zoom    | No        |  |
| 20                   | 2                       | -  | 1         | 1          | 60       | Zoom    | No        |  |

Table 1. Detailed information about the conducted focus group interviews

#### 3.5.1 Conducting participant observations

The participants were studied in different settings like breakfast, lunch, and during teaching hours in food production. The observations lasted between 30-45 minutes for the actual meals (breakfast and lunch). The observations for the elective subject, which included the food production, serving, cleaning and washing dishes, lasted between 90-120 minutes.

In this study, the researcher participated as an observer, meaning participating in activities at the site. Creswell and Pott (2018, p.167) describe the participant role as more important than the researcher role to gain insider views and subjective data. It may be distracting to take notes when the researcher is integrated into the activity. Therefore, taking notes was held to a

minimum under the observations. For example, it was easy to take notes during the food production when the pupils were busy with the tasks and did not realize they were observed. The master's student did not take notes while walking around in the kitchen, having informal conversations with the pupils and the teacher. A similar approach was used when the master's student was doing observations at the primary school while having conversations and eating breakfast together with the pupils. Observation notes were written down as soon as possible after each observation to remember as many details as possible.

#### 3.5.2 Focus group interviews

In the focus group interviews, the researcher promotes self-disclosure among participants to hear what people think and feel. This should happen in a free, open-minded and nonjudgmental environment where the participants feel comfortable (Krueger & Casey, 2015, pp. 4-5). For this reason, the researcher tried to create a trust-inspiring situation from the moment when the participants entered the room (whether physical or digital) where the interviews were conducted. This included small-talk and giving adequate information at the beginning of the focus groups about the study, confidentiality, and encouraging to talk as freely as possible.

At the secondary school, where pupils were producing the lunch, the participants were divided into separate focus groups to hear different perspectives and avoid that pupils did not answer honestly because of loyalty for the pupils who were producing the meals. Two focus group interview with pupils from the elective subject and one focus group interview with pupils from the pupils' council were conducted.

Before the participants arrived, "name tents" for each pupil who was expected to attend were prepared and placed on the tables. The pupils were assigned predetermined places because of Covid-19 provisions, separating the grade levels with one-meter distance.

When conducting focus group interviews, it is recommended to use a moderator and an assistant moderator (Krueger & Casey, 2015). The master's student was the moderator having the main conversation with the participants to keep the discussion flowing and make sure that all the questions from the interview guide were discussed. One supervisor acted as assistant moderator in one of the group interviews. The assistant moderator in the remaining interviews was an alumni master's student who had experience with focus group interviews. The main tasks of the assistant moderator were to take notes throughout the focus group interviews

about the participants' nonverbal communication and to identify which participant was speaking chronologically by noting the first few words or main messages. This was useful under the transcription process. In addition to that, the assistant moderator was participating in the debriefing session together with the moderator carried out immediately after the focus group interviews, a 5- to 10-minutes oral review.

With the introduction of stricter infection control measures, focus groups planned with pupils, parents, teachers, and other school staff, were conducted digitally via Zoom, a web-based video conferencing tool. All participants received an e-mail with a link with an invitation to a scheduled OsloMet Zoom meeting. At the agreed time, the participants were able to log in with the link. To ensure that only participants could join the meeting, a waiting room was created where the moderator had to let the participants into the digital meeting room. To handle the participants more easily, a maximum of 2-3 participants were invited per group interview. The group interviews were recorded on the Zoom platform.

#### 3.5.3 Audio recording

All focus groups were recorded with a digital audio recorder (model: Zoom H4n Pro). MP3 files were stored on an SD card and as soon as possible downloaded to the researcher's computer. The digital focus groups were recorded over zoom. Only audio records were stored, while the video records were deleted immediately after the transcription.

#### 3.5.4 Transcription

Transcription means transforming spoken language into written language, and Kvale & Brinkman (2015, p. 205) describe transcription as weakened decontextualized renditions of live interview conversations. This means that much information about body language, tone of voice, intonation and breathing is getting lost in the transcription process. The interviews were transcribed verbatim to retain as many details as possible to ensure reliability. This included "ehm" and longer breaks and emotions like laughter and other descriptions of nonverbal language. However, it was not used a very detailed transcription procedure based on Kvale and Brinkman (2015, p. 208-209), who indicate that it is not always necessary to transcribe exactly and complexly with all the details, especially when the purpose of the project is not linguistic analysis but rather analysis of the meaning content.

The software F4 was used to transcribe the interviews, and a foot pedal (Altoedge) was used to make the transcription process more time-saving. The data were anonymized immediately

by using pseudonyms while transcribing the interviews and by writing observation notes. Each participant got a code to ensure anonymity. For example, the code JN4 (*j*ente *n*iende trinn nr.4) stands for a girl in the ninth grade and pupil number four. The code key was stored separately from the dataset.

### 3.6 Analysis

The analysis was based on the interview transcripts, observation notes, the school's project descriptions, and memos. The transcripts and observation notes amounted to a total of 350 pages of data material. After transferring the documents into NVivo 12, a qualitative data analysis computer software, the data were analysed with a grounded theory approach.

Grounded theory is an inductive method encouraging researchers to start their analysis without any preconceptions. GT coding helps to conceptualize views, actions and processes in the data by breaking down the text into smaller components (Charmaz, 2014, p. 113). Coding helps to see what is happening in the data and start thinking about the meaning of the data. Charmaz (2014) uses two main phases in her constructivist GT approach: initial and focused coding. The initial phase consists of naming each word, line or segment in the text. In the second phase, focused coding, the researcher selects the most important or frequent initial codes from the data. This helps to handle and analyse large amounts of data (Charmaz, 2014, p. 113). Furthermore, the analysis process consists of constant comparison of coding and analysing data.

The first step before coding the interviews and observation notes was to get familiarised with the data. All documents were thoroughly read analytically to make sense of the data and find meanings in what the participants had told in the interviews.

### 3.6.1 Initial coding

In the initial phase, an attempt was made to use line-by-line coding. Using line-by-line coding helps to delve deeper into the data and examine each text fragment (Charmaz, 2014, p. 121). Line-by-line coding was used in the first interviews, and gradually segments or smaller sections were coded for all the other interviews. According to Charmaz "this type of coding helps to define implicit meanings and actions, gives researchers directions to explore, spurs making comparisons between data, and suggests emergent links between processes in the data to pursue and check" (Charmaz, 2014, p. 121).

26

Some examples of initial codes which emerged early in the analysis process were: "do not need eating alone", "eating with someone", "forgetting the foodservice day", "talking with someone", "going to the shopping center", "eating healthy food", "hanging out with friends", "experiencing bullying", "experiencing packed lunches as boring", "seeing healthy food as unpopular", "seeing unhealthy food as popular", "throwing away food that does not taste good". The codes in the data were continuously compared to new data from new interviews looking for similarities and differences. After coding the first interviews, it became easier to code new data by using, when possible, already existing codes. When new codes emerged from the data, previous interviews were re-read, searching for the same patterns. This type of coding led to a theoretical categorisation of the initial codes.

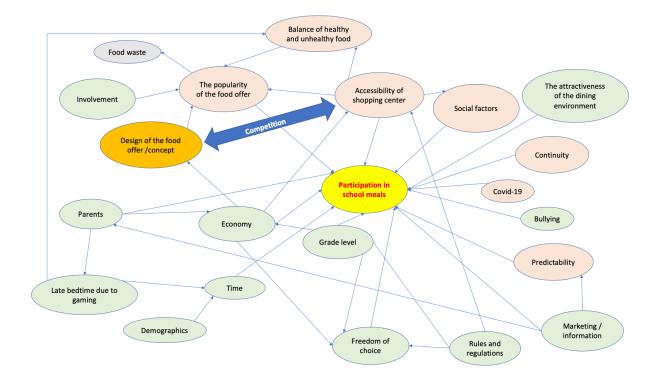
### 3.6.2 Focused coding

Focused coding is the next phase that includes studying the initial codes, sorting and selecting them, and synthesize, analyze and conceptualize the data (Charmaz, 2014, p. 138). These two phases are not entirely separate from each other in that one start already with focused coding after coding the first interviews. This is followed by initial coding with new interviews and simultaneous sorting of existing initial codes. Focused codes can emerge from those initial codes with more importance or meaning than other codes (Charmaz, 2014, p. 138). Some examples of initial codes which were designated as focused codes were: "do not need eating alone", "eating with someone", "going to the shopping center", "experiencing packed lunches as boring", "seeing healthy food as unpopular", "seeing unhealthy food as popular".

Charmaz (2014) also describes focused coding as concentrating on which initial codes are most useful and then test them against the data, get a higher level of codes, and think about what larger story these codes are telling. These focused codes were helpful to categorize the data. While doing focused coding, memos were written to identify interesting thoughts and aspects that could lead to emerging themes in the data.

### 3.6.3 Making sense of the data

By reading and sorting codes and coming up with categories, all data was reviewed several times, and mind-mapping was used to draw connections between codes emerging from the analysis. Figure 1 provides the mind map developed under the analysis and gives an overview of the factors affecting pupils participating in the free school meals.



*Figure 1.* Factors for pupils' participation in the school meal schemes and their relationships to each other

# 3.7 The researcher's role and preconceptions

When Kvale et al. (2015, p. 84) states that a research interview is to be regarded as a craft, they emphasize the importance of Gadamer's view that people can only recognize the social and historical world through understanding and interpretation, which in turn is based on preconceptions and prejudices. The researcher's preconceptions affect how he/she views the world (Kvale et al., 2015). Personal goals, assumptions, and previous experiences influence the research, and excluding these is neither possible nor necessary (Maxwell, 2013, pp. 26-27). A researcher's preconceptions become part of data interpretation and the development of new understanding. Moreover, new understanding will further affect the preconceptions the researcher has. There is an alternation back and forth between understanding and preconceptions, called the hermeneutic circle (Debesay et al., 2008; Fangen, 2010, p. 47).

It is important to reflect upon and being explicit about the role of the researcher. When the researcher knows the environment from before, he/she can develop an understanding "from inside", but it can also happen that the researcher is not aware of what is different from his own experiences and become less open to nuances (Thagaard, 2018, p. 190).

As a master's student in public health nutrition, my professional knowledge and positive experience with school meals when growing up in Germany may have influenced my assumptions and attitudes to my research project. When I went to school, I had the opportunity to eat in the school canteen that prepared the food, and there was a selection of three different warm lunch dishes every day. This previous experience can qualify me as an "outsider" regarding the experience with the Norwegian school meals. However, as I have been living in Norway for a long time, I have gained a good knowledge of Norwegian society, including the school system, and regard myself as an "insider" as well.

Throughout my studies, I have been convinced that free school meals as a public health promotion intervention can positively affect children's physical and mental health and contribute to level out social inequalities in diet and health. Although I tried to be as openminded as possible, expectations that the participants would come up with more positive than negative experiences with the school meal scheme might have influenced the development of the interview guide, how questions were asked in the interviews and how results were interpreted.

### 3.8 Ethical issues

In qualitative research, it is especially important to be aware of one's own ethical research practice and follow the research ethics guidelines. In projects that involve the processing of personal data, such as in this master's thesis, the projects must be reported to the Norwegian Center for Research Data (NSD) (Thagaard, 2018, pp. 20-22). NSD authorized the study in September 2020. Some changes were made to the study design, and several change notifications were submitted to NSD, which were approved (see Appendix 1). OsloMet's internal ethical guidelines and the guidelines prepared by the research ethics committees were followed (OsloMet, 2016).

Thagaard (2018) describes the three most important ethical principles: informed consent, confidentiality and assessment of the consequences of participating in research projects. The participants gave written consent before participating in the study after being informed by letter and oral information before the interviews (see Appendix 2-6). As described in the informed consent form, only the master's student and supervisors had access to the data material from the research project. Confidentiality was ensured by anonymizing the participants under the transcription process. The code key was stored in paper format, separate from the data material. Due to closed university premises during the Covid-19

pandemic, both the code key and the signed consent forms were kept locked up at the master's student's home.

There are special ethical challenges regarding online research, which is discussed under chapter 5.2.4.

# 4 Findings

In this chapter, the study's findings will be presented based on the analysis of the focus group interviews, participant observations and the project documents from the schools. First, a description of the samples included in the study is presented, followed by a description of the two school meal models that the schools had chosen in the pilot project. When it was necessary, a distinction was made between the breakfast and lunch model.

### **Characteristics of the samples**

Selected socio-demographic characteristics of the samples in the study are presented in Table 2.

Twenty focus group interviews/group interviews with in total 66 participants were undertaken, including eight interviews with pupils (n = 39), seven interviews with parents (n = 15), and five interviews with school staff (n = 12). Of the 39 pupils, 12 were boys, and 27 were girls. Furthermore, 12 were from primary school (5<sup>th</sup> - 7<sup>th</sup> grade) and 27 from secondary school (8<sup>th</sup> -10<sup>th</sup> grade), 24 were Norwegian and 15 had an immigrant background. Of the parents, 7 had children in primary school and 8 had children in lower secondary school. Furthermore, 2 were men and 13 were women. Twelve parents who participated in the study were Norwegian, whereas 3 had an immigrant background, one from outside Europe. The primary school staff consisted of the principal, assistant principal, teachers, chef, and caretaker. The school staff of the lower secondary school consisted of the assistant principal, teachers, and the canteen teacher responsible for food production. Of the school staff, 4 were men and 8 were women.

|                      | Number of<br>participants<br>total | Number of<br>interviews<br>total | Secondar | v school | Primary      | school     |
|----------------------|------------------------------------|----------------------------------|----------|----------|--------------|------------|
|                      | total                              | total                            |          | -        | Participants | Interviews |
| Pupils               | 39                                 | 8                                | 27       | 3        | 12           | 5          |
| Boys                 | 12                                 |                                  |          |          |              |            |
| Girls                | 27                                 |                                  |          |          |              |            |
| Norwegian            | 24                                 |                                  |          |          |              |            |
| Immigrant background | 15                                 |                                  |          |          |              |            |
| Parents              | 15                                 | 7                                | 8        | 3        | 7            | 4          |
| Men                  | 2                                  |                                  |          |          |              |            |
| Women                | 13                                 |                                  |          |          |              |            |
| Norwegian            | 12                                 |                                  |          |          |              |            |
| Immigrant background | 3                                  |                                  |          |          |              |            |
| School staff         | 12                                 | 5                                | 5        | 2        | 7            | 3          |
| Men                  | 4                                  |                                  |          |          |              |            |
| Women                | 8                                  |                                  |          |          |              |            |
| Norwegian            | 12                                 |                                  |          |          |              |            |
| Immigrant background | 0                                  |                                  |          |          |              |            |
| Total                | 66                                 | 20                               | 40       | 8        | 26           | 12         |

# Table 2. Sociodemographic characteristics of the participants

# 4.1 Decision about what meals to provide and organization of the meals

As mentioned, the two schools opted for two different meal programs. The primary school decided to serve breakfast, while the lower secondary school decided to provide lunch. In the following section, more information about the reasons for the choice and the organization of these two meal programs will be provided.

# 4.1.1 The children need energy in the morning: the breakfast meal

The primary school's management reported in the interview that they conducted a needs analysis before they applied for the school meal project and found that there was the greatest need for breakfast. The needs analysis showed that many of the pupils from 5<sup>th</sup> to 7<sup>th</sup> grade did not eat breakfast at home, whereas most of the pupils tended to bring a packed lunch:

It is so exceptional that pupils do not bring lunch (...), it is a district where it is said that the conditions for growing up are less resourceful than many other places. But packed lunches they do have. And they are nice, I must say, that even though pupils *have parents who may be weaker financially, they have nice packed lunches* ... (School management)

Indications that pupils may skip breakfast where stated in the school's project description, stressing that "pupils could be tired and often seemed to have problems learning and interacting in the morning". By opting for providing a good and nutritious breakfast, "pupils will get energy for the day through the food served and experience care from staff through informal, equal meetings around the breakfast table." It was estimated that about 160 pupils would be offered school breakfast during the project period. In the planning phase of the project, the primary school established a breakfast committee consisting of three pupils, one from each grade from 5<sup>th</sup> to 7<sup>th</sup> grade. The school management and these three pupils had a meeting with the Agency for Health in Oslo where they came up with the suitable model and how the school meal should be nutritionally composed to follow the guidelines for food and meals in school. After this meeting, the school management and the breakfast committee conducted a digital survey among all pupils about what they wanted for breakfast:

We went to a meeting. I do not quite remember where it was. It was a bit like a complicated meeting, but we talked about how it would be to have lunch or if we should have breakfast. And then after that we went to school, then we discussed what we should have. Then we thought we could have a survey on who wants what. Ask questions, and then it came to the point that we can have it and toast and lots of good food, really. It became a survey of what we should have. (Boy, breakfast committee, 7<sup>th</sup> grade)

The school management emphasized that involvement was an essential factor in ensuring that pupils adapt and participate in a free school meal program:

We believe that we would not have had such a positive effect on it, and we believe that a bit of the success factor here is that we asked the pupils and teachers first what we need if we are to serve something. What do we need here? And it was breakfast, and it was so unambiguously that it was what we needed. (School management)

During the school years 2019/2020 and 2020/2021 breakfast was served four days a week, Tuesday to Friday, from 8 am to 8.25 am, in the school's assembly hall. However, from March 2021, due to the Covid-19 restrictions (which were still ongoing at the time of the data collection), the three grades had to be separated so that the 5<sup>th</sup> and 6<sup>th</sup> grades received breakfast service one day a week each and the 7<sup>th</sup> grade received breakfast two days a week. The school management explained that a school assistant and two environmental therapists were responsible for the planning and serving the breakfast at the beginning of the pilot project. According to school employees, the primary school had a food budget of NOK 12 per pupil and breakfast meal, which they received from the Agency for Health in Oslo. From August 2020, the school employed a professional chef to prepare and serve the breakfast and responsible for meals during the before- and after-school program (AKS). When the study was conducted, the chef and a school assistant were responsible for preparing and serving the school breakfast. The assistant's main task was to look after the children, be social with them and support the chef when needed.

The observations showed that the breakfast buffet included mainly slices of wholegrain bread, but also polar bread (Scandinavian soft flatbread), varied toppings like jams in portion packs (strawberries and blueberries), mackerel in tomato sauce, caviar and chicken pâté in portion packs, cold cuts (pastrami chicken sausage (halal), salami), yellow and brown cheese slices, a small bowl with homemade chicken salad (halal), mayonnaise and sliced fruit and vegetables (apple, orange, grapes, carrot), homemade fried cereals, raisins, and two large glass bowls with «honey grains» and «Cheerios» as breakfast cereals. There was also milk, orange juice, apple juice, large water carafes and a small bowl of vanilla yoghurt.

### 4.1.2 Providing a social and healthy alternative to "shopping center" food: the lunch meal

The other school participating in the study, a secondary school, chose lunch for the pilot project. The reason for this choice was stated in the school's project description used for applying for the grant. The grant stated that "it had become a trend for many of the pupils to go to the nearby shopping center during the lunch break to buy food. Thus, the pupils left the school area during the break instead of sitting down and eating together around a table." Furthermore, "the goal was to offer a healthy meal and strengthen the social environment through socializing around a dining table." It was estimated that about 170 pupils would be offered school lunch during the project period. According to the school employees, the secondary school had a food budget of NOK 15 per pupil and lunch meal, which they received from the Agency for Health in Oslo.

To ensure that the food was enjoyed and eaten by the majority of pupils, the school involved pupils in the elective subject weekly by co-determining the menu. In addition, all pupils were

34

invited to participate in a survey and indicate their food wishes in the beginning of the school meal project. As stated by some of the pupils:

We are allowed to contribute to the decisions through a brainstorming session. We are also allowed to have some of that responsibility for the content of the menu. Because we as adolescents have a lot to say about it. (Girl, elective course, 9<sup>th</sup> grade)

We got such forms where it was like we had to tick off what we think was good and stuff. So it seems like they put much work into it. Yes. (Girl, 9<sup>th</sup> grade)

According to the school management and the canteen manager, the school served lunch twice a week, and the food menu varied from week to week and could consist of both hot and cold food. For practical reasons, the school canteen only offered the same food for both days. A food and health teacher, who was also the canteen manager, and pupils from the elective subject "Production of goods and services" prepared and served the school meals. Food production and serving were organized through this subject. The pupils were divided into two groups. Food production was carried out on Monday and Tuesday morning, while lunch was served on Tuesday and Wednesday from 10.45 am to 11.30 am. The Monday group's pupils served, cleaned, and did the dishwashing on Tuesday, while the Tuesday group was carrying out the serving on Wednesday. There were no changes in the arrangement since the Covid-19 pandemic, except that there were three instead of two food stations, and the 10<sup>th</sup> grade was served outside the auditorium.

From the interviews with the pupils and the canteen manager, it emerged that dishes served for lunch during the school meal project were, for example, tacos, au gratin cheese sandwiches, chili con carne, chicken salad, pasta, meat dishes, quesadillas, fish burgers, smoothie bowls, juice (sugar-free), burgers, yoghurt with fruit and berries, tomato soup, fish soup, and salad bar.

# 4.2 Who participated in the school meal scheme?

The question of who used the free school meals was not so easy to answer since both schools did not have such a monitoring system indicating how many pupils or who ate the free school meals, including socioeconomic data, although this was originally planned.

In their project description for the breakfast pilot, it was stated that "that parents had to report the pupils for six months at a time and the pupils had to confirm their presence by signing a name list at check-in". During observations, however, the pupils entered the breakfast room without registering their names. A follow-up dialogue with the school management clarified that registration was only done in the first year, but not in the second year.

Also in the case of lunch, in their project description, the school proposed to monitor participation in the school lunch by "having the teacher in the subject production of goods and services and an assistant logging the amount of food that was offered and inspecting teachers should log how many pupils that ate". The observations could not confirm this practice, and exact numbers about pupils' participation in the school lunch were unavailable.

It is therefore difficult to say if the school meal programs reached a wide range of pupils. Some indications however emerged from the interviews and the participant observations.

In the case of the breakfast offered by the primary school, the school management said that they knew which children were in need and tried to encourage them to participate in the school breakfast:

There were children who were recommended to participate. The social worker or one of us or the contact teacher called home and said that perhaps this would have been a good measure for this pupil. (School management)

Also, one parent indicated that the free breakfast could be positive for some families:

(...) It varies a lot from which home the children come from, and it is easier for me and maybe you too, when we sit here, when we have several types of toppings in the fridge. But it may be that there are families who really need a cup of yoghurt or cornflakes with milk because the economy is very varied in this part of town, I must say again. So, I think it's a very nice measure. (Mother, informant 10)

From the interviews with the school management, it was mentioned that in the primary school, there were significantly more pupils who participated in school breakfast before the Covid-19 restrictions:

When it was the 5<sup>th</sup> to 7<sup>th</sup> grade [served together], there were up to 100 children on average each morning. (School management)

From the employee interviews, it appeared that there were both Norwegian pupils and pupils with an immigrant background attending the school breakfast.

Of the pupils who I last saw or whom I know were there last time, it was a very good mix of pupils with parents from different countries. So, this mix of pupils I think it was very equal. (Tobias, teacher)

Right now, I have a project to write Merry Christmas in different languages on the window. And then we have had a bit of that kind of talk about the different nationalities who actually sit and eat with us. (...) So, I started writing "Merry Christmas" in different languages and then I found out that there are many nationalities here. (Pia, school staff)

Observations also confirmed that pupils from different ethnicities were participating in the school breakfast. It could also be observed that there was an equilibrium between boys and girls.

In the case of the lunch offered by the secondary school, the school management indicated that the scheme migh attract pupils who would otherwise have been alone. However, who these pupils were and whether those who had the most need also used the scheme was difficult to answer:

You know what, it's so hard to speculate. We have some pupils that we would think should definitely be there, but we do not get [them] there. Eh, and it's a big job over time, I think. So it is simply too difficult to answer. I think that we catch some pupils with this offer who would otherwise be alone. And that is very important. Yes, so that it counteracts loneliness. But there are some pupils we think would take advantage of it but who do not participate. (School management)

In the interviews with both pupils and school staff, it was mentioned that it was mainly the 8<sup>th</sup> and 9<sup>th</sup> graders who participated in the school lunch, while the 10<sup>th</sup> graders participated to a much lower extent. Tenth graders were the group that most often left the school area during the lunch break.

*We have a large group of boys [10<sup>th</sup> grade] who do not eat in the canteen, period.* (Katarina, teacher)

Some of the pupils mentioned also economic constrains as one of the reasons for participating in the lunch.

And that there are those who may not be able to afford a packed lunch at home, may be able to get it at school, which is free. (Girl 11, 10<sup>th</sup> grade)

Hm (confirms) (Girl 15, 9th grade)

*Hm, Do you think that there are many who cannot afford a packed lunch?* (Researcher)

Yes (Girl 11, 10<sup>th</sup> grade)

More than we think. (Girl 18, 8th grade)

(Conversation focus group, secondary school)

# 4.3 Factors influencing the participation in the school meals

The findings from the study indicate that the reasons and influencing factors of whether pupils choose to participate in the school meal scheme are several. The analysis of the interviews and the participant observation indicate that the most important factors were the popularity of the food served, social factors like eating together with friends, and availability of alternatives like the local grocery store or fast-food restaurant. In the following sections, the different factors found in the study are presented.

# 4.3.1 Popularity of food

From the interviews with all pupils it emerged that essential criteria for being popular foods or liked foods were taste, appearance, smell, and selection, and the variety of choices.

#### Breakfast, primary school

According to focus group interviews with the pupils, the following food items were most popular for breakfast: "cereals Cheerios", cornflakes, yoghurt, polar bread, jams, yellow cheese, toast, and pancakes. The food items that were mentioned as unpopular were instead caviar, mackerel in tomato, liver pate, brown cheese, and wholegrain bread. In addition, many boys mentioned that they did not like fruits and vegetables. The interviews indicated that the pupils' preferences and the school staff's ideas of good food to serve may not necessarily be the same. For instance, the new chef in charge of the breakfast, regarded the most popular options like toast and pancakes as not that healthy and removed them from the breakfast buffet. Instead, the chef suggested to try other more healthy options like smoothie or yoghurt variations:

So, I think about something with these small glasses. I was wondering if I should have some homemade jam at the bottom, some natural yoghurt on top and this muesli of mine that is not popular, but that should go in [the buffet], on top of somehow. They're [pupils] going to look at it as a dessert, while I know this is a breakfast. (Chef)

Although some pupils were positive with the healthy breakfast buffet selection, others would not participate if their favourite dishes were not served anymore:

You got more people to eat breakfast when it was served toast. (...) Many came, which I had not seen there before. Then it [dining room] was really full. (Boy, 7<sup>th</sup> grade)

*I agree that they [classmates] came because of the toast (...) but now it is just ordinary food that you can just as easily eat at home.* (Boy, 7<sup>th</sup> grade)

We got pancakes once, and we thought we would start getting it every single time, but then we were wrong. So when we got pancakes, we said [to the classmates]: there are pancakes there, you should come. Next week, there were many people, but there were no pancakes there, so they all went. (Girl, 6<sup>th</sup> grade)

While the chef argued that these food items were removed from the buffet because of unhealthiness, the pupils thought the reason was Covid-19:

Yes, and then they [the classmates] may have gone to school breakfast because they could choose what they wanted. But now, they don't get it any longer [pancakes and toast] because of the corona. (Girl, 7<sup>th</sup> grade)

# Lunch, secondary school

According to focus group interviews with the pupils and the interview with the canteen manager, the following dishes served for lunch were popular with the secondary school pupils: taco, au gratin cheese sandwiches, chili con carne, chicken salad, pasta, meat dishes, quesadillas, fish burgers, smoothie bowl, juices, hamburgers, yoghurt with fruits and berries. Food mentioned by pupils as unpopular were instead fish, tomato soup (depending on what was in it), too many spices and too spicy food, too much onion flavour, and tomato flavour. Vegetarian food and salads were also mentioned as unpopular, particularly among many boys. An indication that the food was not popular was that it was not eaten or was thrown away. For example, it may occur that the chicken was picked out and eaten from the chicken salad, while the salad was left behind and thrown away:

I think a lot of food is thrown away. For example, when it's [served] chicken salad, they [the classmates] starting just eating the chicken. But they do not always eat the salad. You take the salad because of the chicken. (Boy, 9th grade)

*If they do not like it [lunch food], then they throw it right away. If it tastes bad in a way, they go to the bathroom and throw it away. Hidden.* (Girl, 10<sup>th</sup> grade)

The pupils who attended the elective subject indicated that they were supposed to prepare dishes that all pupils would like and to make the dishes healthier, for example by using wholegrain bread and fish instead of meat. The food's taste and popularity was important for their decisions:

We think about what is good. That it tastes good. What we like. (Girl, elective subject, 10<sup>th</sup> grade)

And what our friends really want, as well. (Girl, elective subject, 10<sup>th</sup> grade)

According to the interviews with pupils from secondary school, healthy food such as wholegrain bread and fish, were defined as unpopular with many adolescents. When asked what could make the lunch meals more attractive to eat, one pupil answered the following, while several agreed:

Not so damn healthy every time. It could have been [served] white hamburger bread somehow [today]. (Girl, 10<sup>th</sup> grade)

Even if the pupils were involved and could come up with suggestions for the menu, there was no guarantee that the food would be liked by the other classmates. According to school staff interviews, an example was that both fish burger and tomato soup were suggestions the pupils came up with themselves. While the fish burger was a huge success, the tomato soup was not that popular. The findings show that whether the food served is liked or not depends on whether the pupils who make the food can meet the tastes of other pupils, which, in turn, depends on the pupils' cooking skills. The canteen manager stated that when pupils were preparing the food, there could also be a chance that things could go wrong but that this also would be a part of a learning process. Examples that the taste and quality could vary came up also during the observations. Once it was registered that there were different tastes in the two pots with tomato soup. One pot had an intense chili taste, while the other was much milder and had less flavour.

It is interesting to notice that while several parents thought that there should be more than one option in the school canteen to meet more pupils' preferences, some pupils considered the food to be varied as the menu changed every week. The pupils expressed no negative opinion about that it was served only one dish and that the same food was served on both days:

I do not really have strong opinions about it. I think that's fine. (Girl, 9th grade)

Many of the pupils who usually participated in the school lunch mentioned that it was a very good alternative to the packed lunch:

There will be quite a lot of slices of bread, so I do not know how healthy it is, but eh, there will be many slices of bread. So it's a little nice to get something new, and that tastes a little more. Yes, a little more flavours and such. (Girl, 9<sup>th</sup> grade)

Several pupils mentioned that food which did not taste as expected or was not liked could be thrown away openly and visibly. In contrast, others did not dare to say that the food did not taste good and either left the plates standing without cleaning up or threw the food hidden on the toilet:

It is that you try the food, and then it is not good, and then you throw it away. Because many people do not take food because they do not dare to taste it, and then some people dare to taste, and then they throw it. (Girl, 9<sup>th</sup> grade)

From the interviews, it emerged that when food was served that pupils considered as too healthy and thus did not like it, more food waste occurred than when food was served that was more unhealthy but at the same time more popular. On the other hand, popular food quickly became empty:

It was like I said yesterday. It was completely empty. Just a little bit of salad again. So it went well. (Kari, teacher)

*It was surprising to me that the fish burger should be so popular.* (School management)

The pupils at the secondary school had a shopping center at a very short distance, and thus had easy availability of unhealthy food and drinks. The canteen manager and teachers reported that this availability resulted in a competition between the school canteen and the shopping center. This meant that although the school had an objective of serving healthy food, it felt challenging for the canteen manager and the pupils to follow this requirement:

It can be varied and not just healthy all the time, sort of varying. (Girl, 10<sup>th</sup> grade)

*Yes, and then it will be less popular [if too healthy], fewer people are coming.* (Girl, 10<sup>th</sup> grade)

Here, we have to see who our competitors [shopping center] are then. If I made, as I said to you, cabbage soup that nutritionally would be very good, it would be just you and me who ate it. So, I have to find-, you have to find food which appeals to that age group. (Kari, teacher)

When pupils were asked what they meant about the perspective that future free school meals should be meatless, quite different opinions emerged generating an engaging discussion. Some pupils from the elective subject believed that it would be negative to have only vegetarian food and argued that it would contribute to minor participation in the school lunch:

Then they [the classmates] don't come. (Boy, 9th grade, elective subject)

Yes, it's not going to be so popular. It gets very unpopular, I believe. [More pupils confirmed with Yes] (Girl, 9<sup>th</sup> grade, elective subject)

When for example, we had chicken salad, so it was just vegetarian again in a way [after serving the first round]. And then there were many who stood in the queue [to get food the second round], and when they saw that it was [just] vegetarian [left again] they left [the queue without food]. (Girl, 8<sup>th</sup> grade)

They suggested that some compromises could be reached:

*Can we, for example, let's say we still have meat, just that we don't have too much meat production.* (Girl, 9<sup>th</sup> grade, elective subject)

*Meat plays a role, but we must not produce too much meat. We still have to have some meat. For it attracts pupils.* (Girl, 9<sup>th</sup> grade, elective subject)

Very often, if meat is served the first time, then you eat and think it was good, then next time you also come regardless of whether it is meat or not. It's just that it [meat] gives a good impression about it then [more pupils confirmed]. (Girl, 9<sup>th</sup> grade, elective subject)

(Conversation in focus group, 9th grade, elective subject)

Other pupils, instead, answered that vegetarian food would be positive:

I am very fond of vegetarian food. (Girl 9th grade)

*Eh I hadn't really noticed that we hadn't had meat if we hadn't had it. So I actually eat what they make.* (Girl, 8<sup>th</sup> grade)

The canteen manager argued that the pupils would have eaten vegetarian food if it was communicated differently:

I think there are many ways to communicate it. You do not have to call it meat-free because it has been such a very negative charged word. But you can call it something else as well. (Kari, teacher)

Several of the parents showed similar views on this issue and many were very positive, while others expressed concern about the nutritional content and adequacy of vegetarian school meals as well as pupils' acceptance of vegetarian food and the aim or background of the requirement that meals has to be meat-free:

*Eh, I think maybe there are more who opt out of the food. We ate vegetarian here at home for one year. After one year so, we struggled to find eh, the variety. We tried it. I expected them to join. But, eh, I do not think everyone wanted to try.* (Mother, informant 5)

But then they do not eat it, if they are not used to vegetables in the first place, they do not go and take a vegetable salad or something else. It doesn't help. Then they must be used to and like it, and I would rather wrap and bake it into something else as an accompaniment or part of something. I think, also to bring in vegetables, like father 4 suggested, with lasagna and vegetables, and that you have baked it in something in a way. Then it's easier. Because you do not just start eating a green salad. It's many years of hard work from home, that is, to get a change in this. (Mother, informant 6)

It is probably a bit depending on people than maybe on age. Eh, that's what I'm thinking. Some of the ones [children] I have in lower secondary school will probably have tried meat-free alternatives as long as it tastes good. (Father, informant 14)

One thing that I think is that you are in a way forced, then you stand yourself and take responsibility because the children eat what the parents have made. The parents are adults who have made quite good and wise choices in their lives. So you can manage yourself in a way how you should have it in everyday life, I think. So it's just the way it's done. So bang, that's how it [school meals] should be [vegetarian]. (Mother, informant 10)

Yes, a bit of the purpose as well. For my part, I agree with everything there, which has been a bit forced. It can be a bit like that [negative]. I'm a little reserved too. But if I see that the purpose is well justified or I can identify with the goal, then I would, to a greater extent, think that it is okay. (Mother, informant 11)

### 4.3.2 Eating food together: the sociality of meals at school

### Breakfast, primary school

The most stated reasons for participating in school breakfast were eating and being social with friends and talking together with someone. Many of the pupils and parents said in the interviews that the pupils enjoyed eating breakfast with their friends more than having breakfast at home alone. In many cases, in fact, parents were leaving for work early or were still sleeping:

Because in the morning it is, like we as a family we are getting up at different times, so that they [the children] often eat breakfast alone. So, therefore, they [the children] think it was all right to eat with someone. (Mother, informant 12)

I usually eat alone. Yes, it is quite boring, but no one is awake. (Girl, 6th grade)

I think the breakfast is really good. And I tend to be there. Sometimes I'm also there with lots of friends and stuff, so it's really fun. (Boy, 7<sup>th</sup> grade)

The school management reported that they had some pupils who arrived late at school before the breakfast project was initiated and they had experienced an improvement:

We had quite a few who arrived late. (...) When they came, we saw that they had just gotten up, jumped in the trousers, got off, and they had not combed their hair. Eh, a little like that. (...) And it can be because there is no one at home, they [parents] have gone to work, and it can also be that they [parents] have not gotten up themselves. (...) But we see that now they [pupils] often come still with tousled hair and straight from jumping right into the pants, but they are here and get their breakfast. (School management)

Many pupils thought it was positive to meet more friends and pupils from other classes and other grade levels under breakfast.

*I like that we can sit with different people from each grade to get to know them better.* (Girl, 7<sup>th</sup> grade)

When the pupils were asked if they liked to eat together with adults, most pupils thought it was nice to have adults present and eat together with them, while some would prefer to sit only with friends, without adults present at the same table:

But it's kind of, the young teachers who tend to be at school breakfast. Yes, it's a bit; you are allowed to joke a bit with them then. (Boy, 7<sup>th</sup> grade)

It's annoying [have adults eating at the same table] because then you cannot talk about what you want. (Girl, 5<sup>th</sup> grade)

*Eh, sometimes the principal or some of the teachers come, and then they come and eat with us and talk to us like whether we're fine and stuff.* (Girl, 7<sup>th</sup> grade)

From all the interviews with pupils it emerged that participation in the school breakfast was quite variable from class to class. It was mentioned that in some school classes, many pupils

participated in school breakfast, while in other classes, almost the whole class did not participate:

There is never anyone from the C class there, but only A and B. (Girl, 6<sup>th</sup> grade)

Maybe, they [classmates] think that if he [my friend] does not come, then I do not bother, and then also other do not bother to come. (Boy, 7<sup>th</sup> grade)

While most parents reported positive feedback about their children's experiences with school breakfast, one parent reported their daughter's felt pressure to participate:

*Eh, for our part, there is nothing that is positive, for our part. For her [daughter] part, I see nothing positive. She [daughter] feels a certain pressure to go there to be with her friend, but she would rather not go according to herself. At least she would rather drop out, so the two often have discussions about whether or not to go. So there is a reason why they do not go every Friday. So it's a bit like negotiations if they go.* (Mother, informant 7)

From the interview with the school management it emerged that they thought about the effect of the school breakfast on bullying:

And we think that, because we had high bullying numbers at the grade that was fifth which is now seventh. We had high bullying numbers here. It has gone down along with the vandalism. Eh we think that this is one of the factors because we think it is the school breakfast. We can refer to numbers on that. (school management)

This does not however mean that the problem has disappeared, and one school employee reported in fact to have experienced bullying during breakfast:

Another group commented to him sitting at the other table that "the chair cannot stand your weight". Eh, I'm very bad at tolerating bullying so, so they had to leave. (Pia, school staff)

# Lunch, secondary school

Also in the secondary school, spending time with friends during the lunch break was mentioned as an important aspect for participating in the lunch.

Overall, both the pupils and school staff in the secondary school described the days with school lunch as more social than the typical days:

So when we have the canteen, there are more people at the school than at the center then. But the social aspects too. Then they [pupils] sit here; many sit in the auditorium and sit there and eat and talk and such, instead of going to the center and such. (Girl, 9<sup>th</sup> grade)

If one or two are sitting and eating food from the canteen, all the other friends will be left and sit together. So there are more people left in the auditorium. And you hear it very well, and it is more socially. And there are fewer who go to the center, I think. (Girl, 9th grade)

Yes, I mean that, so I have not counted it, but I mean that there are significantly more pupils who are present here, eh when it is eh canteen. (school management)

In contrast two girls from the 10<sup>th</sup> grade stated that they did not see any differences between the days with free lunch compared with ordinary days when it came to 10<sup>th</sup> graders:

*Eh, I don't think there is such a big difference. (...) I think it's normal. The same people go to the center every free minute no matter what.* (Girl, 10<sup>th</sup> grade)

Maybe there are fewer people when it's for 10<sup>th</sup> grade. (...) There is not much difference. (Girl, 10<sup>th</sup> grade)

Observations showed that in general, the lunch time was a "social time" and that pupils socialized with other pupils in the auditorium, regardless of whether they ate a free school lunch or sat with their packed lunches, or went to the nearby shopping center.

Maybe once a week or something. We're sitting inside mostly, isn't it. But then it's like that if someone suggests, then we just start walking and then we end up somehow at the center (...). So it's like that, oi where are we now? (Girl, 10<sup>th</sup> grade)

4.3.3 *Competition with other options: the temptation of the nearby grocery store* School meals, and particularly lunch, not being compulsory had to "compete" with other alternatives, such as the attraction provided by the nearby shopping center. As mentioned, at the secondary school, the pupils from 8<sup>th</sup> to 10<sup>th</sup> grade were allowed to leave the school area during the lunch break. The tendency to go to the shopping mall tended to increase with age:

Yes, in the autumn of the 8<sup>th</sup> grade, all the pupils have a packed lunch. They all have lunch boxes in the autumn of the 8<sup>th</sup>. And then the lunch boxes slowly but surely disappear as well as the packed lunches slowly but surely for very many, especially boys. Eh, and then the visits to the center increases as the lunch boxes disappear. Eh, so it is true that the 10<sup>th</sup> grade has traditionally been a lot at the center. They still do it now, even though they are offered food. (Katarina, teacher)

The pupils reported that it varied how often they would go to the center to buy food, but the 8<sup>th</sup> and 9<sup>th</sup> graders states that they went 1-2 times a week, while the 10<sup>th</sup> graders went much more often. Reasons mentioned for going to the center were that pupils forgot their packed lunch, wanted some temptations or followed some friends:

Sometimes if I do not have time to make a packed lunch, I just buy from the center. (Girl, 9<sup>th</sup> grade)

It really depends on the day, whether it's a day where you feel like bread or more such a small meatball, or something like that. Otherwise, it's a day when you feel like something sweet and just buy chocolate somehow. (Girl, 10<sup>th</sup> grade)

When the pupils were asked what they usually bought at the center, many answered that they bought buns, chocolate, chocolate milk, smoothies, biscuits, items from the 10 KR market, iced coffee, and food from Burger King. Although many pupils bought unhealthy food at the center, several girls stated that they bought salads from the salad bar:

I buy such salads that are like pick and mix. But I cannot buy that often. (Girl, 9th grade)

Eh, I also tend to buy that kind of salad from the salad bar. (Girl, 8th grade)

So it's like when I'm at the center, I often go for drinks, not very much food, but mostly drinks, like chocolate milk. (Girl, 10<sup>th</sup> grade)

The teachers reported energy drinks in addition to what the pupils stated to buy, which was not mentioned by the pupils themselves:

There are a lot of buns and energy drinks. They [pupils] buy it. That's what they go for at the mall to buy. And it has something to do with age. They are allowed to buy energy drinks when they have become 10<sup>th</sup> graders, and then they can buy them. And especially boys, there are not so many girls, but many of the boys buy energy drinks every day, and it is not that you are not allowed to have them back in school. But uh, it gives them such a boost of energy that quickly fades away in an hour. (Katarina, teacher)

And then it often happens that we take it from them then. So it's not always they get consumed all, but uh, that's the main motivation for going to the center, it seems that way. Buy energy drinks and stuff. (Steinar, teacher)

Parents mentioned that the shopping center has a powerful appeal. As a mother explained:

I think the older you get in secondary school, the more you want to detach yourself from maybe being a pupil in primary school. I don't think this is strange that they try to free themselves more and more from having to eat at school and such when they become older when they reach the 10<sup>th</sup> grade. (Mother, informant 3)

For this reason it was argued that measures such as free meals could help reducing hanging out at the center and thus reduce the intake of unhealthy foods and drinks:

*I think it helps to reduce the hanging on the center and that it is both a social measure and an important welfare school then.* (Mother, informant 1)

The shopping center had an appeal also for the pupils from the primary school. Although they had no opportunity to leave the school area during breaks, the pupils mentioned that many 7<sup>th</sup> graders were visiting the store on the way home to buy something sweet:

There are many of my friends who are going after school because we have the center right next to us where there is Burger King. So many of the girls and boys in the class often go there and buy milkshakes or a burger or something after school. (Girl, 7th grade)

I do not think that [be hungry after school] is the reason exactly. I think they [classmates] just have a craving for something sweet that they can get. (Girl, 7th grade)

Suggestions for trying to limit the attraction of the shopping centers were proposed.

In the school staff interviews, the teachers suggested that changing these rules could possibly limit the availability for options such as shopping malls and fast-food restaurants, and influence the pupils to participate in the school lunch:

I think that if you have said no to the pupils being allowed to go to the center, then I think that canteen has gone so well. For 10<sup>th</sup> grade as well. (Tina, teacher)

And then you may have to be so tough that you do not necessarily let them [the pupils] go to the center then. There is really no reason for our pupils to go up to the center. (...) So I think maybe we have to limit the possibility to visit the center, for example. Then many more would have eaten the lunch at school. (Katarina, teacher)

Also some parents expressed concerns about their kids buying food at the center and mentioned that even when their children got pocket money they did not receive extra money for food from the mall:

We don't give them money to buy lunch. The eldest who has access to the center during the breaks, he does not get any extra money to go out and shop. We do not do that. (Mother, informant 9)

Many of the pupils at secondary school said as well that a positive thing with free school lunch is that they do not need to spend money at the shopping center:

Yes, and it's better to eat at school because then we do not have to go to the center and spend money to buy something else that is unhealthy. (Girl, 9<sup>th</sup> grade)

*Eh*, *I* was going [to the center] a lot before. I also bought a lot. But I cannot afford to go there every free minute. So, therefore, I quit a little. (Boy, 8<sup>th</sup> grade)

You don't have to spend money because there is always hot food in the canteen twice a week. (Boy, 9<sup>th</sup> grade)

4.3.4 Predictability and information

As previously described, in this pilot project, there were initially four days of breakfast serving and two days of lunch serving for all the pupils at the two schools. However, due to the Covid-19 restrictions, the breakfast serving was reduced to two days for 7<sup>th</sup> grade and one

day for 5<sup>th</sup> and 6<sup>th</sup> grade, respectively. Similarly, the lunch serving was cancelled in periods when pupils from the election subject were in quarantine. In the interviews, the informants reported that pupils in both schools often forgot which day it was served food for them:

It may be that they [the classmates] do not remember it [breakfast serving] like me. I often forget that. (Boy, 5<sup>th</sup> grade)

Sometimes it is that I have a packed lunch with me, that I forget that it is a canteen and such, but I usually eat when there is food. (Girl, 9<sup>th</sup> grade)

*Eh, the challenges are probably then that there is no regularity, given every day. I think it makes the kids; it's that predictability. It was discussed that, yes, they do not always know what day it is; they forget. Because if it had been every day, I think there would have been more continuity.* (Mother, informant 9)

Predictability was specially mentioned in secondary school when it came to the lunch menu. Pupils wanted to know in advance what would be served. They could then plan whether they would bring a packed lunch or not. Many pupils brought a backup packed lunch regardless to ensure that they had food if they did not like what was being served:

*Often, people come and ask, Oh what is it in the canteen?* (Girl, elective course, 9<sup>th</sup> grade)

No, those are the days when there is food at school, before there is a lot of talk about what it can be. Should I make a backup packed lunch, or should I not? (Mother, informant 1)

From most of the interviews with the parents, it emerged that they had not received much information regarding the school meal project and expressed that they would have liked to have more information from the schools.

One parent with children at the primary school, for instance, said she did not know the school breakfast project's goals:

I think it's a great measure, but then it's a little bit about what's the goal of it. Is it because of socially or the nutritional aspects or because you think children do not get food at home? So I don't know what the goal is. (...) I could think it is because one has an assumption that some children do not eat breakfast at home. Eh, if it is one of the reasons and when you offer a healthy and nutritious meal during a day, then I think it's fine, but for our part, then it's not for that reason. I don't see the big goal. Because it is not therefore our children are attending. So we always eat breakfast at home anyway. (Mother, informant 11)

In the primary school, immigrant parents' challenges were mentioned as a possible reason for why some children did not participate in the school breakfast:

There may be a communication flow that has not been good enough, or it may be that the family, due to some challenges, language challenges, don't check the e-mails and messages that come from school. That school breakfast is offered on those days at that time. It may have happened that those who are the vulnerable groups in the system have not been informed. (Mother, informant 10)

Also when it comes to the lunch meal, several parents in the focus groups missed general information about the project:

Basically, I think there has been very little information. I heard about it at the intro day for  $\delta^{th}$  graders. But they said it only with a few words, and they did not say which days it should be served either. (Mother, informant 5)

*I agree. It [information] has been incomplete.* (Mother, informant 6)

*Eh, I didn't know about it. So it may be that it's my fault. But I do not, unfortunately known about it. For I would like to know about it. For I am very positive about school food. Very, very positive.* (Father, informant 4)

(Conversation, focus group parents)

Some parents called for more information, such as weekly menus, to better influence their children to attend the school lunch:

I think we could have made a better impact if we had known what food had been offered these days [lunch was served]. (Mother, informant 5)

Had I known, it's possible I haven't followed well enough, and I've probably not done that. But in terms of pushing my son to attend those meals, I would probably have *done it if I had insight into the menu plan and maybe how the food is made.* (Father, informant 4)

One mother said that she did not allow her child to take a packed lunch to school the days it was served to get her eating the school food:

Yes, she [daughter, 8<sup>th</sup> grade] comes home and also tells a little. No, she didn't like that today. But I have basically said she doesn't get packed lunch on those days [when lunch was served]. (Mother, informant 5)

4.3.5 Time

In the primary school, the lack of time was mentioned as a reason for both participating in the school breakfast and for not participating in it. While some pupils experienced the stress of getting up earlier to reach breakfast, many pupils felt less stress in the morning at home and would rather eat food from the breakfast buffet:

They don't have time to go [earlier] to school. Because many wake up like that very late, and then they may not have time to go to school [breakfast] because there are some in my class who do not eat breakfast.(...) Because they get up so late. And then they don't make it. (Boy, 5<sup>th</sup> grade)

*There are quite a few who sleep quite late, and they also wake up very late.* (Girl, 6<sup>th</sup> grade)

Some, especially many boys, tend to game at night, and they often brag about it. (Girl, 6<sup>th</sup> grade)

It also gets a little faster because you have to prepare and get it ready and then eat breakfast at home. But at school, everything is ready when you are there. You just take what you want, and then you eat it. (Boy, 7<sup>th</sup> grade)

Having breakfast at school is wonderful. Because then I don't have to stress about being late or something like that. (Boy, 7<sup>th</sup> grade)

One parent said it could be a challenge to have the children delivered half an hour earlier for those who have a slightly longer journey:

Because breakfast is also for those who live in a little longer distance from the school or those who have to walk, they have to leave quite early. They start walking earlier to be there at 8 o'clock. In contrast, school begins at half-past eight. And it may sometimes happen when you go to work in the dark, so you do not have time to deliver the child or follow the children. (Mother, informant 10)

One pupil and one parent explained that sometimes the first school lesson was starting earlier and for that reason it was not possible to attend school breakfast at these days:

The days I start early, I don't eat [school breakfast] because then we start at 8 o'clock, and unfortunately breakfast also starts at 8 o'clock. (Girl, 6<sup>th</sup> grade)

There was a period here under the corona where there were some changes and things like that, and then she [daughter] started early with school lessons. So then, she was not allowed to attend the school breakfast. And I think she thinks that was a little sad, actually. It seemed that she thought it was a little sad to miss it. (Father, informant 14)

When the pupils were asked if 25 minutes was sufficient time to have breakfast, everyone agreed that there was enough time:

It's perfectly appropriate. For example, if you are there a quarter past 8, then you only have a quarter to eat. Then you cannot talk as much with your friends as when you get exactly eight. (Boy 35, 6<sup>th</sup> grade)

Yes, but it's enough, it's enough then. (Boy 36, 6<sup>th</sup> grade)

Yes, it's enough to get some food at least. (Boy 35, 6th grade)

(Conversation, interview 6<sup>th</sup> grade)

When the pupils were asked what they found as positive with the school lunch, some answered that it was time-saving not to have to make a packed lunch in the morning:

Many may struggle to get up in the morning and think it can be tiring to make their own packed lunch, if the parents cannot do it. So it's very nice that a few days a week you can sleep longer and relax a little extra and not have to think about it. (Girl, 9<sup>th</sup> grade) Yes, of course, you have little time in the morning to prepare the packed lunch. So when we get it [school lunch] in the canteen, it's very easy. (Girl, 9<sup>th</sup> grade)

Another aspect of time, combined with kitchen equipment, was mentioned by the canteen manager and the pupils who were preparing the food to influence the type of meals that can be offered:

(...) somehow it's very much like that, we cannot cook all the food because it takes much time like that. (Girl, elective course, 9<sup>th</sup> grade)

There is little time to cook for so many people. (Boy, elective course, 9th grade)

But it is a time issue. That is, what is actually feasible in relation to time. Because they [the pupils] come along, they want pizza. We can make smart pizza, but we just do not have time for that. We do not have time to roll out and get warm enough in time. (Kari, teacher)

But the fact that we do not have a commercial kitchen stove, it would have saved me an enormous amount of time. Because we have two stoves that are really just ordinary [household] stoves. And our menus are also adapted to that equipment. But if you had a commercial kitchen stove, then you had the work done in no time, and you could cook. It would be much easier for us to have salmon, potatoes, and vegetables, isn't it. Because then you just have to snap it in, and then it's done in ten minutes. (Kari, teacher)

# 4.4 Pupils' perception of healthy and unhealthy food

From all the interviews with the pupils, it emerged that the pupils perceived healthy food as what is recommended by the Norwegian Directorate of Health. The pupils mentioned fruits and vegetables, fish, wholegrain bread, liver pate, water and milk. As unhealthy foods, red meat, burger, jam, brown cheese, white bread, and foods and drinks that contain a lot of salt and sugar were mentioned.

# Breakfast, primary school

When pupils at the primary school were asked how easy or difficult it was to eat healthy at school, most pupils answered that the school provided healthy meals:

*Eh, I think it's very easy because we do not get so much unhealthy at school.* (Girl, 5<sup>th</sup> grade)

*Yes, I agree. What can be unhealthy can be the juice due to the sugar.* (Girl, 5<sup>th</sup> grade) Some pupils stated that there was a rule under breakfast that said that the pupils were just allowed to drink one glass of juice:

And we can only take one glass of juice because it has a lot of sugar in it. (Boy, 5<sup>th</sup> grade)

Observations confirmed that there was a poster on the buffet table (A4 format) with the following text: "Juice contains much sugar. One glass is enough".

When asked the pupils if the food they were eating at the school, both at breakfast and lunch, was healthy, some answered that they were not eating healthy:

*I probably do not eat so healthy.* (Boy, 5<sup>th</sup> grade)

At lunch, I eat very healthy but eh, but at school breakfast not very healthy. Because then I eat cereals and there is a lot of sugar in it. (Girl, 5<sup>th</sup> grade)

Several pupils mentioned that they did not like wholegrain bread. When asked why they did not like it, there were several who answered the following:

Yes, it tastes ok but sort of. But common, not wholegrain bread tastes better. (Girl, 5<sup>th</sup> grade)

*They* [*the classmates*] *tend to take polar bread because it is not healthy. It is healthy in a way, but wholegrain bread is the healthiest. But no one takes that.* (Girl, 6<sup>th</sup> grade)

I think it's all right really, but when you are going to eat a little of it, you get tired of it, and then you eat a little more, then it will be a little like that, hm. I do not want to eat this somehow. (Girl, 6<sup>th</sup> grade)

*Eh, I've tasted wholegrain bread at school breakfast once, and I have to admit I didn't like it. (...) It makes my mouth dry.* (Girl, 6<sup>th</sup> grade)

# Lunch, secondary school

When pupils at the secondary school were asked how easy or difficult it was to eat healthy at school, most pupils answered that they trusted that the school lunch meals were healthier compared with the food bought at the center:

*Of course, when we buy ready-made food at the center, it more often contains a lot of salt, while here we make it from scratch.* (Girl, 9<sup>th</sup> grade, elective subject)

At the center, there are not many choices that contain healthy food. It is just easy to buy unhealthy food instead of having it available at school then. When there is food available at school it is healthy and you get food. (Girl, 9<sup>th</sup> grade)

*Yes, and you are often used to buy unhealthy when you buy at the center. At least I do. While we are at school, it is healthier.* (Girl, 9<sup>th</sup> grade)

The pupils who produced the lunch meals mentioned that they had to cook healthy food, which did not fulfil all their wishes, due to Oslo's municipality's requirement for the school meal project, even though they thought that healthy food was unpopular:

Yes. But then it's like that; we cannot get all our wishes fulfilled (...) because we are not allowed, because of the Oslo municipality. They sponsor us with healthy food, or we have to buy healthy food. (...) Yes, and then it will be (Girl, 10<sup>th</sup> grade)

Less popular, fewer people come. (Girl, 10<sup>th</sup> grade)

*Yes* (Girl, 10<sup>th</sup> grade)

(Communication, group interview, elective subject)

In secondary school, it was expressed, in both the interviews with the pupils and with the canteen manager, that the dishes the pupils cooked could be made in a way that makes them healthier than the dishes that were initially popular but unhealthy.

*Like today, burgers are normally unhealthy, but it was wholegrain bread, and also fish instead of meat then.* (Boy, 9<sup>th</sup> grade)

When the pupils were served sugar-free soft drink on Halloween, as an exception, the pupils from the elective subject said it was just as popular as regular juice:

Even if it was sugar-free soft drink today, was it as popular as regular soft drinks, do you think? (Researcher)
I don't think people cared that it was sugar-free. (Boy, 9<sup>th</sup> grade)
Yes (Girl, 9<sup>th</sup> grade)
I don't think they knew. (Boy, 9<sup>th</sup> grade)
Yeah, they just took (laughs). (Girl, 9<sup>th</sup> grade)
(Conversation, group interview, elective subject)

Although most of the pupils who cooked the food thought that healthy food was unpopular, the pupils' council replied that they thought it was positive that healthy food was served in the school canteen and expressed a wish that the school should continue to serve healthy food:

I think it's quite wise to, instead of just shopping at the center all the time, I also think it's wise to get evenly varied food. I also think it was nice that the school or the pupils from the election subject took the time to cook for us. (Girl, 9<sup>th</sup> grade)

But they try to keep it as healthy as possible. To have things like that that you can get through the days. (Girl, 9<sup>th</sup> grade)

*I think they should continue to cook with things we should get in us during the day.* (Girl, 10<sup>th</sup> grade)

# 5 Discussion

This present master's thesis aimed to explore factors influencing pupils' participation in free school meal schemes by investigating pupils', school staff's and parents' experiences with and views on free school meals introduced at two pilot schools in the Municipality of Oslo.

In the next section a summary and discussion of the findings will be presented, followed by a discussion of the strength and limitations of the study.

# 5.1 Discussion of the findings

# 5.1.1 Summary of the findings

The main findings of this study show that most participants (pupils, parents, and school staff) had positive experiences with and perceptions of the school meal schemes. The factors that can affect pupils' participation in these school meals turned out to be quite complex. The most dominant factors that the informants addressed in most interviews were the popularity of the food served, social factors like eating together with friends, and the attraction and availability of alternatives like the local grocery store or fast-food restaurants. Continuity in the offer, predictability of the menus, involvement of the pupils and parents, and time were highlighted as other important factors affecting whether the pupils took part in the school meals. In addition to these factors, the Covid-19 pandemic, with the fear of contaminations and changes in the arrangements of school meals, has emerged as an important dimension.

### 5.1.2 Popularity of food

The abundance of food in our modern society gives people the opportunity to choose what they want. Thus, it is not surprising that children and adolescents choose the food they think tastes good (Waddingham et al., 2018). It is also a well-known phenomenon that healthy food often is not so popular and unhealthy food is popular, especially among young people. Unhealthy foods are often described as foods with poor nutrition content and high energy, too much red meat, refined and processed, and high in sugar, fat, and salt (Helsedirektoratet, 2016; Nasjonalt råd for ernæring, 2011).

In our study, one of the most influencing factors for pupils to participate in the school meals was popularity, both in terms of popularity of the food and popularity of the people attending the scheme, which is discussed under social aspects. The food needed to be tasty and match the pupils' food preferences like appearance, smell, selection, and variety. Previous studies

59

have also highlighted food preferences like taste as an essential factor in children's and adolescents' food choices (Bawajeeh et al., 2020; Fitzgerald et al., 2010; Haugset & Nossum, 2013; Neumark-Sztainer et al., 1999; Waddingham et al., 2018). In Finland, where free school meals are provided for all pupils, the most common reason for not participating or eating the meal was that the pupils did not like the food served (Finnish institute for health and welfare, 2018).

As adolescents get more independent regarding food, more unhealthy eating patterns may develop (Fitzgerald et al., 2010). Fitzgerald et al. underline the developmental differences in factors influencing dietary habits from childhood to adolescence. A study that examined an ecological perspective of food choices and eating autonomy among adolescents showed that adolescents make different food choices in different environmental contexts like home, school, restaurants, and stores (Ziegler et al., 2021).

The findings indicate that unhealthy food seems to be popular in the current study, while healthy food seems unpopular with many pupils in both schools. It seemed that some pupils could get tired of adults' requirements to eat healthy food. A previous study also found adolescents' negative perceptions of parental restrictions of unhealthy food consumption and parental over-promotion of healthy eating (Ziegler et al., 2021). In the current study, these perceptions contributed to pupils choosing to either eat the offered meal, when popular enough, or choose other alternatives like packed lunch or visit the nearby shopping center when unpopular food was served. A main emerging topic was the balance between providing healthy alternatives without jeopardizing children's participation in the food schemes.

The findings in the current study show that most pupils from both schools knew what healthy and unhealthy food is. But healthiness was not a prioritized factor for their food choices. However, food preferences (what they liked to eat) was the main factors influencing their food choices. This is in line with what has been reported by Fitzgerald et al. (2010) and Waddingham et al. (2018). In our study, the pupils in charge of preparing the meals were often caught between different priorities and values. On the one hand, they were encouraged by teachers to consider that the food that they had to serve should be healthy, while on the other hand they were afraid that their schoolmates would drop the meal. Hence, when planning lunch dishes in the elective subject, the taste and what the friends enjoyed eating was decisive for which dishes were suggested. These results support the findings of Waddingham et al. (2018), who found that children often base their decisions on assumptions about what they expect their friends would or would not like and called it *social acceptability*. These dilemmas have been confirmed in a US study on free school breakfast, where unfulfilled food preferences were a barrier for participation, and the children accepted being hungry rather than eating the school breakfast (Bailey-Davis et al., 2013). Several other studies have shown that children and adolescents prefer unhealthy food when choosing themselves (Bawajeeh et al., 2020; Fitzgerald et al., 2010; Waddingham et al., 2018; Ziegler et al., 2021). Although many pupils in our study bought unhealthy food at the nearby shopping center, several girls stated that they bought salads from the salad bar, indicating a need for good and healthy alternatives. These assumptions are supported by another Norwegian study (Chortatos et al. 2018), where pupils wanted healthier and tastier food options in school canteens instead of purchasing unhealthy options in the shops.

The difficulties in meeting children's preferences in school meals are supported by preliminary findings from a pilot project on developing a national model for school meals in Norway (Bere, 2021). The Norwegian National Institute of Public Health (FHI) has tested simple hot dishes which could be made in one pot, meeting the school's lack of kitchen equipment. In this study, five dishes were tested out for two weeks at five secondary schools. Preliminary results showed that it was possible to offer a hot meal within the current school's infrastructure, but surprisingly, many did not eat the food. Overall, 18 % did not taste the dishes, 38 % of those who tasted ate only half or less, while only 35 % of those who tasted liked the dishes well. How much the dishes were liked varied significantly between the schools (Bere, 2021, pp. 6-7).

Pupils were not the only ones having opinions about the school meals. It was interesting to note that the parents were more focused on the importance of a larger variety of dishes that met children's preferences for lunch than the pupils themselves. As a result, some pupils often had a backup packed lunch to ensure having access to food they liked. This aspect emerged, especially when we discussed the predictability of the food to be served.

The requirement that future free school meals in Oslo would be meat-free would have several benefits such as health, economic, environmental, and religious facilitation. The results in our study on perceptions of a future meat-free school meal were quite scattered. Many secondary pupils stated that a requirement for vegetarian food would lead to a decrease in school lunch participation. Parents supported that view and suggested it would be better to include more vegetables "hidden" in the meals. These results reflect those of a study from Helsinki in

61

Finland, where it was implemented a vegetarian day once a week (Lombardini & Lankoski, 2013). The short time effect was a decrease in the participation and the amount of food taken to the plate and an increase of food waste. In the medium term, they found only a decrease in the amount of food taken to the plate. These findings were interpreted by the authors that pupils might have become used to the vegetarian food after a while. Also, other research showed that it is challenging to achieve acceptance for vegetarian meals among pupils, parents and school staff (Summers, 2013). Forced restrictions on food choices are controversial, and it should be considered in what way the vegetarian choice could be implemented in the free school meals in Oslo.

In the secondary school's project description, it was stated that the pupils' unhealthy purchasing habits at the nearby shopping center was a problem that hopefully could be reduced by implementing free school lunch. As discussed earlier, many pupils, especially the 10<sup>th</sup> graders, did not participate in the school lunch and visited the nearby shopping center instead. School meals, particularly lunch, not being compulsory are competing with other alternatives, such as the attraction provided by the nearby shopping center. Moreover, buying food from a shop nearby schools is associated with more unhealthy eating habits (Chortatos et al., 2018). A study from Finland confirmed these findings and showed that the availability of grocery stores or fast-food restaurants near schools and the short distance to these establishments were associated with higher fast-food purchases. (Virtanen et al., 2015). The study results also showed that the shorter the distance from school to the shop or fast-food restaurant, the more pupils skipped breakfast and the free school lunch, and consumed more unhealthy snacks from outside school. Adolescents with low SEP were more likely to have irregular eating habits in association with a short distance to a fast-food outlet or grocery store than adolescents with high SEP (Virtanen et al., 2015).

Interestingly these purchasing habits already were mentioned in the primary school where children are not allowed to leave the school during lunch break. The children said it was quite common to visit the nearby shopping center and fast-food restaurant after school on the way home. These habits are confirmed by Bailey-Davis et al. (2013), who found that it was common for children to purchase food and drinks on the way to or from school and that this often happened without parents' consent. That pupils get used to these purchasing habits at an early age might explain why many pupils, when changing from primary school to secondary school, use their newly gained freedom to leave the school area.

Finding a good balance of healthy and unhealthy food is essential, mainly because healthiness was not the only goal in that pilot project; school meals should also be social. This will be discussed in the next section.

## 5.1.3 Social aspects: eating food together

Throughout social life, food and meals are important elements in the organization of the interaction between people, and meals unite people together (Holm & Tange Kristensen, 2012). Several studies emphasize the importance of eating school meals as a social happening (Haugset & Nossum, 2013; Waddingham et al., 2018).

In the current study, the most stated reasons for participating in the school breakfast were eating together and talking with friends and other school children; for some it meant not having to eat alone at home. The secondary school management in our study indicated that the free lunch scheme might capture pupils who would otherwise have been alone. The findings in this study indicate that a school breakfast that was open to both pupils and school staff can provide an opportunity for children and adults to meet in an arena other than the classroom, contributing to relationship building between them and strengthening the entire school environment. Experiences from a pilot project with school meals in Nord-Trøndelag support these findings as it showed that the tastiness of meals and a social and pleasant eating environment were the most critical factors for pupils to participate in these meals (Haugset & Nossum, 2013).

Another important finding was that participating in meals often depended on what other pupils or friends decided to do. In the interviews with primary school pupils, it was mentioned that in some school classes, many pupils participated in school breakfast. In contrast, in other classes, almost the whole class did not participate. It seems then that not only the popularity of food but also the popularity of people attending the meals can have an impact on participation. A study from the USA showed, for instance, that attending a universal free school breakfast was often associated with social stigma and that pupils experienced bullying when they participated, which led to pupils often ate before going to school or chose to be hungry (Bailey-Davis et al., 2013). However, it has to be noted that in our study, the school management of the primary school stated that the school breakfast had a positive effect on bullying and vandalism. This finding is consistent with Defeyter et al. (2015), who found that breakfast clubs could improve children's relationship with other pupils and reduce victimization over time (Defeyter et al., 2015). Our study findings show that most participants from the secondary school perceived the free school lunch as more social than the common days. In contrast, the results from a Danish study could not confirm the conventional view that free school meals serving a hot meal were more social compared to the setting where children ate their packed lunches (Andersen et al., 2015). Instead, Andersen et al. conclude that "sharing individual lunch packs might even outweigh some of the benefits of shared meals where everyone is served the same food". That could explain the results from our study, where it often was a mixed setting, where pupils both ate the served meal and their packed lunch, and the dominant factor was that pupils sat together in the same place instead of being outside the school.

## 5.1.4 Routines when implementing free school meal schemes

This school meal project investigated in this study, should suggest how to implement and test free school meals as a new concept in two schools. In Norway, meals are traditionally brought from home. Free school meals represent therefore something new that especially the oldest pupils were not accustomed to as it was not a part of their culture and they were used to going to the shopping center during lunch breaks. As indicated in the literature, food consumption is largely a routinized activity, and changes in food consumption practices may need time (Jastran et al., 2009; Kjaernes & Holm, 2007). It would be interesting to investigate whether the pupils would participate in a universal free school lunch if it were introduced for all grade levels.

Already existing routines may compete with the establishment of new ones. As the school rules allowed adolescents to leave the school area during the break, many pupils used this freedom. The lack of routines related to school meals also emerged when parents were interviewed. Findings in the present study show in fact that also parents were not accustomed to these free school meals.

There have been many changes because of the Covid-19 pandemic, which have made these free school meals not become a routine. As a result of the changes due to Covid-19 restrictions in both breakfast and lunch, pupils often forgot which day they would be served food in both schools. It seems that the absence of continuity created some uncertainty for both pupils and parents. If school meals had been served continuously every day, the pupils would not have had to think about whether there was any food service or not, and the pupils might have more easily adapted to the new school meal program.

There was also much uncertainty about what kind of food would be served the next day and whether the pupils would like it. To ensure that they had food they liked for lunch, pupils often brought a backup packed lunch with them. These findings clarify that there is a need for pupils to know what food they would be served.

Time in the morning was mentioned as challenging for pupils in both schools, and it was stated that pupils got up late and did not have time to prepare a packed lunch. The lack of time to pack a lunch at home has been shown in several studies (Meier et al., 2020; Ziegler et al., 2021). Therefore, a free school lunch would be an excellent alternative to the packed lunches and give adolescents a more relaxed start in the day. Time pressure was also mentioned by Bailey-Davis et al. (2013) for school breakfast programs.

Covid-19 has not only affected the participation concerning a reduced number of days and cancelled days due to quarantine, but it has also created much uncertainty about infection risk in both schools among pupils and parents. Some pupils expressed concerns about the food quality and hygiene and stated this as a reason for not participating in the school lunch, as other pupils prepared it. The lack of trust about food quality was also described by Bailey-Davis et al. (2013) as a reason for not participating in the school breakfast.

# 5.1.5 Who participated in the schemes?

Universal measures such as free school meals are targeting all children in school. Nevertheless, the pilot project introduced by the Agency for Health in Oslo aimed to reduce social inequalities. It is thus interesting to investigate whether such a project reaches the pupils who need it the most. Findings in the current study showed challenges of immigrant families related to language and economy. This study supports evidence from a previous study from Norway that shows how families with an immigrant background strive to have enough adequate food, as children poverty is overrepresented in immigrant families (Skuland, 2019). This might contribute to explain who the pupils in need are. The experience in the project was that one reach some of them, but not necessarily all. There were still some pupils who had benefited from participating in the scheme but who did not participate. These results correspond with the experiences from another pilot project in Nord-Trøndelag, where findings showed that pupils who typically did not eat breakfast also did not participate in the school breakfast (Haugset & Nossum, 2013). However, on the other hand, previous literature indicates that free school meals can reduce social inequalities (Arntzen et al., 2019; Vik et al., 2019). Also in our study emerged that school meals might identify groups in need. Several informants mentioned financial constraints in this study as a possible reason for some pupils' participation in school meals. When it came to breakfast at home and packed lunches, it was mentioned that some families could not afford food. It is a vulnerable topic to talk about, and it is often associated with stigma (Bailey-Davis et al., 2013; Sahota et al., 2014). However, one study about the implementation of free school breakfast in New York showed that participation increased when school meals were getting universal and free of charge, even in the group eligible for free meals before the changing policy (Leos-Urbel et al., 2013).

The question about who participated in the schemes was impossible to answer at the individual level. However, the findings indicated on group level that in both schools, there was a clear tendency for the youngest pupils to participate much more often than the older pupils. It turned out particularly clearly at the secondary school that 10<sup>th</sup> graders were the group that participated the least in the school lunch and most often left the school area to visit the nearby shopping center to buy food there. The increasing autonomy through adolescence can possibly explain this, where pupils want to free themselves and get more independent. Autonomy was mentioned by several parents in this study. Food acquisition, which means independently seeking out food and having control over their own food choices, were important issues Ziegler et al. (2021) found relating to adolescents eating autonomy.

# 5.1.6 The lack of information

In our study, parents seemed not to be informed about the project's goal. In the breakfast model, for instance, it might be possible that some parents who perceived the school breakfast as positive were more likely to send their children to attend. Parents who may perceive the goal as an offer for families who cannot afford food, and at the same time could identify themselves with this goal, may not have sent their children to participate to avoid stigma. Also, parents who do not identify themselves as families with a constrained economy might not send their children to the free school meal if they think they are not part of the target group. Another study showed that participation in school lunch was influenced by parents' perceptions, whether they had positive or negative views (Meier et al., 2020).

The parents suggested getting information like weekly menus or other relevant information to influence better their children's participation in the school meals, which was also confirmed by Bailey-Davis et al. (2013). Studies show that parents have an important impact on their children's food choices (Fitzgerald et al., 2010; Meier et al., 2020; Ziegler et al., 2021). For instance, parents could give restrictions related to the economy and set up rules. Adolescents'

food choice autonomy is often perceived as restricted by parents, especially when it comes to unhealthy food items (Ziegler et al., 2021). Involving parents could improve pupils' participation in school meals (Meier et al., 2020).

# 5.2 Methodological consideration

In this section, the research design and the methods used in the study will be discussed, pointing to strength and limitations. The concept of validity in qualitative research is widely debated, and different definitions of "quality in qualitative research" have been proposed (Whittemore et al., 2001). In all qualitative research, it is important to reflect on whether the procedures used make the results trustworthy (Krueger & Casey, 2015). In contrast to quantitative research, in qualitative research there is not the assumption that researchers are distanced and unbiased because the researcher create their data together with participants and is involved in their social worlds. According to Creswell & Poth (2018, p. 259), validation in qualitative research means to document the accuracy of the findings of a study by using accepted validation strategies to document the sources of possible bias.

Elements of the Consolidated criteria for Reporting Qualitative research (COREQ) checklist will be utilized to provide detailed information and reflections about the research process (Tong et al., 2007).

# 5.2.1 Grounded theory approach as method

According to COREQ, it is important to reflect on whether the research design was appropriate (Tong et al., 2007). The GT approach was adopted in this master's thesis as it offers the opportunity of developing a research project without having a specific theory. The purpose was to explore factors for pupil's participating in free school meal schemes by investigating pupils', school staff's and parents' experiences with and views on free school meals introduced in two pilot schools. Findings from the study could be useful when implementing free school meals on a larger scale. In the literature, GT is seen as a useful approach because "it is probably best suited to questions about *influencing factors* and the (social) processes that underpin a particular phenomenon" (Braun & Clarke, 2013). Therefore, GT was deemed appropriate for the current study. Braun & Clark describe a "full" version of GT as a demanding and time-consuming process that is only possible to use in more extensive research projects. One limitation of this study is that this master's thesis can be seen as a smaller project, and therefore GT was not used to its full potential. Recruitment of informants,

for instance, stopped more for time (and Covid-19) constraints than for having reached saturation, as will be explained more in detail later on. Also, the analysis did not reach the point of developing a "new theory". This is a limitation that also other studies adopting GT have met. According to Braun and Clarke "only the early stages like initial coding and concept development are used in practice by many researchers" (Braun & Clarke, 2013, p. 186). Also, Charmaz (2014, p. 15) expressed that most researchers who claim using GT are only engaged in the first stages until the development of abstract analytic categories.

One strength of the study was that the analysis was carried out alongside the data collection, which gave the opportunity to use new insights for changing the direction or to adapt and justice the interview guide. Using memos was a useful tool being reflexive throughout the whole research process. The use of line-by-line coding was helpful to ensure that important ideas were undetected.

## 5.2.2 Strength and limitations of the data collection

## **Participant observations**

The observations at both schools provided useful information before the interviews were conducted, however, due to Covid-19, not as many observations could be made as desired. More observations of the pupils' eating during breakfast, lunch, and in the area outside the school, including the mall, could have contributed to richer information than what was obtained. This could have strengthened the validity. At the same time, there were enough observations to get a good impression of how the meals and the food production took place. A strength of conducting observations before the qualitative interviews was that it contributed to becoming more familiar with the schools and the pupils from the elective subject. This led to a slightly more relaxed interview situation than can have contributed to gathering better data.

## Focus group interviews

Focus group interviews were chosen as the main data collection. The purpose of the focus groups was to create a dialogue between the participants. A group dynamic can help to illuminate different opinions about an issue (Krueger & Casey, 2015, p. 2). The use of group interviews contributed to getting an insight into pupils', parents' and school staff's experiences with and perceptions of the free school meals provided at the two schools. However, not all focus groups have actually been focus groups. Because of Covid-19 restrictions, some focus groups had to be conducted digitally and with fewer participants than

68

planned. This could have affected the validity, as the digital environment and the smaller groups could have created less group dynamics, contributing to fewer different views emerging.

When focus group interviews examine experiences and events that happened in the past, based on participants' memories, there is the risk of a recall bias (Krueger & Casey, 2015, p. 40). This may be especially true for children and adolescents who may not remember so far back in time. The special situation due to the Covid-19 restrictions demanded that the pupils had to think back to how the food was served before Covid-19 and how it was during the pandemic when the interviews were conducted. This may have made it extra challenging to remember everything correctly and could be a limitation of the reliability of the study.

Another possible weakness may be that a moderator team was only used in 8 out of 20 focus group interviews due to a lack of resources. Nevertheless, the 12 focus groups, where only the master's student was present, were carried out digitally and were relatively easy to handle with just one moderator. The fact that not all focus groups were conducted under the same conditions as some were face-to-face and others were digital, can also be seen as a limitation of the study. Nevertheless, there were some benefits to take into account. The benefits of webbased interviews in the current study included time-saving and flexibility aspects for the participants, which allowed especially the parents to be flexible regarding interview times. Similar aspects have been mentioned by Irani (2019). The participants seemed to be more relaxed because the interview took place in the familiar and natural environment of the informants. Challenges with web-based interviews experienced in the study, which also were mentioned by Irani (2019), were that the researcher could not see the whole body language since a data screen only provided the face and upper body for observing nonverbal communication. Furthermore, participants without access to the required technology or feeling uncomfortable using it may have been underrepresented (Irani, 2019). This might be the case for some parents. It was stated as a challenge for one child from primary school, who could not participate because the parents could not assist and provide a computer for the interview. Some technical problems and problems with the internet connection occurred several times during some of the interviews, which may have distracted participants and led to partial unclear voices on the audio recording.

# Sampling

69

A strength of this qualitative study, and in line with a GT approach, is the inclusion of many informants (66) and a range of different samples (pupils from 5<sup>th</sup> to 10<sup>th</sup> grade, parents, and school staff), contributing to a better understanding of a complex issue by elucidating the issue from different angles.

In line with a GT approach and a theoretical sampling strategy, it was desirable to conduct more interviews with those who did not use the scheme, especially with pupils in the 10<sup>th</sup> grade, and parents who were not so interested and engaged in school meals. This could have elucidated some aspects that could not be fully investigated with the collected data. However, time constraints made it impossible to conduct additional interviews. Thus, the data saturation point was not fully reached. Nevertheless, the interviews conducted have given a good basis for interpretations and explaining the phenomenon. Also, the literature shows that the use of a theoretical sampling and reach of saturation is often not reached in smaller studies using GT (Braun & Clarke, 2013, p. 186; Charmaz, 2014, p. 15). Further research is needed to illuminate the experiences and perceptions of those who commonly not participate in the free meals.

# **Recruitment of the participants**

One limitation of the recruitment strategy in this study could be that the school management was choosing the participants, so the researcher had limited influence over which pupils were asked to participate, besides determining the inclusion criteria given at the beginning of the recruiting process. A group of boys who prepared the food and had agreed to participate in the study, expressed that they would rather not have attended the focus group. However, the teacher had encouraged them to participate. Although they had signed the consent form and the master's student specified in the introduction before the interview started that it was voluntary to participate and that they could leave if they wanted, it might be possible that some pupils participated because they felt pressured by the teacher. This may have influenced how deeply they wanted to share their experiences with the master's student. Having pupils as informants that are not really willing to participate in a study could lead to superficial interviews. On the other hand, it could also be evaluated as positive that pupils who did not really "volunteered" participated in the study. This allowed having a larger variation of experiences and opinions, and actually, during the interview, these boys were seriously engaged in the discussions.

Most parents who participated in the study had higher education or leadership positions. Given that inhabitants' SEP in the two Oslo districts and the two schools is very varied, more parents with a lower level of education could have contributed to richer data in the current study. This represents a limitation of the study. Possibly, pupils and parents who chose to participate in the research project may differ from those who did not choose to participate concerning their opinions and views about the school meal project. In qualitative research, people with higher education are generally more willing to participate in qualitative studies than people with lower education (Thagaard, 2018, p. 57). These selection bias can lead to missing important information, which those families who potentially could have the most need for the measure could have contributed with, and which is then not represented in the results. It may also be possible that the parents who were most positive and engaged in the topic of school meals were those who chose to participate. People who choose not to participate may also do so because of a lack of interest. One parent from FAU responded to the invitation that she did not want to participate because she did not have any strong opinions about the school meal scheme.

# 5.2.3 Analysis of the transcripts and transferability of the results

The master's student herself transcribed the interviews, and quality was assured by doublechecking the audio files against the finished transcripts. It is important to consider that all transcripts are based on the master's student's interpretations. According to Kvale & Brinkmann, the decision to put commas and periods when transcribing is already a process of interpretation and can give different meanings than if another person would have transcribed the same raw material (Kvale et al., 2015, pp. 211-212). The fact that the master's student both participated and transcribed the interviews could have helped accuracy in the transcription.

In line with a GT approach, the analysis consisted of initial coding, writing initial memos, focused coding, writing more memos, refining the coding, linking codes to other codes, and identifying categories (Braun & Clarke, 2013, p. 202). Line-by-line coding, typically used in GT, is very time-consuming, but according to Charmaz (2014, p. 125), it is beneficial to discover important information and patterns in the data that otherwise would be overlooked. Line-by-line coding was performed until a code saturation was obtained, which means no more new initial codes which could contribute to explore the concepts were generated (Braun & Clarke, 2013, p. 239).

Since the master's project scope was limited, it was not possible with a GT analysis to develop a comprehensive theory. Nevertheless, as Braun and Clark state, it is possible to explain the data related to the research question in a theoretical or conceptual way (Braun & Clarke, 2013, p. 266). The mind map in Figure 1 shows factors found in that study that influenced pupils' participation in the school meal schemes. This mapping can be seen as a first step in developing a theory about "participation in school meals". Using GT, the master's student tried to understand better the factors that influence pupils' participation in free meals, as it is not given that school meals are eaten just because they are free. In the analysis, it became clear that pupils' participation is affected by various factors, and the master's student has tried to explain why by developing abstract concepts such as popularity, social aspects and routines.

In line with a GT social constructionist approach, the data collected in their interpretations, have to be seen as the results of the interrelation between the researcher and the participants. It is, therefore, likely that different researchers or interviewers had developed different understandings and different findings. The analysis of the results would have been enhanced if the data had been coded and analysed by more than one researcher (Nowell et al., 2017, p. 7). However, due to resource constraints in this master's project, only the master's student carried out the full coding and analysis. Nevertheless, the first coding process was supported by the supervisors by discussing the codebook, and crucial decisions throughout the research project were discussed with the supervisors. The data were also discussed with other people involved in the process, for instance, staff from the Agency for Health in Oslo.

Member checking, a critical method to ensure reliability in qualitative research, was not used in this study. Member checking is getting feedback from the participants about the analysis to ensure the experiences are presented correctly (Braun & Clarke, 2013, p. 332). It was considered not feasible concerning the time frame and the burden on the participants.

An important aspect in qualitative research is if the interpretations grounded in the data of a study can be used to interpret and understand other situations, known as transferability or usefulness of the results (Braun & Clarke, 2013, p. 282). Our study is limited, as only two schools participated. The factors influencing pupils' participation in school meals found at these two schools may vary from other schools in Oslo or other parts of the country. Nevertheless, it is conceivable that the three concepts, popularity, social aspects and routines may be transferable to similar settings and that they can be helpful for understanding

participation in meals in other schools. For ensuring transferability, thick descriptions were used, so the reader can decide self whether the setting is transferable (Creswell & Poth, 2018, p. 263).

# 5.2.4 Ethical issues

Some special ethical issues occurred when the data collection of focus groups had to shift from in-person to online interviews because of Covid-19. Basically, the same ethical guidelines as in-person apply for online data collection, where respect for persons is fundamental (Lobe et al., 2020). Lobe et al. point the informed consent, which is common to achieve by email, but it is especially important for the researcher to ensure anonymity by preventing any linkages between the email addresses and the data collected. It is also important to ensure privacy, which can be enabled in Zoom with password protection and a "waiting room". Another issue in videoconferencing platforms when conducting group interviews is that the participant's private surroundings, usually homes, are visible for all participants. Another important issue for privacy is that there is no guaranty that participants do not record the focus group from their own device.

# 6 Conclusions

# 6.1 Research summary

The purpose of this master's thesis has been to explore factors influencing pupils' participation in free school meal schemes by investigating pupils', school staff's and parents' experiences with and views on free school meals introduced at two pilot schools in the Municipality of Oslo.

In this study, we have seen that the factors that influence pupils' participation in free school meal schemes are very complex. Although most of the informants had positive experiences with the two school meal models, many pupils did not participate in the scheme, especially the oldest pupils in the 10<sup>th</sup> grade. The results show that there are more factors than the one that the food is free that are decisive for pupils' participation. The most dominant factors found in this study was the popularity of the food served, including the influence of the nearby grocery store or fast-food restaurants, and social aspects like eating together with friends. The challenge to get as many pupils as possible to eat the food that was served was to get the balance between healthy food, which was often unpopular, and unhealthy food that was often popular. For reaching that balance, the involvement of the pupils in the meal menus was found as a positive and crucial factor for serving food that pupils like. Not necessary involvement of the parents, but more information about the school meal schemes could be an important support and influencing factor to increase pupils' participation. Continuity in the offer, predictability of the menus, and time were highlighted as other important factors influencing whether the pupils took part in the school meals. These findings support previous research about attendance in free school meals. In addition to these factors, the Covid-19 pandemic, with the fear of contaminations and changes in the arrangements of school meals, has emerged as an important dimension.

# 6.2 Practical implications

Based on the findings of this study, we can recommend municipalities that plan to start implementing free school meals to prioritize the primary and secondary schools to create routines that pupils become accustomed to over time, thus increasing pupils' participation in such schemes. This will be in line with previous research, which shows that eating habits are formed early in life and are tracking into adulthood. When implementing free school meal

74

schemes as a universal measure, one should consider whether school rules, which allows pupils to leave the school during lunch break, should be limited. Forced restrictions in food choices are controversial, and it should be considered in what way the vegetarian choice could be implemented in the free school meals in Oslo. As data about participation were scares, it is recommended that schools monitor attendance to school meals.

# 6.3 Suggestions for further research

Further research is needed to investigate what it takes for pupils who do not attend free meals to participating in free school meal schemes. In addition, more research is needed in order to understand if the pupils who have the greatest need to participate in such a scheme actually do so and how eventually to reach these pupils.

# 7 Referanser

- Andresen, A. & Elvbakken, K. T. (2007). From poor law society to the welfare state: school meals in Norway 1890s–1950s. *J Epidemiol Community Health*, *61*(5), 374-377. https://doi.org/10.1136/jech.2006.048132
- Arntzen, A., Bøe, T., Dahl, E., Drange, N., Eikemo, T. A., Elstad, J. I., Fosse, E., Krokstad, S., Syse, A., Sletten, M. A. & Strand, B. H. (2019). 29 recommendations to combat social inequalities in health. The Norwegian Council on Social Inequalities in Health. *Scand J Public Health*, 47(6), 598-605. <u>https://doi.org/10.1177/1403494819851364</u>
- Bailey-Davis, L., Virus, A., McCoy, T. A., Wojtanowski, A., Vander Veur, S. S. & Foster, G. D. (2013). Middle School Student and Parent Perceptions of Government-Sponsored Free School Breakfast and Consumption: A Qualitative Inquiry in an Urban Setting. 251-257. https://doi.org/10.1016/j.jand.2012.09.017
- Bakken, A. (2018). Ung i Oslo 2018 (Rapport NR 6/18). Oslo Metropolitan University -OsloMet: NOVA. <u>https://www.oslomet.no/forskning/forskningsprosjekter/ung-i-oslo-2018</u>
- Bakken, A. (2019). *Ungdata. Nasjonale resultater 2019* (NOVA Rapport 9/19). OsloMet. <u>https://www.oslomet.no/forskning/forskningsprosjekter/ung-i-oslo-2018</u>
- Bawajeeh, A. O., Albar, S. A., Zhang, H., Zulyniak, M. A., Evans, C. E. L. & Cade, J. E. (2020). Impact of Taste on Food Choices in Adolescence—Systematic Review and Meta-Analysis. *Nutrients*, 12(7), 1985. <u>https://doi.org/10.3390/nu12071985</u>
- Bere, E. (2021, 03.03). Erfaringer fra pilotprosjektet "Utvikling av en nasjonal modell for skolemat" og noen første resultat fra skolematundersøkelsen i Viken. Paper presentert på digitalt frokostmøte om skolemåltid i Viken fylkeskommune, Zoom. <u>https://viken.no/ f/p1/i2f07e1d9-51d3-4d18-a29b-c0c8d91d9372/presentasjonbere-frokostmote-viken.pdf</u>
- Bere, E., te Velde, S. J., Smastuen, M. C., Twisk, J. W. R. & Klepp, K. I. (2015). One year of free school fruit in Norway-7 years of follow-up. Int J Behav Nutr Phys Act, 12(1), 139-139. https://doi.org/10.1186/s12966-015-0301-6
- Bere, E., van Lenthe, F., Klepp, K.-I. & Brug, J. (2008). Why do parents' education level and income affect the amount of fruits and vegetables adolescents eat? *The European Journal of Public Health*, 18(6), 611-615. <u>https://doi.org/10.1093/eurpub/ckn081</u>
- Braun, V. & Clarke, V. (2013). Successful qualitative research: a practical guide for beginners. Sage.
- Brown, J. E. (2014). Nutrition through the life cycle (5 ed.). Cengage Learning.

- Bugge, A. B. (2007). *Ungdoms skolematvaner-refleksjon, reaksjon eller interaksjon?* (Fagrapport Nr.4 -2007). Statens institutt for forbruksforskning. SIFO.
- Charmaz, K. (2008). Constructionism and the grounded theory. In J.A. Holstein & J. F. Gubrium (Eds.), Handbook of Constructionist Research. (pp. 397-412). The Guilford Press. <u>https://doi.org/10.1111/j.1744-6570.2009.01160\_2.x</u>
- Charmaz, K. (2014). Constructing grounded theory (2 ed.). Sage.
- Chortatos, A., Terragni, L., Henjum, S., Gjertsen, M., Torheim, L. E. & Gebremariam, M. K. (2018). Consumption habits of school canteen and non-canteen users among Norwegian young adolescents: A mixed method analysis 11 Medical and Health Sciences 1117 Public Health and Health Services 13 Education 1303 Specialist Studies in Education. *BMC Pediatrics*, *18*(1). https://doi.org/10.1186/s12887-018-1299-0
- Contento, I. R. (2016). *Nutrition education: linking research, theory, and practice* (3 ed.). Jones & Bartlett Learning.
- Craigie, A. M., Lake, A. A., Kelly, S. A., Adamson, A. J. & Mathers, J. C. (2011). Tracking of obesity-related behaviours from childhood to adulthood: A systematic review. *Maturitas*, 70(3), 266-284. <u>https://doi.org/10.1016/j.maturitas.2011.08.005</u>
- Creswell, J. W. & Poth, C. N. (2018). *Qualitative inquiry & research design: choosing among five approaches* (4. international student ed.). Sage.
- Dahl, E., Bergsli, H. & van Der Wel, K. A. (2014). *Sosial ulikhet i helse: en norsk kunnskapsoversikt*. Høgskolen i Oslo og Akershus.
- Dahl, T. & Jensberg, H. (2011). *Kost i skole og barnehage og betydningen for helse og læring: en kunnskapsoversikt* (Vol. 2011:534). Nordisk ministerråd.
- Debesay, J., Nåden, D. & Slettebø, Å. (2008). How do we close the hermeneutic circle? A Gadamerian approach to justification in interpretation in qualitative studies. *Nursing Inquiry 15*(1), 57-66. <u>https://doi.org/10.1111/j.1440-1800.2008.00390.x</u>
- Defeyter, M. A., Graham, P. L. & Russo, R. (2015). More than Just a Meal: Breakfast Club Attendance and Children's Social Relationships. *Frontiers Public Health*, *3*, 183-183. <u>https://doi.org/10.3389/fpubh.2015.00183</u>
- DeWalt, K. M. & DeWalt, B. R. (2011). *Participant observation: a guide for fieldworkers* (2nd ed. ed.). Rowman & Littlefield.
- European Commission. (2017, 2019). Strategy for the implementation of the school scheme in Denmark from 2017/2018 to 2022/2023 school year. <u>https://ec.europa.eu/info/sites/info/files/food-farming-</u> <u>fisheries/key\_policies/documents/denmark-school-scheme-strategy-2017-23\_en.pdf</u>

Fangen, K. (2010). Deltagende observasjon (2 ed.). Fagbokforlaget.

- Federici, R. A., Gjerustad, C., Vaagland, K., Larsen, E. H., Rønsen, E. & Hovdhaugen, E. (2017). Spørsmål til Skole-Norge våren 2017: Analyser og resultater fra Utdanningsdirektoratets spørreundersøkelse til skoler og skoleeiere (2017:12). Nordisk institutt for studier av innovasjon, forskning og utdanning (NIFU). <u>https://www.udir.no/globalassets/filer/tall-og-forskning/rapporter/2017/sporsmaltil-skole-norge-varen-2017.pdf</u>
- Finnish institute for health and welfare. (2018, September 11.). *Most children eat the school lunch – however, many do not eat the salads*. <u>https://thl.fi/en/web/thlfi-en/-/most-</u> <u>children-eat-the-school-lunch-however-many-do-not-eat-the-salads</u>
- Fismen, A. S., Smith, O. R. F., Torsheim, T. & Samdal, O. (2014). A school based study of time trends in food habits and their relation to socio-economic status among Norwegian adolescents, 2001–2009. <u>https://bora.uib.no/bitstream/handle/1956/9045/s12966-014-0115-y.pdf?sequence=1&isAllowed=y</u>
- Fitzgerald, A., Heary, C., Nixon, E. & Kelly, C. (2010). Factors influencing the food choices of Irish children and adolescents: a qualitative investigation. *Health Promot Int*, 25(3), 289-298. <u>https://doi.org/10.1093/heapro/daq021</u>
- Flodgren, G. M., Helleve, A., Lobstein, T., Rutter, H. & Klepp, K.-I. (2020). Primary prevention of overweight and obesity in adolescents: An overview of systematic reviews. *Obesity Reviews*, *21*(11), e13102. <u>https://doi.org/https://doi.org/10.1111/obr.13102</u>
- Folkehelseinstituttet. (2018). *Helsetilstanden i Norge 2018 [Public Health in Norway 2018]* (Rapport 2018). Folkehelseinstituttet. <u>https://www.fhi.no/nettpub/hin/</u> <u>https://www.fhi.no/nettpub/hin/grupper/sosiale-helseforskjeller/</u>
- Fossheim, H., Hølen, J. C., Ingierd, H. & De Nasjonale forskningsetiske, k. (2013). Barn i forskning: etiske dimensjoner. De Nasjonale forskningsetiske komiteene.
- Gebremariam, M., Henjum, S., Hurum, E., Utne, J., Terragni, L. & Torheim, L. (2017).
   Mediators of the association between parental education and breakfast consumption among adolescents: the ESSENS study.
   <a href="https://doi.org/10.6084/m9.figshare.c.3700984">https://doi.org/10.6084/m9.figshare.c.3700984</a>
- Gebremariam, M. K., Henjum, S., Terragni, L. & Torheim, L. E. (2016). Correlates of fruit, vegetable, soft drink, and snack intake among adolescents: the ESSENS study. *Food & Nutrition Research*, 60(1), 32512. <u>https://doi.org/10.3402/fnr.v60.32512</u>
- Gotaas, N. (2020). Barn, unge og utjevning av sosial ulikhet i helse: en kartleggingsundersøkelse av byomfattende plandokumenter i Oslo kommune (NIBRrapport 2020:11). O.-s. By- og regionforskningsinstituttet NIBR.
- Hansen, L. B., Myhre, J. B., Wetting Johansen, A. M., Paulsen, M. M. & Andersen, L. F. (2016). UNGKOST 3 - Landsomfattende kostholdsundersøkelse blant elever i 4. og 8. klasse i Norge, 2015. Universitet i Oslo.

https://www.fhi.no/globalassets/dokumenterfiler/rapporter/2016/ungkost-rapport-24.06.16.pdf

- Haug, E., Robson-Wold, C., Helland, T., Jåstad, A., Torsheim, T., Fismen, A.-S., Wold, B. & Samdal, O. (2020). Barn og unges helse og trivsel: Forekomst og sosial ulikhet i Norge og Norden (HEMIL- rapport 2020). Institutt for helse, miljø og likeverd – HEMIL. <u>https://filer.uib.no/psyfa/HEMIL-</u> senteret/HEVAS/HEVAS%20rapport%202020%20(V4).pdf
- Haugset, A. S. & Nossum, G. (2013). *Prosjekt skolemåltid i Nord-Trøndelag* (2013:17). Trøndelag Forskning og Utvikling AS. <u>https://tfou.no/wp-</u> content/uploads/2015/10/ra201317web.pdf
- Havdal, H. H., Fosse, E., Gebremariam, M. K., Lakerveld, J., Arah, O. A., Stronks, K. & Lien, N. (2021). Perceptions of the social and physical environment of adolescents' dietary behaviour in neighbourhoods of different socioeconomic position. *Appetite*, 159, 105070-105070. <u>https://doi.org/10.1016/j.appet.2020.105070</u>
- Helland, S. H., Øverby, N. C. & Vik, F. N. (2019). Arenaer for folkehelse og ernæring. In N. C.
   Øverby, L. E. Torheim & D. Engeset (Eds.), *Samfunnsernæring* (pp. 181-193).
   Universitetsforlaget.
- Helse- og omsorgsdepartementet (2007). Nasjonal strategi for å utjevne sosiale helseforskjeller (St.meld. nr. 20 (2006–2007)). https://www.regjeringen.no/contentassets/bc70b9942ea241cd90029989bff72d3c/n o/pdfs/stm200620070020000dddpdfs.pdf
- Helse- og omsorgsdepartementet (2015). Folkehelsemeldingen: Mestring og muligheter (Meld. St. 19 (2014–2015)). <u>https://www.regjeringen.no/contentassets/7fe0d990020b4e0fb61f35e1e05c84fe/no</u> /pdfs/stm201420150019000dddpdfs.pdf
- Helse- og omsorgsdepartementet (2017). Nasjonal handlingsplan for bedre kosthold (2017– 2021) - Sunt kosthold, måltidsglede og god helse for alle! <u>https://www.regjeringen.no/contentassets/fab53cd681b247bfa8c03a3767c75e66/h</u> <u>andlingsplan\_kosthold\_2017-2021.pdf</u>
- Helse- og omsorgsdepartementet (2019). Folkehelsemeldinga: Gode liv i eit trygt samfunn (Meld. St. 19 (2018 – 2019)). <u>https://www.regjeringen.no/contentassets/84138eb559e94660bb84158f2e62a77d/</u><u>nn-no/pdfs/stm201820190019000dddpdfs.pdf</u>
- Helsedirektoratet. (2015a, 29. september). *Mat og måltider i skolen*. Retrieved 19.11.2019 from <u>https://www.helsedirektoratet.no/retningslinjer/mat-og-maltider-i-skolen/om-retningslinjen</u>
- Helsedirektoratet. (2015b). *Mat og måltider i skolen; Nasjonal faglig retningslinje*. <u>https://www.helsedirektoratet.no/retningslinjer/mat-og-maltider-i-skolen</u>

Helsedirektoratet. (2016, Oktober 24). *Kostrådene*. <u>https://www.helsedirektoratet.no/faglige-rad/kostradene-og-</u>naeringsstoffer/kostrad-for-befolkningen

- Helsedirektoratet. (2018, August 30). Sosial ulikhet påvirker helse tiltak og råd. <u>https://www.helsedirektoratet.no/tema/sosial-ulikhet-i-helse/sosial-ulikhet-pavirker-helse-tiltak-og-rad</u>
- Holm, L. & Tange Kristensen, S. (2012). *Mad, mennesker og måltider:* samfundsvidenskabelige perspektiver (2. ed.). Munksgaard.
- Hovdenak, I. M., Bere, E. & Stea, T. H. (2019). Time trends (1995-2008) in dietary habits among adolescents in relation to the Norwegian school fruit scheme: the HUNT study. *Nutr J*, *18*(1), 77-77. <u>https://doi.org/10.1186/s12937-019-0501-z</u>
- Irani, E. (2019). The Use of Videoconferencing for Qualitative Interviewing: Opportunities, Challenges, and Considerations. *Clin Nurs Res*, *28*(1), 3-8. <u>https://doi.org/10.1177/1054773818803170</u>
- Jastran, M. M., Bisogni, C. A., Sobal, J., Blake, C. & Devine, C. M. (2009). Eating routines. Embedded, value based, modifiable, and reflective. *Appetite*, *52*(1), 127-136. <u>https://doi.org/10.1016/j.appet.2008.09.003</u>
- Kjaernes, U. & Holm, L. (2007). 23 Social factors and food choice: consumption as practice. Elsevier Ltd. <u>https://doi.org/10.1533/9781845692506.5.511</u>
- Krueger, R. A. & Casey, M. A. (2009). *Focus groups: a practical guide for applied research* (4 ed.). Sage.
- Krueger, R. A. & Casey, M. A. (2015). *Focus groups: a practical guide for applied research* (5 ed.). Sage.
- Kvale, S., Brinkmann, S., Anderssen, T. M. & Rygge, J. (2015). *Det kvalitative forskningsintervju* (3 ed.). Gyldendal akademisk.
- Langford, R., Bonell, C., Jones, H., Pouliou, T., Murphy, S., Waters, E., Komro, K., Gibbs, L., Magnus, D. & Campbell, R. (2015). The World Health Organization's Health Promoting Schools framework: a Cochrane systematic review and meta-analysis. BMC public health, 15(1), 130. <u>https://doi.org/10.1186/s12889-015-1360-y</u>
- Lazzeri, G., Ahluwalia, N., Niclasen, B., Pammolli, A., Vereecken, C., Rasmussen, M., Pagh Pedersen, T. & Kelly, C. (2016). Trends from 2002 to 2010 in Daily Breakfast Consumption and its Socio-Demographic Correlates in Adolescents across 31 Countries Participating in the HBSC Study. *PLoS ONE*, *11*(3), e0151052. <u>https://doi.org/10.1371/journal.pone.0151052</u>
- Leos-Urbel, J., Schwartz, A. E., Weinstein, M. & Corcoran, S. (2013). Not just for poor kids: The impact of universal free school breakfast on meal participation and student outcomes. 88-107. <u>https://doi.org/10.1016/j.econedurev.2013.06.007</u>

- Lobe, B., Morgan, D. & Hoffman, K. A. (2020). Qualitative Data Collection in an Era of Social Distancing. *International Journal of Qualitative Methods*, *19*, 160940692093787. <u>https://doi.org/10.1177/1609406920937875</u>
- Lombardini, C. & Lankoski, L. (2013). Forced Choice Restriction in Promoting Sustainable Food Consumption: Intended and Unintended Effects of the Mandatory Vegetarian Day in Helsinki Schools. *Journal of consumer policy*, *36*(2), 159-178. https://doi.org/10.1007/s10603-013-9221-5
- Mackenbach, J. D., Nelissen, K. G. M., Dijkstra, S. C., Poelman, M. P., Daams, J. G., Leijssen, J. B. & Nicolaou, M. (2019). A Systematic Review on Socioeconomic Differences in the Association between the Food Environment and Dietary Behaviors. *Nutrients*, 11(9), 2215. <u>https://doi.org/10.3390/nu11092215</u>
- Maxwell, J. A. (2013). *Qualitative research design: an interactive approach* (3 ed., Vol. 41). Sage.
- Meier, C. L., Brady, P., Askelson, N., Ryan, G., Delger, P. & Scheidel, C. (2020). What Do Parents Think About School Meals? An Exploratory Study of Rural Middle School Parents' Perceptions. 105984052092471. https://doi.org/10.1177/1059840520924718
- Meiklejohn, S., Ryan, L. & Palermo, C. (2016). A Systematic Review of the Impact of Multi-Strategy Nutrition Education Programs on Health and Nutrition of Adolescents. *Journal of Nutrition Education and Behavior*, 48(9), 631-646.e631. https://doi.org/https://doi.org/10.1016/j.jneb.2016.07.015
- Micha, R., Karageorgou, D., Bakogianni, I., Trichia, E., Whitsel, L. P., Story, M., Peñalvo, J. L. & Mozaffarian, D. (2018). Effectiveness of school food environment policies on children's dietary behaviors: A systematic review and meta-analysis. *PLoS ONE*, 13(3), e0194555-e0194555. <u>https://doi.org/10.1371/journal.pone.0194555</u>
- Moen, K., Middelthon, A.-L., Moen, K. & Middelthon, A.-L. (2015). Qualitative Research Methods *Research in Medical and Biological Sciences: From Planning and Preparation to Grant Application and Publication* (pp. 321-378). Elsevier Ltd. <u>https://doi.org/10.1016/b978-0-12-799943-2.00010-0</u>
- Nasjonalt råd for ernæring. (2011). Kostråd for å fremme folkehelsen og forebygge kroniske sykdommer: Metodologi og vitenskapelig kunnskapsgrunnlag (IS-1881). Helsedirektoratet. Helsedirektoratet.

Nasjonalt råd for ernæring. (2016). *Risiko for jodmangel i Norge. Identifisering av et akutt behov for tiltak* (IS-0591). <u>https://www.helsedirektoratet.no/rapporter/risiko-for-jodmangel-i-norge-identifisering-av-et-akutt-behov-for-tiltak/Risiko%20for%20jodmangel%20i%20Norge%20-%20Identifisering%20av%20et%20akutt%20behov%20for%20tiltak.pdf/\_/attachment/inline/cf5bfe92-959f-42fc-8258-cc66c8d839e2:c5d0ab8c7c1bb456664ec681781e4914e51a0dd4/Risiko%20for%20jod</u>

mangel%20i%20Norge%20– %20Identifisering%20av%20et%20akutt%20behov%20for%20tiltak.pdf

- Neumark-Sztainer, D., Story, M., Perry, C. & Casey, M. A. (1999). Factors Influencing Food Choices of Adolescents: Findings from Focus-Group Discussions with Adolescents. J Am Diet Assoc, 99(8), 929-937. <u>https://doi.org/10.1016/S0002-8223(99)00222-9</u>
- Nordic Council of Ministers. (2014). Nordic nutrition recommendations 2012: Integrating nutrition and physical activity (5 ed.). Nordic council of ministers. <u>https://doi.org/http://dx.doi.org/10.6027/Nord2014-002</u>
- Norges forskningsråd & Nettverk for miljølære. (2018). *Forskningskampanjen 2018: Sjekk skolematen*. <u>https://www.miljolare.no/aktiviteter/skolematen/rapport</u>
- Nowell, L. S., Norris, J. M., White, D. E. & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16: 1–13. <u>https://doi.org/DOI</u>: 10.1177/1609406917733847
- Oostindjer, M., Aschemann-Witzel, J., Wang, Q., Skuland, S. E., Egelandsdal, B., Amdam, G. V., Schjøll, A., Pachucki, M. C., Rozin, P., Stein, J., Lengard Almli, V. & Van. (2017). Are school meals a viable and sustainable tool to improve the healthiness and sustainability of children's diet and food consumption? A cross-national comparative perspective. *Critical Reviews in Food Science and Nutrition*, *57*(18), 3942-3958. https://doi.org/10.1080/10408398.2016.1197180
- Opplysningskontoret for frukt og grønt & Helsedirektoratet. (2020). Skolefrukt for elever i grunnskolen. <u>https://skolefrukt.no</u>
- Opplæringslova. (1998). Lov om grunnskolen og den vidaregåande opplæringa (LOV-1998-07-17-61) Lovdata. <u>https://lovdata.no/dokument/NL/lov/1998-07-17-</u> 61#KAPITTEL 11

Oslo Arbeiderparti, Miljøpartiet De Grønne i Oslo & Oslo Sosialistisk Venstreparti (2019). *Plattform for byrådssamarbeid mellom Arbeiderpartiet, Miljøpartiet De Grønne og Sosialistisk Venstreparti i Oslo 2019-2023.* <u>https://www.oslo.kommune.no/getfile.php/13346154-</u> <u>1573659611/Tjenester%20og%20tilbud/Politikk%20og%20administrasjon/Politikk/By</u> <u>r</u>ådet/Oslos%20byrådserklæring%202019-2023.pdf

- Oslo kommune Helseetaten. (2020). Oslohelsa 2020: Oversikt over påvirkningsfaktorer og helsetilstand i Oslo. <u>https://www.oslo.kommune.no/getfile.php/13131998-</u> <u>1590734531/Tjenester%20og%20tilbud/Politikk%20og%20administrasjon/Statistikk/</u> <u>Rapport%20Oslohelsa%202020.pdf</u>
- Oslo Skolemuseum. (2020, 15. mai). Oslofrokosten. <u>https://skolemuseum.osloskolen.no/for-skolene/Skriftserie/oslofrokosten/</u>

OsloMet. (2016, 10.11.20). Forskningsetikk. https://ansatt.oslomet.no/forskningsetikk

- Sabinsky, M. S., Toft, U., Sommer, H. M. & Tetens, I. (2019). Effect of implementing school meals compared with packed lunches on quality of dietary intake among children aged 7-13 years. *J Nutr Sci*, *8*, e3-e3. <u>https://doi.org/10.1017/jns.2018.29</u>
- Sahota, P., Woodward, J., Molinari, R. & Pike, J. (2014). Factors influencing take-up of free school meals in primary- and secondary-school children in England. *Public Health Nutr*, *17*(6), 1271-1279. <u>https://doi.org/10.1017/S136898001300092X</u>
- Samdal, O., Bye, H. H., Torsheim, T., Birkeland, M. S., Diseth, Å. R., Fismen, A.-S., Haug, E., Leversen, I. & Wold, B. (2012). Sosial ulikhet i helse og læring blant barn og unge. Resultater fra den landsrepresentative spørreskjemaundersøkelsen "Helsevaner blant skoleelever. En WHO-undersøkelse i flere land" (978-82-7669-133-7). <u>http://bora.uib.no/bitstream/handle/1956/6809/500161%20HEVAS-</u> rapport%20materie%20NY.pdf?sequence=1&isAllowed=y
- Samdal, O., Mathisen, F. K. S., Torsheim, T., Diseth, Å. R., Fismen, A.-S., Larsen, T. M. B., Wold, B. & Årdal, E. (2016). Helse og trivsel blant barn og unge. Resultater fra den landsrepresentative spørreundersøkelsen «Helsevaner blant skoleelever. En WHOundersøkelse i flere land (9788276691351,8276691358). HEMIL-senteret, Universitetet i Bergen. <u>https://bora.uib.no/bora-xmlui/handle/1956/13072</u>
- Skeie, G., Sandvær, V. & Grimnes, G. (2019). Intake of Sugar-Sweetened Beverages in Adolescents from Troms, Norway-The Tromsø Study: Fit Futures. *Nutrients*, 11(2), 211. <u>https://doi.org/10.3390/nu11020211</u>
- Skuland, S. E. (2019). 8. Packed Lunch Poverty: Immigrant Families' Struggles to Include Themselves in Norwegian Food Culture *Inclusive Consumption* (pp. 135-153). https://doi.org/10.18261/9788215031699-2019-08 ER
- Skuterud Kløvstad. (2018). Frukt og grønt blant elever i grunnskolen våren 2018. Opplysningskontoret for frukt og grønt. <u>https://skolefrukt.no/wp-content/uploads/2018/12/Rapport-frukt-og-gr</u>ønt-i-skolen-2018.pdf
- Starks, H. & Brown Trinidad, S. (2016). Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory. *Qual Health Res*, 17(10), 1372-1380. <u>https://doi.org/10.1177/1049732307307031</u>
- Stea, T. H., Vik, F. N., Bere, E., Svendsen, M. V. & Oellingrath, I. M. (2015). Meal pattern among Norwegian primary-school children and longitudinal associations between meal skipping and weight status. *Public Health Nutr, 18*(2), 286-291. <u>https://doi.org/10.1017/S136898001400010X</u>

Strauss, A. & Corbin, J. M. (1997). Grounded theory in practice. Sage

- Summers, A. C. (2013). Vegetarian meals in the national school lunch program: Emploring the barrriers and facilitators [Dissertation, Johns Hopkins University].
- Sælensminde, K., Johansson, L. & Helleve, A. (2016). Frukt og grønt i skolen Samfunnsøkonomiske vurderinger 2015 (IS-2434). Helsedirektoratet.

https://www.helsedirektoratet.no/rapporter/frukt-og-gront-i-skolensamfunnsokonomiske-vurderinger-2015/Frukt%20og%20grønt%20i%20skolen%20-%20Samfunnsøkonomiske%20vurderinger%202015.pdf/\_/attachment/inline/289354 a8-c7b1-4061-867a-

a7b84aa6f139:275a28682ac09c45f8e81a7ab36488c534d8750e/Frukt%20og%20grøn t%20i%20skolen%20-%20Samfunnsøkonomiske%20vurderinger%202015.pdf

- Sørensen, L. B., Dyssegaard, C. B., Damsgaard, C. T., Petersen, R. A., Dalskov, S.-M., Hjorth, M. F., Andersen, R., Tetens, I., Ritz, C., Astrup, A., Lauritzen, L., Michaelsen, K. F. & Egelund, N. (2015). The effects of Nordic school meals on concentration and school performance in 8- to 11-year-old children in the OPUS School Meal Study: a clusterrandomised, controlled, cross-over trial. *113*(8), 1280-1291. <u>https://doi.org/10.1017/S0007114515000033</u>
- Thagaard, T. (2018). Systematikk og innlevelse: en innføring i kvalitative metoder (5 ed.). Fagbokforl.
- Tong, A., Sainsbury, P. & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care*, 19(6), 349-357. https://doi.org/10.1093/intqhc/mzm042
- Totland, T. H., Gebremariam, M. K., Lien, N., Bjelland, M., Grydeland, M., Bergh, I. H., Klepp, K.-I., Andersen, L. F. & Totland, T. H. (2013). Does tracking of dietary behaviours differ by parental education in children during the transition into adolescence? *Public Health Nutrition*, *16*(4), 673-682. https://doi.org/10.1017/S1368980012003060
- Vik, F. N., Van Lippevelde, W. & Øverby, N. C. (2019). Free school meals as an approach to reduce health inequalities among 10-12- year-old Norwegian children. *BMC public health*, 19(1). <u>https://doi.org/10.1186/s12889-019-7286-z</u>
- Virtanen, M., Kivimäki, H., Ervasti, J., Oksanen, T., Pentti, J., Kouvonen, A., Halonen, J. I., Kivimäki, M. & Vahtera, J. (2015). Fast-food outlets and grocery stores near school and adolescents' eating habits and overweight in Finland. 650-655. <u>https://doi.org/10.1093/eurpub/ckv045</u>
- Waddingham, S., Shaw, K., Van Dam, P. & Bettiol, S. (2018). What motivates their food choice? Children are key informants. *Appetite*, *120*, 514-522. <u>https://doi.org/https://doi.org/10.1016/j.appet.2017.09.029</u>
- Waling, M., Olafsdottir, A., Lagström, H., Wergedahl, H., Jonsson, B., Olsson, C., Fossgard, E., Holthe, A., Talvia, S., Gunnarsdottir, I. & Hörnell, A. (2016). School meal provision, health, and cognitive function in a Nordic setting - the ProMeal-study: description of methodology and the Nordic context. *Food & Nutrition Research*. <u>https://doi.org/doi</u>: 10.3402/fnr.v60.30468
- Wang, D. & Stewart, D. (2013). The implementation and effectiveness of school-based nutrition promotion programmes using a health-promoting schools approach: a

systematic review. *Public Health Nutr, 16*(6), 1082-1100. https://doi.org/10.1017/S1368980012003497

- Whittemore, R., Chase, S. K. & Mandle, C. L. (2001). Validity in Qualitative Research. *Qualitative Health Research*, 11(4), 522-537. <u>https://doi.org/10.1177/104973201129119299</u>
- WHO. (2017). Health Promoting School: an effective approach for early action on NCD risk factors. World Health Organisation. <u>https://www.who.int/healthpromotion/publications/health-promotion-school/en/</u>
- Ziegler, A. M., Leone, L. A., Gregory, A. M., Barich, R. A., Kasprzak, C. M., Hatzinger, L. A. & Mansouri, T. H. (2021). An Ecological Perspective of Food Choice and Eating Autonomy Among Adolescents. *Frontiers in psychology*, 12. <u>https://doi.org/10.3389/fpsyg.2021.654139</u>
- Øverby, N. C., Torheim, L. E. & Engeset, D. (Eds.). (2019). *Samfunnsernæring*. Universitetsforlaget.

# 8 Appendices

# 8.1 Appendix 1: Ethical approval from Norwegian social science data services

Meldeskjema for behandling av personopplysninger

26.01.2021, 22:25

# NORSK SENTER FOR FORSKNINGSDATA

#### NSD sin vurdering

### Prosjekttittel

Vurdering av "Prøveprosjektet gratis skolemåltid" i Osloskolen

#### Referansenummer

598231

#### Registrert

19.07.2020 av Sandra Mauer - s312616@oslomet.no

#### Behandlingsansvarlig institusjon

OsloMet - storbyuniversitetet / Fakultet for helsevitenskap / Institutt for sykepleie og helsefremmende arbeid

#### Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Liv Elin Torheim, livtor@oslomet.no, tlf: 47334643

#### Type prosjekt

Studentprosjekt, masterstudium

#### Kontaktinformasjon, student

Sandra Mauer, sandra.mauer.no@gmail.com, tlf: 99388915

#### Prosjektperiode

20.08.2020 - 01.06.2021

#### Status

13.10.2020 - Vurdert

#### Vurdering (3)

#### 13.10.2020 - Vurdert

NSD har vurdert endringen registrert 13.10.2020

about:blank

Side 1 av 5

Meldeskjema for behandling av personopplysninger

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 13.10.2020. Behandlingen kan fortsette.

ENDRING: Alderen på utvalg 1 er nedjustert til 10år.

Før nye endringer ber NSD om at meldingsdialogen benyttes til å avklare hvorvidt endringer trenger å meldes eller ikke

#### OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Kontaktperson hos NSD: Kajsa Amundsen Tlf. Personverntjenester: 55 58 21 17 (tast 1)

#### 29.09.2020 - Vurdert

NSD har vurdert endringene registrert fra 21.09.2020. Ettersom endringene i prosjektet er flere, blant annet endringer i formålet og nye utvalg, har NSD gjort en full ny vurdering av prosjektet. Denne nye vurderingen erstatter den opprinnelige sendt 20.07.2020. Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 29.09.2020. Behandlingen kan fortsette.

#### 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 alminnelige kategorier av personopplysninger frem til 01.06.2021.

#### LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra foresatte til behandlingen av personopplysninger om barna/elevene. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som foresatte kan trekke tilbake. Barna/elevene vil også samtykke til deltakelse.

Lovlig grunnlag for behandlingen vil dermed være foresattes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

#### PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

about:blank

Side 2 av 5

- 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).

NSD vurderer at informasjonen som de registrerte og deres foresatte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets 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).

Zoom er databehandler i prosjektet. NSD legger til grunn at behandlingen oppfyller kravene til bruk av databehandler, jf. art 28 og 29.

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 ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Kontaktperson hos NSD: Kajsa Amundsen Tlf. Personverntjenester: 55 58 21 17 (tast 1)

#### 20.07.2020 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 20.07.2020 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

about:blank

Side 3 av 5

Meldeskjema for behandling av personopplysninger

Du må vente på svar fra NSD før endringen gjennomføres.

#### TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 15.06.2021.

#### LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra foresatte til behandlingen av personopplysninger om barna/elevene. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som foresatte kan trekke tilbake. Barna/elevene vil også samtykke til deltakelse.

Lovlig grunnlag for behandlingen vil dermed være foresattes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

#### 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).

NSD vurderer at informasjonen som de registrerte og deres foresatte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets 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).

Zoom er databehandler i prosjektet. NSD legger til grunn at behandlingen oppfyller kravene til bruk av databehandler, jf. art 28 og 29.

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 ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

about:blank

Side 4 av 5

Meldeskjema for behandling av personopplysninger

26.01.2021, 22:25

Lykke til med prosjektet!

Kontaktperson hos NSD: Kajsa Amundsen Tlf. Personverntjenester: 55 58 21 17 (tast 1)

about:blank

Side 5 av 5

# 8.2 Appendix 2: Information letter and consent form to school principals



OsloMet - Storbyuniversitetet Fakultet for helsevitenskap

Kunnskapsveien 55, Kjeller Kontaktperson: Liv Elin Torheim, Professor i samfunnsernæring Telefon: 47334643 E-mail: livtor@oslomet.no

Kjeller, 21. september 2020

Til rektor

#### Forespørsel om deltakelse i forskningsprosjektet "Vurdering av Prøveprosjekt

#### gratis skolemåltid i Osloskolen".

I «Byrådsplattform for byrådssamarbeid i Oslo, 2019-2023» beskrives det at byrådet i Oslo ønsker å starte innføringen av et gratis skolemåltid for elever i Osloskolen i løpet av skoledagen. I den forbindelse har skolen din siden 2019 vært med i et prøveprosjekt om gratis skolemåltid, i regi av Oslo kommune. I vårt forskningsprosjekt er vi interessert i å høre mer om positive og negative erfaringer ved skolemåltidsordningen ved din skole. Vi ønsker blant annet å undersøke elevenes erfaringer med, og meninger om, skolemåltidsordningen, samt hvilken medvirkning elevene har i prosjektet. Videre ønsker vi å undersøke ansatte og foresattes synspunkter og erfaringer omkring innføring av gratis skolemåltid. Disse erfaringene vil kunne være til hjelp for evalueringsarbeidet på deres skole i forbindelse med prøveprosjektet. De vil også kunne være nyttige for Helseetaten i forbindelse med implementering av gratis skolemåltid i Oslo kommune. Forskningsprosjektet er del av en masteroppgave i Samfunnsernæring ved OsloMet – Storbyuniversitet, og gjennomføres i samarbeid med Helseetaten. OsloMet er ansvarlig for forskningsprosjektet.

I vårt forskningsprosjekt ønsker vi å inkludere de tre pilotskolene i Oslo kommune. Dette innebærer 7. trinn på barneskolen og 8. til 10.trinn på ungdomsskolen. Datainnsamlingen vil gjøres i form av fokusgruppeintervjuer, som vil gjørnomføres med elever og ansatte på skolen, samt intervjuer med foreldre over Zoom.

#### Hva innebærer deltakelse i studien?

#### Elevundersøkelse:

Deltakelse i studien innebærer at noen av elever fra din skole, som er eller har vært med i skolematprosjektet, vil delta på intervjuer. Vi ønsker å gjennomføre fokusgruppeintervjuer med 5-10 elever per gruppe. Det er ønskelig med to elever fra hver klasse: én gutt og én jente. Intervjuene vil gjennomføres på skolen og vil ta ca. 45-60 minutter. Tidspunkt for intervju vil tilpasses deltakernes tid og mulighet. Det vil bli stilt spørsmål om skolemåltidet, hva elevene opplever som positivt og negativt ved det, spiseomgivelsene og inkludering av elevene i skolematprosjektet. Intervjuet vil bli tatt opp på lydopptak og det vil bli tatt feltnotater underveis.

#### Ansattundersøkelse:

Videre innebærer det at ansatte ved din skole som har praktiske erfaringer med skolematprosjektet, som f. eks. lærere, miljøterapeuter og ansvarlige for kantine/ matlaging, vil bli spurt om å delta på et

intervju. Det vil gjennomføres fokusgruppeintervju med opp til 10 personer, og intervjuene vil ta ca. 60 minutter. Tidspunkt for intervju vil tilpasses deltakernes tid og mulighet. Det vil bli stilt spørsmål om det praktiske og organisatoriske rundt skolematordningen og hvordan måltidssituasjonen oppleves med rammene rund måltidet, sosialiseringen under måltidet og læringssituasjoner i klassene etter måltidet. I tillegg ønsker vi å gjennomføre et individuelt intervju med deg som rektor, som vil ta ca. 30-45 minutter. Intervjuene vil bli tatt opp på lydopptak.

#### Undersøkelse foresatte:

Videre innebærer deltakelse i studien at klassekontakter og FAU inviteres til individuelle intervjuer. Hver av disse intervjuene vil ta ca. 30 minutter. Det vil bli stilt spørsmål om hvordan foreldrene opplever skolematprosjektet, og hvordan medvirkningen av foresatte blir ivaretatt i dette prosjektet. Intervjuet vil foregå personlig eller via Zoom (digitalt) og vil bli tatt opp på lydopptak.

#### Observasjon under skolemåltidet

I tillegg vil masterstudenten utføre deltakende observasjon, som vil innebære at studenten vil være til stede under skolemåltider noen dager for å observere hva som skjer under måltidene.

All innsamlet data fra denne studien vil bli behandlet konfidensielt. Det er kun autorisert personell knyttet til prosjektet som har adgang til personidentifiserbare data. De innsamlede dataene vil anonymiseres innen juni 2021. Det vil lages egne informasjonsbrev til elever, ansatte og foreldre/foresatte. Disse vil opplyse om at det er frivillig å delta på intervjuene, og at deltakerne når som helst kan trekke seg fra studien uten å måtte oppgi noen grunn.

På oppdrag fra OsloMet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Vennligst ta kontakt med én av våre prosjektmedarbeidere eller kontaktpersonen i kommunen dersom du har spørsmål eller ønsker mer informasjon om studien.

- Sandra Mauer (masterstudent, OsloMet) tlf.: 99388915, e-post: s312616@oslomet.no
- Professor Liv Elin Torheim (veileder, OsloMet) tlf.: 67236357/ 47334643, e-post: livtor@oslomet.no
- Sina Bråten Lunde (Prosjektleder Gratis måltid, frukt og grønt i Osloskolen; Helseetaten) tlf.: 45 43 67 43, e-post: sinabraten.lunde@hel.oslo.kommune.no

Vi håper at din skole ønsker å delta i studien.

\_\_\_\_\_

Med vennlig hilsen

Liv Elin Torheim (Forsker/veileder)

5. Marios

Sandra Mauer (masterstudent)

\_\_\_\_\_

# Samtykkeskjema for deltakelse

Jeg har fått informasjon om forskningsprosjektet og gir samtykke i at

\_\_\_\_\_ skole skal delta i studien.

------ (Signert av rektor, dato)

Vennligst oppgi kontaktinformasjon til kontaktlærer/e i 7. klasse (barneskole) eller 8.-10. klasse (ungdomsskole):

1. Navn:

E-post adresse:

Telefonnummer:

2. Navn:

E-post adresse:

Telefonnummer:

3. Navn:

E-post adresse:

Telefonnummer:

4. Navn:

E-post adresse:

Telefonnummer:

5. Navn: Navn:

E-post adresse:

Telefonnummer:

# 8.3 Appendix 3: Information letter and consent form to pupils



OsloMet - Storbyuniversitetet Fakultet for helsevitenskap

Kunnskapsveien 55, Kjeller Kontaktperson: Liv Elin Torheim, Professor i samfunnsernæring Telefon: 47334643 E-mail: livtor@oslomet.no

Kjeller, september 2020

Til elever på \_\_\_\_\_\_ skole

## Vil du delta i forskningsprosjektet "Vurdering av Prøveprosjekt gratis skolemåltid i

#### Osloskolen"?

Din skole har takket ja til å være med på dette forskningsprosjektet. Vi skal undersøke hvilke erfaringer og meninger elever, på 5. til 7. trinn på barneskolen og 8. til 10. trinn på ungdomsskolen, har med og om gratis skolemat. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

#### Målet med forskningsprosjektet

Byrådet i Oslo vil sørge for at elever i Osloskolen får et gratis måltid i løpet av skoledagen. I denne forbindelsen har skolen din vært med i et prøveprosjekt i regi av Oslo kommune siden 2019. Formålet med denne studien er å undersøke elevers erfaringer med og meninger om skolemåltidsordningen, med spisemiljøet og med hvordan elevene blir involvert i skolemåltidet. Vi er interessert i å høre om både positive og negative erfaringer. Forskningsprosjektet er del av en masteroppgave i Samfunnsernæring ved OsloMet – storbyuniversitet.

#### Hvem er ansvarlig for forskningsprosjektet?

Forskningsprosjektet er et samarbeid mellom OsloMet og Oslo kommune. Ansvarlig for prosjektet hos OsloMet er professor Liv Elin Torheim. En student som studerer samfunnsernæring gjennomfører prosjektet som en del av sin masteroppgave.

#### Hvorfor får du spørsmål om å delta?

Du får spørsmålet om å delta i denne undersøkelsen fordi vi ønsker å inkludere elever som har erfaring med skolemåltidsordningen og som kan dele erfaringene med oss. Det er ønskelig med to elever fra hver klasse, en gutt og en jente.

#### Hva innebærer det for deg å delta?

Hvis du velger å delta i forskningsprosjektet, innebærer det at du deltar i et gruppeintervju sammen med 5-10 andre elever. Intervjuet vil ta ca. 45-60 minutter. Gruppeintervjuet inneholder spørsmål om skolemåltidet, hva du opplever som positivt og negativt, spiseomgivelsene og medvirkning av elevene i skolematprosjektet. Intervjuet vil bli tatt opp på lydopptak og det vil bli tatt notater.

Det er mulighet for at foreldrene dine kan få se intervjuguiden på forhånd ved å ta kontakt. Husk at foreldrene dine må skrive under på samtykkeskjema før intervjuet!

#### Det er frivillig å delta

Det er helt frivillig å delta i forskningsprosjektet. Hvis du vil være med, kan du ombestemme deg når som helst, uten å fortelle hvorfor. All innsamlet informasjon om deg vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg eller påvirke ditt forhold til skolen hvis du ikke vil delta eller senere velger å trekke deg.

#### Dine rettigheter (personvern) - hvordan vi oppbevarer og bruker dine opplysninger

Dere som deltar i intervjuet vil være anonyme og det som blir sagt vil ikke kunne kobles til deg eller din skole. Det er kun masterstudenten og veiledere fra OsloMet som vil ha tilgang til dine opplysninger. Det du har sagt i løpet av intervjuet skrives ordrett i et dokument uten opplysninger som kan knyttes til din person. Alle opplysninger om deg vil slettes ved forskningsprosjektets slutt.

#### Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Forskningsprosjektet avsluttes etter planen i juni 2021. All informasjon om deg som ble samlet inn, vil slettes ved prosjektslutt.

#### **Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

#### Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler all informasjon om deg basert på ditt samtykke til å være med i forskningsprosjektet.

På oppdrag fra OsloMet - storbyuniversitetet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

#### Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Sandra Mauer (masterstudent) tlf.: 99388915, e-post: s312616@oslomet.no eller professor Liv Elin Torheim (veileder) tlf.: 67236357/ 47334643, e-post: livtor@oslomet.no
- Vårt personvernombud: ved OsloMet: Ingrid Jacobsen, telefon (kontor): +47 672 35 534; epost: personvernombud@oslomet.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

NSD – Norsk senter for forskningsdata AS på epost (<u>personverntjenester@nsd.no</u>) eller på telefon: 55 58 21 17.

Vi håper du vil være med i studien!

Med vennlig hilsen

Liv Elin Torheim (Forsker/veileder)

S. Mayor

Sandra Mauer (masterstudent)

# Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet "Vurdering av *Prøveprosjekt gratis skolemåltid* i Osloskolen", og har fått anledning til å stille spørsmål. Jeg sier ja til:

□ å delta i fokusgruppeintervju

Jeg sier ja til å delta i forskningsprosjektet og at mine opplysninger behandles frem til prosjektet er avsluttet, ca juni 2021.

Elevens navn (blokkbokstaver)

Sted

Dato

Klasse

Underskrift elev

#### Deres rettigheter (personvern) - hvordan vi oppbevarer og bruker opplysninger

Vi vil bare bruke opplysningene om din sønn/datter til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun masterstudenten og veiledere fra OsloMet som vil ha tilgang til deres opplysninger. Navnet og kontaktopplysningene dine vil vi erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Det som din sønn/datter har sagt i løpet av intervjuet skrives ordrett i et dokument uten opplysninger som kan knyttes til personen. Lydfilene lagres på en sikker forskningsserver. All personidentifiserbar informasjon slettes ved prosjektets slutt. Sandra Mauer (masterstudent) vil være databehandler som skal samle inn, bearbeide og lagre data. Deltakerne vil ikke kunne gjenkjennes når resultatene fra studien publiseres.

#### Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når forskningsprosjektet avsluttes/oppgaven er godkjent, noe som etter planen er i juni 2021. All personidentifiserbar informasjon slettes ved prosjektets slutt.

#### **Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

#### Hva gir oss rett til å behandle personopplysninger om din sønn/datter?

Vi behandler opplysninger om din sønn/datter basert på ditt og barns samtykke.

På oppdrag fra OsloMet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

#### Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Sandra Mauer (masterstudent) tlf.: 99388915, e-post: s312616@oslomet.no eller professor Liv Elin Torheim (veileder) tlf.: 67236357/ 47334643, e-post: livtor@oslomet.no
- Vårt personvernombud: ved OsloMet: Ingrid Jacobsen, telefon (kontor): +47 672 35 534; epost: personvernombud@oslomet.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

 NSD – Norsk senter for forskningsdata AS på epost (<u>personverntjenester@nsd.no</u>) eller på telefon: 55 58 21 17.

Vi håper at du ønsker at barnet ditt delta i studien!

Med vennlig hilsen

Liv Elin Torheim (Forsker/veileder)

S. Manor

Sandra Mauer (masterstudent)

# Samtykkeerklæring

Jeg/vi har mottatt og forstått informasjon om forskningsprosjektet "Vurdering av *Prøveprosjekt gratis skolemåltid* i Osloskolen", og har fått anledning til å stille spørsmål. Deltakelse er frivillig og mitt/vårt barn kan til enhver til trekke seg uten å måtte oppgi noen grunn.

Jeg/vi samtykker til at mitt/vårt barn KAN DELTA i intervjuet og at opplysningene behandles frem til prosjektet er avsluttet.

Elevens navn (blokkbokstaver)

Sted

Dato

Klasse

Underskrift foresatte

## 8.4 Appendix 4: Information letter and consent form to parents

OsloMet - Storbyuniversitetet Fakultet for helsevitenskap

Kunnskapsveien 55, Kjeller Kontaktperson: Liv Elin Torheim, Professor i samfunnsernæring Telefon: 47334643 E-mail: livtor@oslomet.no



Kjeller, september 2020

**Til foresatte** 

## Forespørsel om deltakelse i forskningsprosjektet "Vurdering av Prøveprosjekt

## gratis skolemåltid i Osloskolen".

## Formål

Byrådet i Oslo vil sørge for at elever i Osloskolen får et gratis måltid i løpet av skoledagen. I denne forbindelsen har skolen til barnet ditt vært med i et prøveprosjekt i regi av Oslo kommune siden 2019. Formålet med denne studien er å undersøke elevers erfaringer med og meninger om skolemåltidsordningen, med spisemiljøet og med hvordan elevene blir involvert i skolematprosjektet. Vi er interessert i å høre om både positive og negative erfaringer. Forskningsprosjektet er del av en masteroppgave i Samfunnsernæring ved OsloMet – storbyuniversitet.

## Hvem er ansvarlig for forskningsprosjektet?

OsloMet - storbyuniversitet er ansvarlig for prosjektet. Forskningsprosjektet skjer i samarbeid med Helseetaten i Oslo kommune.

## Hvorfor får ditt barn spørsmål om deltakelse?

Din sønn/datter får spørsmålet om å delta i dette forskningsprosjektet fordi vi ønsker å inkludere elever som har erfaring med skolemåltidsordningen og som kan dele erfaringene med oss. Det er ønskelig med to elever fra hver klasse på ungdomsskolen på 08. - 10. trinn, en gutt og en jente. På barneskolen er det ønskelig med to elever fra hver klasse på 7. trinn, en gutt og en jente.

## Hva innebærer det for å delta i fokusgruppen?

skole tilby sine elever en form for gratis skolemat i 2019 og/eller 2020. For å få en forståelse om hva elevene selv synes om dette gratis skolemattilbud ønsker vi å gjennomføre gruppeintervjuer med 5-10 elever per gruppe. Intervjuene blir gjennomført på skolen og vil ta ca. 45-60 minutter. Dato og tidspunkt vil blir informert om nærmere. Det vil bli stilt spørsmål om skolemåltidet, hva elevene opplever som positivt og negativ, spiseomgivelsene og inkludering av elevene i skolematprosjektet. Intervjuet vil bli tatt opp på lydopptak og det vil bli tatt notater.

Det er mulighet for dere som foresatte å kunne få se intervjuguiden på forhånd ved å ta kontakt.

## Det er frivillig å delta

Det er frivillig å delta i prosjektet. Dere kan når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine og dine barns personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for din sønn/datter eller for skolen hvis dere ikke vil delta eller senere velger å trekke dere.

## Deres rettigheter (personvern) - hvordan vi oppbevarer og bruker opplysninger

Vi vil bare bruke opplysningene om din sønn/datter til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun masterstudenten og veiledere fra OsloMet som vil ha tilgang til deres opplysninger. Navnet og kontaktopplysningene dine vil vi erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Det som din sønn/datter har sagt i løpet av intervjuet skrives ordrett i et dokument uten opplysninger som kan knyttes til personen. Lydfilene lagres på en sikker forskningsserver. All personidentifiserbar informasjon slettes ved prosjektets slutt. Sandra Mauer (masterstudent) vil være databehandler som skal samle inn, bearbeide og lagre data. Deltakerne vil ikke kunne gjenkjennes når resultatene fra studien publiseres.

## Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når forskningsprosjektet avsluttes/oppgaven er godkjent, noe som etter planen er i juni 2021. All personidentifiserbar informasjon slettes ved prosjektets slutt.

## **Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

## Hva gir oss rett til å behandle personopplysninger om din sønn/datter?

Vi behandler opplysninger om din sønn/datter basert på ditt og barns samtykke.

På oppdrag fra OsloMet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

## Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Sandra Mauer (masterstudent) tlf.: 99388915, e-post: s312616@oslomet.no eller professor Liv Elin Torheim (veileder) tlf.: 67236357/ 47334643, e-post: livtor@oslomet.no
- Vårt personvernombud: ved OsloMet: Ingrid Jacobsen, telefon (kontor): +47 672 35 534; epost: personvernombud@oslomet.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

• NSD – Norsk senter for forskningsdata AS på epost (<u>personverntjenester@nsd.no</u>) eller på telefon: 55 58 21 17.

Vi håper at du ønsker at barnet ditt delta i studien!

Med vennlig hilsen

Liv Elin Torheim (Forsker/veileder)

S. Manor

Sandra Mauer (masterstudent)

# Samtykkeerklæring

Jeg/vi har mottatt og forstått informasjon om forskningsprosjektet "Vurdering av *Prøveprosjekt gratis skolemåltid* i Osloskolen", og har fått anledning til å stille spørsmål. Deltakelse er frivillig og mitt/vårt barn kan til enhver til trekke seg uten å måtte oppgi noen grunn.

Jeg/vi samtykker til at mitt/vårt barn KAN DELTA i intervjuet og at opplysningene behandles frem til prosjektet er avsluttet.

Elevens navn (blokkbokstaver)

Sted

Dato

Klasse

Underskrift foresatte

## 8.5 Appendix 5: Information letter and consent form to parents (digital)

OsloMet - Storbyuniversitetet Fakultet for helsevitenskap

Kunnskapsveien 55, Kjeller Kontaktperson: Liv Elin Torheim, Professor i samfunnsernæring Telefon: 47334643 E-mail: livtor@oslomet.no



Kjeller, november 2020

**Til foresatte** 

## Forespørsel om deltakelse i forskningsprosjektet "Vurdering av Prøveprosjekt

## gratis skolemåltid i Osloskolen".

## Formål

Byrådet i Oslo vil sørge for at elever i Osloskolen får et gratis måltid i løpet av skoledagen. I denne forbindelsen har skolen til barnet ditt vært med i et prøveprosjekt i regi av Oslo kommune siden 2019. Formålet med denne studien er å undersøke elevers erfaringer med og meninger om skolemåltidsordningen, med spisemiljøet og med hvordan elevene blir involvert i skolematprosjektet. Vi er interessert i å høre om både positive og negative erfaringer. Forskningsprosjektet er del av en masteroppgave i Samfunnsernæring ved OsloMet – storbyuniversitet.

## Hvem er ansvarlig for forskningsprosjektet?

OsloMet - storbyuniversitet er ansvarlig for prosjektet. Forskningsprosjektet skjer i samarbeid med Helseetaten i Oslo kommune.

## Hvorfor får ditt barn spørsmål om deltakelse?

Din sønn/datter får spørsmålet om å delta i dette forskningsprosjektet fordi vi ønsker å inkludere elever som har erfaring med skolemåltidsordningen og som kan dele erfaringene med oss. Det er ønskelig med to elever fra hver klasse på 5. - 7. trinn, en gutt og en jente. Barnet vil også bli bedt om å gi informert muntlig samtykke før intervjuet starter.

## Hva innebærer det for å delta i fokusgruppen?

Skolen til barnet ditt har siden 2019 tilbudt sine elever en form for gratis skolemat. For å få en forståelse om hva elevene selv synes om dette gratis skolemattilbudet ønsker vi å gjennomføre gruppeintervjuer med 3-4 elever per gruppe. Intervjuene blir gjennomført digitalt på Zoom og vil ta ca. 45-60 minutter. Dato og tidspunkt vil blir informert om nærmere. Det vil bli stilt spørsmål om skolemåltidet, hva elevene opplever som positivt og negativ, spiseomgivelsene og inkludering av elevene i skolematprosjektet. Intervjuet vil bli tatt opp på lydopptak og det vil bli tatt notater. Det er mulighet for dere som foresatte å kunne få se intervjuguiden på forhånd ved å ta kontakt.

## Det er frivillig å delta

Det er frivillig å delta i prosjektet. Dere kan når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine og dine barns personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for din sønn/datter eller for skolen hvis dere ikke vil delta eller senere velger å trekke dere.

## Deres rettigheter (personvern) - hvordan vi oppbevarer og bruker opplysninger

Vi vil bare bruke opplysningene om din sønn/datter til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun masterstudenten og veiledere fra OsloMet som vil ha tilgang til deres opplysninger. Navnet og kontaktopplysningene dine vil vi erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Det som din sønn/datter har sagt i løpet av intervjuet skrives ordrett i et dokument uten opplysninger som kan knyttes til personen. Lydfilene lagres på en sikker forskningsserver. All personidentifiserbar informasjon slettes ved prosjektets slutt. Sandra Mauer (masterstudent) vil være databehandler som skal samle inn, bearbeide og lagre data. Deltakerne vil ikke kunne gjenkjennes når resultatene fra studien publiseres.

## Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når forskningsprosjektet avsluttes/oppgaven er godkjent, noe som etter planen er i juni 2021. All personidentifiserbar informasjon slettes ved prosjektets slutt.

## **Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

## Hva gir oss rett til å behandle personopplysninger om din sønn/datter?

Vi behandler opplysninger om din sønn/datter basert på ditt og barns samtykke.

På oppdrag fra OsloMet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

#### Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Sandra Mauer (masterstudent) tlf.: 99388915, e-post: s312616@oslomet.no eller professor Liv Elin Torheim (veileder) tlf.: 67236357/ 47334643, e-post: livtor@oslomet.no
- Vårt personvernombud: ved OsloMet: Ingrid Jacobsen, telefon (kontor): +47 672 35 534; epost: personvernombud@oslomet.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

 NSD – Norsk senter for forskningsdata AS på epost (<u>personverntjenester@nsd.no</u>) eller på telefon: 55 58 21 17.

Vi håper at du ønsker at barnet ditt delta i studien!

Med vennlig hilsen

Liv Elin Torheim (Forsker/veileder)

S. Manor

Sandra Mauer (masterstudent)

# Samtykkeerklæring

Jeg/vi har mottatt og forstått informasjon om forskningsprosjektet "Vurdering av *Prøveprosjekt gratis skolemåltid* i Osloskolen", og har fått anledning til å stille spørsmål. Deltakelse er frivillig og mitt/vårt barn kan til enhver til trekke seg uten å måtte oppgi noen grunn.

Jeg/vi samtykker til at mitt/vårt barn KAN DELTA i intervjuet og at opplysningene behandles frem til prosjektet er avsluttet.

Elevens navn (blokkbokstaver)

Sted

Dato

Klasse

Underskrift foresatte

# 8.6 Appendix 6: Information letter and consent form to parents (participants)

OsloMet - Storbyuniversitetet Fakultet for helsevitenskap

Kunnskapsveien 55, Kjeller Kontaktperson: Liv Elin Torheim, Professor i samfunnsernæring Telefon: 47334643 E-mail: livtor@oslomet.no



Kjeller, desember 2020

Til foresatte \_\_\_\_\_ skole

## Forespørsel om deltakelse i forskningsprosjektet "Vurdering av Prøveprosjekt

## gratis skolemåltid i Osloskolen"?

## Målet med prosjektet

Byrådet i Oslo vil sørge for at elever i Osloskolen får et gratis måltid i løpet av skoledagen. I denne forbindelsen har skolen til barnet ditt vært med i et prøveprosjekt i regi av Oslo kommune siden 2019. Formålet med denne studien er å undersøke foreldres/ foresattes erfaringer med og meninger om skolemåltidsordningen, og hvilken medvirkning foresatte har i skolematprosjektet. Vi er interessert i å høre om både positive og negative erfaringer. Forskningsprosjektet er del av en masteroppgave i Samfunnsernæring ved OsloMet – storbyuniversitet.

## Hvem er ansvarlig for forskningsprosjektet?

Forskningsprosjektet er et samarbeid mellom OsloMet og Helseetaten i Oslo kommune. Ansvarlig for prosjektet hos OsloMet er professor Liv Elin Torheim. En student som studerer samfunnsernæring gjennomfører prosjektet som en del av sin masteroppgave.

## Hvorfor får du spørsmål om å delta?

Du får spørsmålet om å delta i dette prosjektet fordi vi ønsker å inkludere foresatte slik at de kan dele sine erfaringer og meninger om skolematprosjektet med oss.

## Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du deltar i en gruppediskusjon med 3-4 personer. Gruppeintervjuet vil ta ca. 30-45 minutter. I noen tilfeller kan det også gjennomføres individuelle intervjuer. Det vil bli stilt spørsmål om hva du opplever som positivt og negativt, og hvordan medvirkningen av foresatte ble ivaretatt i dette prosjektet. Intervjuet vil foregå digitalt via Zoom og bli tatt opp på lydopptak. Tidspunkt for intervjuet tilpasses deltagernes behov.

## Det er frivillig å delta

Det er frivillig å delta i forskningsprosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg eller påvirke ditt forhold til skolen hvis du ikke vil delta eller senere velger å trekke deg.

## Ditt personvern - hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Det er kun masterstudenten og veiledere fra OsloMet som vil ha tilgang til dine opplysninger. Navnet og kontaktopplysningene dine vil vi erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Det som blir sagt i løpet av intervjuet skrives ordrett i et dokument uten opplysninger som kan knyttes til personen. Lydfilene lagres på en sikker forskningsserver. All personidentifiserbar informasjon slettes ved prosjektets slutt. Sandra Mauer (masterstudent) vil være databehandler som skal samle inn, bearbeide og lagre data. Deltakerne vil ikke kunne gjenkjennes når resultatene fra studien publiseres.

## Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når forskningsprosjektet avsluttes/oppgaven er godkjent, noe som etter planen er i juni 2021. All personidentifiserbar informasjon slettes ved prosjektets slutt.

## **Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

## Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra OsloMet - storbyuniversitetet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

## Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Sandra Mauer (masterstudent) tlf.: 99388915, e-post: eller professor Liv Elin Torheim (veileder) tlf.: 67236357/ 47334643, e-post: livtor@oslomet.no
- Vårt personvernombud: ved OsloMet: Ingrid Jacobsen, telefon (kontor): +47 672 35 534; epost: personvernombud@oslomet.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

• NSD – Norsk senter for forskningsdata AS på epost (<u>personverntjenester@nsd.no</u>) eller på telefon: 55 58 21 17.

Vi håper at du ønsker å deltar i studien!

Med vennlig hilsen

Z

Liv Elin Torheim (Forsker/veileder)

--

S. Mayor

Sandra Mauer (masterstudent)

# Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet "Vurdering av *Prøveprosjekt gratis skolemåltid* i Osloskolen", og har fått anledning til å stille spørsmål. Jeg sier ja til:

□ å delta i personlig intervju

□ å delta i gruppeintervju

Jeg sier ja til å delta i prosjektet og at mine opplysninger behandles frem til prosjektet er avsluttet, ca. juni 2021.

Navn (blokkbokstaver)

Sted

Dato

Underskrift

# 8.7 Appendix 7: Interview guide pupils primary school

## Intervjuguide til elever barneskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

• Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema Så fint at dere vil være med på denne gruppesamtalen om skolefrokosten. Mitt navn er Sandra og jeg er forsker student og jeg vil gjerne vite mer om deres erfaringer prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 45-60 minutter +/-

Intervjuet vil bli tatt opp. Ok? Muntlig samtykkeerklæringen når opptaket starter? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor. Klar? (lydopptaker aktiveres)

| Icebraker spørsmål: hobby, favorittmatrett   |   |
|--|---|
| Hva syns dere om å få servert gratis frokost skolen?   | • |
| Hvor ofte pleier dere å spiser frokost på skolen? (før korona/nå)                                    |   |
| • Hvis dere ikke deltar i skolefrokost, hva er årsakene til det?                                     |   |
| <ul> <li>Hva spiser dere til frokost hjemme de dagene dere ikke få servert på<br/>skolen?</li> </ul> |   |
| • Hvor mange fra klassen din pleier å spise frokost på skolen?                                       |   |
| Hvordan opplever dere smak, lukt og utseende?  |   |
| • Hva er positivt med gratis frokost?  |   |
| Hva opplever dere som negativt eller utfordrende med ordningen?                                      |   |
| • Hva er det mest populær mat på buffeten?   |   |
| • Hva er upopulær mat?   |   |
| • Hvordan opplever dere aulaen som spisesal, hvordan oppleves det?                                   |   |
| • Spiser dere sammen med andre elever, lærere?   |   |
| • På hvilken måte blir dere elever involvert i hva som serveres?                                     | • |
| Hvordan oppleves det å måtte stå opp tidligere for å rekke frokost?                                  | • |
| • Hvordan syns dere skolemåltidet burde være slik at flest mulig elever benytter seg av det?         | • |
| Kaster dere eller andre elever mat?  | • |
| • Hvis ja, hva er årsakene til det?  |   |

| • | Har dere med matpakke til lunsj og hva har dere opp i ?   | • |
|---|---|---|
| • | Hvor lett eller vanskelig tro dere det er å spise sunn mat på skolen?   | • |
| • | Hvor ofte tro dere at dere kommer til å spise skolefrokost om skolen<br>hadde tilbudet hver dag til alle trinn? |   |
| • | (Hvorfor syns dere skolen har innført gratis skolemat?)   |   |

# 8.8 Appendix 8: Interview guide pupils secondary school

## Intervjuguide til elever ungdomskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

• Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 45-60 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

## Spørsmål

- Hva syns dere om å få gratis skolelunsj?
- Hvordan opplever dere smak, lukt og utseende av det måltidet som blir servert her på skolen?
- Hva opplever dere som positivt med måltidsordningen?
- Hva opplever dere som negativt eller utfordrende med ordningen?
- Hvilke retter er mest populært?
- Hvilke retter er upopulært?
- Hvordan opplever dere spiseomgivelsene?
- Hva tenker dere om det sosiale rundt måltidet? (for eksempel: spiser dere sammen med andre elever, lærere?)

• Opplever dere måltidsituasjonen (gratis skolemåltid) som mer sosialt enn når det ikke er servering?

- Benytter dere det tilbudet skolen har for gratis skolemat?
- Hvis ja hvorfor?
- Hva er årsakene at dere ikke benytter dere dere av mattilbudet? (spørsmål stilles til de som ikke benytter seg av tilbudet)
- Hva spiser dere isteden? (matpakke, kiosk, butikk?)
- På hvilken måte blir dere elever inkludert/involvert i skolemåltidet? Medvirkning.
- Hvordan syns dere skolemåltidet burde være og organiseres slik at flest mulig elever benytter seg av det?
- Hva syns dere om å spise her på skolen istedenfor å gå på butikken?
- Hva syns dere om at fremtidig skolemat skal være kjøttfritt?
- Kaster dere eller andre elever mat?
- Hvis ja, hva er årsakene til det?
- Hvorfor syns dere skolen har innført gratis skolemat?
- Hvor lett eller vanskelig tro dere det er å spise sunn mat på skolen?
- Hvor ofte tro dere at dere kommer til å spise gratis skolemat om skolen hadde tilbudet hver dag?

# 8.9 Appendix 9: Interview guide parents secondary school

## Intervjuguide til foresatte Ungdomskole

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 30-45 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

| Vet dere om deres barn spiser når det er servering i kantina?   |
|---|
| Har skolematordningen vært et tema dere diskuterte med andre foreldre?  |
| Hva syns dere om at barna deres få gratis lunsj 2x i uka?   |
| • (Hvorfor er det viktig at det er gratis?)   |
| Hva opplever dere som positivt med denne ordningen?   |
| Hva opplever dere som negativt eller utfordrende med ordningen?   |
| Opplever dere at skolematen har en påvirkning på måltidene hjemme?  |
| På hvilken måte opplever dere foresatte medvirkning i skolemåltidsprosjektet?   |
| På hvilken måte kunne dere ønske at dere var involvert?   |
| • Hvordan syns dere skolemåltidet burde være og organiseres slik at flest mulig elever benytter seg av det? (Kriterier at det skal være vellykket?) |
| Hva mener dere om at et fremtidig gratis skolemåltid skal være kjøttfri?  |
| • I hvilken grad syns dere at det er tatt hensyn/ tilrettelagt til enkeltes behov som religion, livssyn, matallergier?                              |
| Hvor lett eller vanskelig tro dere det er å spise sunn mat i løpet av skolendagen?  |

# 8.10 Appendix 10: Interview guide parents primary school

## Intervjuguide til foresatte barneskole

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 30-45 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

Vet dere om deres barn spiser når det er frokostservering? Har skolematordningen vært et tema dere diskuterte med andre foreldre? Hva syns dere om at barna deres få gratis frokost på skolen? ٠ Hva opplever dere som positivt med denne ordningen? ٠ Hva opplever dere som negativt eller utfordrende med ordningen? Opplever dere at skolematen har en påvirkning på måltidene/rutinene hjemme? Hvor lett eller vanskelig tro dere det er å spise sunn mat på skolen? • • I hvilken grad syns dere at det er tatt hensyn/ tilrettelagt til enkeltes behov som religion, livssyn, matallergier? • På hvilken måte opplever dere foresatte medvirkning i skolemåltidsprosjektet? På hvilken måte kunne dere ønske at dere var involvert? Hvordan er samarbeid med skolen? • Hvordan syns dere skolemåltidet burde være og organiseres slik at flest mulig elever benytter seg av det? (Kriterier at det skal være vellykket?) Hva mener dere om at et fremtidig gratis skolemåltid skal være kjøttfri?

• Er det noe dere savner med denne ordningen?

# 8.11 Appendix 11: Interview guide teachers secondary school

## Intervjuguide til lærere ungdomskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 30-45 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

| Sp | ørsmål   |
|----|--|
| •  | Hva tenker dere om skolematordningen sånn som den er?  |
| •  | Hva opplever dere som positivt med måltidsordningen?   |
| •  | Hva opplever dere som negativt eller utfordrende med ordningen?  |
| •  | Hvordan opplever dere smak, lukt og utseende av maten som blir servert?  |
| •  | Hva tenker dere om at skolen har valgt lunsj fram for frokost som konsept?   |
| •  | Hvordan opplever dere skolelunsj som sosial arena?   |
| •  | Hva kan være årsakene at de fleste elever fra tiende trinn ikke benytter seg av mattilbudet?   |
| •  | Mange fra tiende trinn går på senteret og kjøper seg lunsj. De andre trinnene har også lov. Hva tro<br>dere skylles at tiende går mest.                                  |
| •  | Hva vet eller tenker dere om ungdommens pengerbruk?  |
| •  | Hva tro dere kunne tiltrekke tiende til å bli værende på skolen og spise enten matpakka eller<br>skolelunsj?   |
| •  | Tro dere at elevene spiser sunnere på skolen når de spiser et gratis skolemåltid?  |
| •  | Hvordan opplever dere læringssituasjon i klasserommet etter lunsjpausa? Er det forskjell mellom de dagene det er servering og ikke servering? Forskjell mellom trinnene? |
| •  | Hvordan opplever dere matkast av matpakke, evtl det som serveres i kantina?  |
| •  | Ut i fra erfaringene dere har, hva tenker dere om innføring av gratis skolemat med start på videregående skoler?   |
|    |  |

# 8.12 Appendix 12: Interview guide teachers primary school

## Intervjuguide til lærere barneskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 45-60 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

- Hva syns dere om at elevene få gratis skolemat?
- Spiser dere sammen med elevene?
- Hvordan opplever dere smak, lukt og utseende av den maten som blir servert?
- Hva opplever dere som positivt med måltidsordningen?
- Hva opplever dere som negativt eller utfordrende med ordningen?
- Hva tenker dere om at skolen har valgt frokost fram for lunsj som konsept?
- Hvordan opplever dere skolefrokost som sosial arena?
- Hvem av elevene benytter seg av tilbudet skolen har for gratis skolefrokost?
- Treffer tiltaket de som er mest sårbar og har størst behov?
- Hva er årsakene hvis noen elever ikke benytter seg av mattilbudet?
- Hvordan syns dere skolemåltidet burde være og organiseres slik at flere elever benytter seg av det?
- Tro dere at elevene spiser sunnere på skolen når de spiser et gratis skolemåltid?
- På hvilken måte påvirker skolematen elevers skolehverdag? Positivt vs. negativt?
- Hvordan opplever dere læringssituasjon i klasserommet etter frokosten? Er det forskjell mellom de dagene det er servering og ikke servering?
- Hva er suksessfaktorene i dette prosjektet?

# 8.13 Appendix 13: Interview guide school staff primary school

# Intervjuguide til øvrige skoleansatte knyttet til praktisk gjennomføring av skolefrokost, barneskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 45-60 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor. Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

| Sp | Spørsmal   |  |
|----|--|--|
| •  | Hva syns dere om at elevene få gratis skolemat?  |  |
| •  | På hvilke måte er deres oppgaver knyttet til skolefrokosten/ prosjektet?                 |  |
| •  | Spiser dere sammen med elevene?  |  |
| •  | Hva opplever dere som positivt med et måltidsordning?                                    |  |
| •  | Hva opplever dere som negativt eller utfordrende med ordningen?                          |  |
| •  | Hva tenker dere om at skolen har valgt frokost fram for lunsj som konsept?               |  |
| •  | Hvordan opplever dere elevene i måltidsituasjonen? Det sosiale?                          |  |
| •  | Hvilke retter er mest populært og hvilke er upopulært?                                   |  |
| •  | Hvem av elevene benytter seg av tilbudet skolen har for gratis skolefrokost?             |  |
| •  | Treffer tiltaket de som er mest sårbar og har størst behov?                              |  |
| •  | Hva er årsakene hvis noen elever ikke benytter seg av mattilbudet?                       |  |
| •  | Hvordan burde skolemåltidet være organiseres slik at flere elever benytter seg av det?   |  |
| •  | Hvilke praktiske utfordringer opplever dere med organiseringen eller tilrettelegging?    |  |
| •  | Hvor høyt er matsvinn, hva er årsakene til det og hvordan håndtere eller løser dere det? |  |
| •  | Tro dere at elevene spiser sunnere på skolen når de spiser et gratis skolemåltid?        |  |
| •  | På hvilken måte påvirker skolematen elevers skolehverdag? Positivt vs. negativt?         |  |
| •  | Hva er suksessfaktorene i dette prosjektet?  |  |
|    |  |  |

# 8.14 Appendix 14: Interview guide school management primary school

## Intervjuguide til skoleledelse barneskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 60 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

| • | Hvordan og hvorfor har dere valgt det konseptet eller modellen med skolefrokost?            |
|---|---|
| • | Hvilke krav har helseetaten stilt til dere?   |
| • | Hva opplever dere som positivt med denne måltidsordning?                                    |
| • | Hva opplever dere som negativt eller utfordrende med ordningen?                             |
| • | Hvordan opplever dere skolefrokosten som sosial arena?                                      |
| • | Hvor mange elever benytter seg av skolefrokosten?   |
| • | Hvem av elevene benytter seg av tilbudet?   |
| • | Hva er årsakene å ikke benytter seg av mattilbudet?   |
| • | Treffer tiltaket de som er mest sårbar og har størst behov?                                 |
| • | Når dere startet med dette prosjektet, hvordan har dere tenkt å evaluere det?               |
| • | Hvilke tanker har dere rundt effekten av prosjektet?  |
| • | På hvilken måte blir elever og foreldre inkludert/involvert i skolemåltidet?                |
| • | Hva skal til at flere elever benytter seg av tilbudet?                                      |
| • | Hva manglet dere i starten og hva måtte dere investere i for å gjennomføring av prosjektet? |

- På hvilken måte sikre dere at det følges retningslinjene for mat og måltider i skolen samt at maten er basert på kostrådene?
- Hvor høyt er matsvinn, hva er årsakene til det og hvordan håndtere eller løser dere det?
- På hvilken måte påvirker skolematen elevers skolehverdag? Positivt vs. negativt?
- Hva er suksessfaktorene i dette prosjektet?
- Hvilken støtte /oppfølging fikk dere fra Helseetaten?
- Er det noe støtte i form av kompetanse eller veiledning dere savner av Helseetaten/ Utdanningsetaten?

# 8.15 Appendix 15: Interview guide school management secondary school

## Intervjuguide til skoleledelse barneskole (fokusgruppeintervju)

## Tema

Erfaringer med gratis skolemattilbud fra pilotskoler i Oslo

Introduksjon med informasjon om prosjektet og innhenting av signert samtykkeskjema. Tusen takk for at dere tar dere tid. Mitt navn er Sandra og jeg er student og jeg vil gjerne vite mer om deres erfaringer og synspunkter om dette prøveprosjektet med gratis skolemat. Vi kommer til å bruke ca. 60 minutter +/-

Intervjuet vil foregår med lydopptaker. Ok? Har alle forstått samtykkeerklæringen? Alt som blir sagt i dette gruppeintervjuet er anonymt, altså ingen andre enn dere her i rommet få vite hvem som har sagt hva. Viktig å vite at dere kan trekke dere når som helst uten å måtte si hvorfor.

Samtykkeerklæringen signert og informasjonsskriv forstått? Klar? (lydopptaker aktiveres)

- Hvordan og hvorfor har dere valgt det konseptet eller modellen med skolelunsj?
- Hvilke krav har helseetaten stilt til dere?
- Hva opplever dere som positivt med denne måltidsordning?
- Hva opplever dere som negativt eller utfordrende med ordningen?
- Hvordan opplever dere skolefrokosten som sosial arena?
- Hvor mange elever benytter seg av skolefrokosten?
- Hvem av elevene benytter seg av tilbudet?
- Treffer tiltaket de som er mest sårbar og har størst behov?
- På hvilken måte blir elever og foreldre inkludert/involvert i skolemåltidet?
- Hva manglet dere i starten og hva måtte dere investere i for å gjennomføring av prosjektet?
- Hvordan tenker dere elevene hadde tatt i mot tilbudet om den hadde vært kun kjøttfritt?
- Hvor høyt er matsvinn, hva er årsakene til det og hvordan håndtere eller løser dere det?
- Hva er suksessfaktorene i dette prosjektet?
- Hvilke råd eller tips ville dere gi til andre skoler som skal innføre gratis skolemat?

# 8.16 Appendix 16: Observation guide

# Observasjonsguide

| Skolemåltid frokost og lunsj:         Hvordan ser spiselokalene / spiseomgivelser ut? Bord/ stoler/ belysning/ støynivå         Hvordan foregår matserveringen?         Hva blir servert? Hvordan ser maten ut?         Hvor mange barn spiser? Fordelingen gutter-jenter?         Hva velger eleven fra frokost buffeten og hva er det dem faktisk spiser? Er det fullverdig?         Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?         Hva snakkes det om (tema)?         Spiser voksne sammen med barna?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser voksne sammen med nyem kastes?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser eller drikker de også andre ting (medbrakt mat og drikke?)         Andre aktiviteter mens maten spises?         Hvor mye brukes det mobiler under måltidet?         Observasjon Matproduksjon         Hvem gjør hva? |   |
|---|---|
| Hvordan foregår matserveringen?<br>Hva blir servert? Hvordan ser maten ut?<br>Hvor mange barn spiser? Fordelingen gutter-jenter?<br>Hva velger eleven fra frokost buffeten og hva er det dem faktisk spiser? Er det fullverdig?<br>Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?<br>Hva snakkes det om (tema)?<br>Spiser voksne sammen med barna?<br>Hvordan virker stemningen?<br>Spiser barna opp maten? Hvor mye kastes?<br>Hvor lenge spiser barna før de forlater spiselokalet?<br>Spiser eller drikker de også andre ting (medbrakt mat og drikke?)<br>Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br><b>Observasjon Matproduksjon</b>  | Skolemåltid frokost og lunsj:   |
| Hva blir servert? Hvordan ser maten ut?         Hvor mange barn spiser? Fordelingen gutter-jenter?         Hva velger eleven fra frokost buffeten og hva er det dem faktisk spiser? Er det fullverdig?         Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?         Hva snakkes det om (tema)?         Spiser voksne sammen med barna?         Hvordan virker stemningen?         Spiser barna opp maten? Hvor mye kastes?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser eller drikker de også andre ting (medbrakt mat og drikke?)         Andre aktiviteter mens maten spises?         Hvor mye brukes det mobiler under måltidet?  | Hvordan ser spiselokalene / spiseomgivelser ut? Bord/ stoler/ belysning/ støynivå           |
| Hvor mange barn spiser? Fordelingen gutter-jenter?         Hva velger eleven fra frokost buffeten og hva er det dem faktisk spiser? Er det fullverdig?         Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?         Hva snakkes det om (tema)?         Spiser voksne sammen med barna?         Hvordan virker stemningen?         Spiser barna opp maten? Hvor mye kastes?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser eller drikker de også andre ting (medbrakt mat og drikke?)         Andre aktiviteter mens maten spises?         Hvor mye brukes det mobiler under måltidet?  | Hvordan foregår matserveringen?   |
| Hva velger eleven fra frokost buffeten og hva er det dem faktisk spiser? Er det fullverdig?         Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?         Hva snakkes det om (tema)?         Spiser voksne sammen med barna?         Hvordan virker stemningen?         Spiser barna opp maten? Hvor mye kastes?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser eller drikker de også andre ting (medbrakt mat og drikke?)         Andre aktiviteter mens maten spises?         Hvor mye brukes det mobiler under måltidet?         Observasjon Matproduksjon   | Hva blir servert? Hvordan ser maten ut?   |
| Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?         Hva snakkes det om (tema)?         Spiser voksne sammen med barna?         Hvordan virker stemningen?         Spiser barna opp maten? Hvor mye kastes?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser eller drikker de også andre ting (medbrakt mat og drikke?)         Andre aktiviteter mens maten spises?         Hvor mye brukes det mobiler under måltidet?   | Hvor mange barn spiser? Fordelingen gutter-jenter?  |
| Hva snakkes det om (tema)?         Spiser voksne sammen med barna?         Hvordan virker stemningen?         Spiser barna opp maten? Hvor mye kastes?         Hvor lenge spiser barna før de forlater spiselokalet?         Spiser eller drikker de også andre ting (medbrakt mat og drikke?)         Andre aktiviteter mens maten spises?         Hvor mye brukes det mobiler under måltidet?         Observasjon Matproduksjon   | Hva velger eleven fra frokost buffeten og hva er det dem faktisk spiser? Er det fullverdig? |
| Spiser voksne sammen med barna?<br>Hvordan virker stemningen?<br>Spiser barna opp maten? Hvor mye kastes?<br>Hvor lenge spiser barna før de forlater spiselokalet?<br>Spiser eller drikker de også andre ting (medbrakt mat og drikke?)<br>Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon   | Hvem spiser sammen med hvem? Sosialiseringen, er det noen som sitter alene?                 |
| Hvordan virker stemningen?<br>Spiser barna opp maten? Hvor mye kastes?<br>Hvor lenge spiser barna før de forlater spiselokalet?<br>Spiser eller drikker de også andre ting (medbrakt mat og drikke?)<br>Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon  | Hva snakkes det om (tema)?  |
| Spiser barna opp maten? Hvor mye kastes?<br>Hvor lenge spiser barna før de forlater spiselokalet?<br>Spiser eller drikker de også andre ting (medbrakt mat og drikke?)<br>Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon  | Spiser voksne sammen med barna?   |
| Hvor lenge spiser barna før de forlater spiselokalet?<br>Spiser eller drikker de også andre ting (medbrakt mat og drikke?)<br>Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon  | Hvordan virker stemningen?  |
| Spiser eller drikker de også andre ting (medbrakt mat og drikke?)<br>Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon   | Spiser barna opp maten? Hvor mye kastes?  |
| Andre aktiviteter mens maten spises?<br>Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon  | Hvor lenge spiser barna før de forlater spiselokalet?                                       |
| Hvor mye brukes det mobiler under måltidet?<br>Observasjon Matproduksjon  | Spiser eller drikker de også andre ting (medbrakt mat og drikke?)                           |
| Observasjon Matproduksjon   | Andre aktiviteter mens maten spises?  |
|   | Hvor mye brukes det mobiler under måltidet?   |
|   |   |
| Hvem gjør hva?  | Observasjon Matproduksjon   |
|   | Hvem gjør hva?  |

Fordeling jenter/gutter?

Hva blir laget?

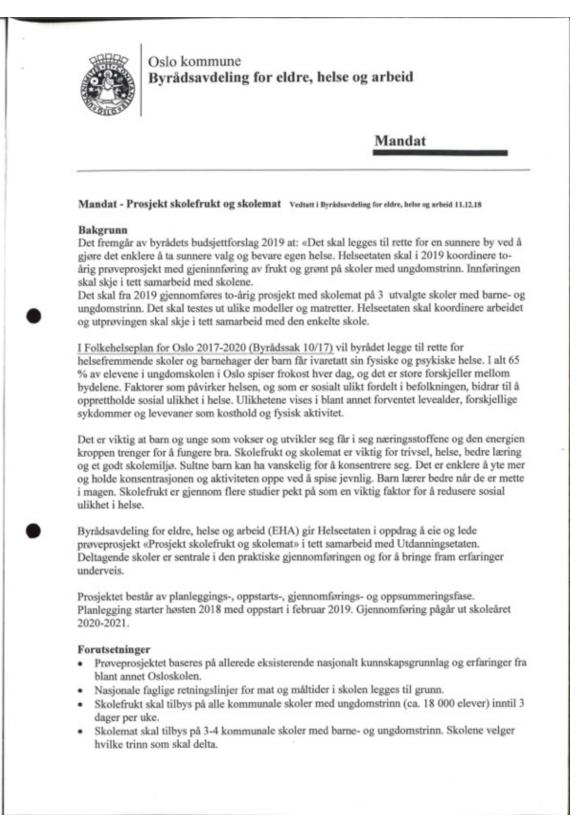
Med hvilken hensikt?

Hvordan samhandler elever, og ansatte?

Hvordan er stemningen?

Hvor engasjert virker elevene?

# 8.17 Appendix 17: Mandate



- Hva elevene selv mener er et sentralt premiss, og brukerevaluering gjennomføres ved oppstart, underveis og innen avslutning. Erfaringer fra elever (elevråd), foresatte (FAU, <u>klassekontakter</u>), lærere og skolehelsetjeneste innhentes. Prosjektgruppen følger opp resultatene i samarbeid med skolene.
- Skoler som prøver ut skolemat velges på bakgrunn spørreundersøkelse, vurdert etter gitte kriterier: Tilbudet er nytt, skolens begrunnelse for mål, hensikt, omfang og organisering. Det er viktig at deltakende skoler representerer hele byen, har ulik størrelse med deltakelse fra ulike trinn. Ulike modeller og matretter skal testes ut.

#### Organisering

- Helseetaten eier og leder Prosjekt skolefrukt og skolemat i tett samarbeid med Utdanningsetaten.
- Prosjektgruppen beskriver roller og ansvar for Helseetaten, Utdanningsetaten og skolene.
- Det sikres kontinuitet i deltakelse fra alle involverte tjenester gjennom hele prosjektperioden.
- Deltakende skoler er ansvarlig for praktisk gjennomføring eksempelvis for lokaler, bestilling/innkjøp, servering, opprydding etc.
- Det etableres prosjektgruppe med fast deltakelse fra Helseetaten og Utdanningsetaten. Prosjektgruppen vurderer behov for opprettelse av lokale arbeidsgrupper. Elevene skal medvirke. Referansegruppe etableres.
- Det etableres ingen styringsgruppe, prosjekteier rapporterer status til EHA gjennom ordinær styringslinje. EHA orienterer Byrådsavdeling for oppvekst og kunnskap.
- Involverte skoler oppnevner 1-2 ansvarlige personer til å koordinere prosjektet lokalt.
- Det gjennomføres to årlige erfaringsmøter hvor utvalgte bydeler deltar.

#### Økonomi

- Prosjekt skolefrukt og skolemat skal gjennomføres innen gitt økonomisk ramme. Prosjekteier er ansvarlig for å fordele midlene og å rapportere status bruk.
- Det utarbeides kostnadsmodell som synliggjør kostnader for valgte matretter og modeller fordelt på matrett, logistikk/bemanning, utstyr og administrasjon («kostøre»).
- Det er budsjettert med totalt kr 15 mill. for perioden 2019-2021. Skolefrukt er budsjettert med kr 5 mill. med opprinnelig foreslått fordeling: 2019: 2 mill. 2020: 2 mill. 2021: 1 mill. Skolemat er budsjettert med kr 10 mill. med foreslått årlig fordeling: 2019: 4 mill. 2020: 4 mill. 2021: 2 mill.

For å sikre best mulig måloppnåelse og tilstrekkelig fleksibilitet øremerkes totale årlige beløp slik at de samlet brukes til drift av prosjektet: 2019: 6 mill. 2020: 6 mill. 2021: 3 mill.

Anskaffelser skjer i tråd med Oslo kommunes regelverk for offentlige anskaffelser.

## Framdrift og milepæler

- Prosjektet starter i januar 2019 (med tilbud om skolefrukt) med varighet ut skoleåret 2020/2021.
- Prosjektplan utarbeides, inkl. delmål, effekt- og resultatmål, milepæler, risiko- og sårbarhetsanalyse.
- Kommunikasjonsplan utarbeides.
- Budsjett og kostnadsmodell utarbeides.
- Økonomirapportering skjer i tråd med gjeldende retningslinjer.
- En helhetlig vurdering av aktiviteter og kostnader danner grunnlag for justeringer inn mot budsjettåret 2020.
- Prosjekteier avgir <u>helhetlig statusrapport 2 ganger årlig</u> (innen 01.07 og 20.12), og rapporterer umiddelbart ved betydelige avvik fra prosjektplanen. Sluttrapport leveres innen 31.12.2021.