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4. Norsk sammendrag

Formål: Denne studien ønsker å utvikle en grundig forståelse av norske videregående elevers oppfatninger av påvirkninger på deres matvalg i hverdagen. I tillegg vil studien prøve å forstå hvordan matvalg og matmønstre endres etter hvert som ungdommene utvikler seg mot voksenlivet.

Teori: Studiens teoretiske rammeverk tar utgangspunktet i den sosial økologiske modellen. I tillegg blir de sosiologiske konseptene "habitus", "socialization" og "transition" brukt.

Metode: Dette er en kvalitativ studie med fire fokusgrupper. Seksten deltakere fra ulike utdanningsprogrammer (helse- og oppvekstfag, byggfag, idrettsfag og studiespesialisering) fra en videregående skole i Hedmark i Norge ble rekruttert gjennom purposive sampling. Deltakerne var mellom 16-18 år: halvparten av dem var jenter og den andre halvparten var gutter. Datainnsamling ble gjennomført i løpet av våren 2017. En induktiv tematisk analyse identifiserte fire temaer og ni subtemaer som fremhevede påvirkninger og utviklingen av ungdommens matvalg.

Funn: Studien identifiserte følgende påvirkninger på matvalg: matpreferanser, tid, kunnskap og tilgang, sammen med sosiale påvirkninger som foreldre som rollemodeller, deltakelse i matrelaterte beslutninger, sosiale medier og spising som en sosial aktivitet. Et kjønnsmonster ble identifisert blant alle de sosiale innflytelsene på ungdommens matvalg. Etter hvert som ungdommene ble eldre (det vil si, går igjennom "translation" fra ungdomslivet mot voksenlivet), hadde de en tendens til å ta mindre sunne matvalg. Samtidig økte kunnskapen og tilgangen i tråd med ungdommens økt uavhengighet og redusert foreldrekontroll, og kjønnsforskjeller i påvirkning fra sosiale medier, kroppsbilde og forventninger dukket opp, som medførte forskjeller i matvalg mellom gutter og jenter.

Konklusjon: Resultatene fra denne studien støtter tidligere funn ved at det er forskjeller i påvirkning av unges matvalg fra barndommen til ungt voksenliv. Den legger imidlertid til et dypere lag i forståelsen av unges matvalg ved å vise betydningen av sosiale påvirkninger på tvers av matvalgene. Studien understreker samtidig viktigheten av tidlig utvikling av ungdommens matvalg i familien, og senere, at å spise omhandler identitet og er en sosial aktivitet unge gjør, gjerne med venner. Denne studien antyder at ungdommer tar flere usunne kostholdsvalg når de beveger seg gjennom ungdomstiden ved sosial eksperimentering og "risikooppførsel", økt uavhengighet generelt (også i matvalg) og endringer i miljøet. Det kan også være slik at ungdomstiden er en usunn periode, som endres når ungdom blir mer etablert. Langtidsstudier kan bidra til å forstå dette. Denne studien bekreftet også at matvalg ikke nødvendigvis - om i det hele tatt - påvirkes av kunnskap om å ta sunne matvalg, særlig under ungdomstiden. Funnene i denne studien foreslår at å tilby sunn mat til en fornuftig pris som er rask å lage, og i tillegg reduserer usunn mat i områdene hvor ungdommer bruker mye av sin tid, virker effektivt for å endre ungdommens matvalg.

Engelsk sammendrag (abstract)

The aim: to develop an in-depth understanding of Norwegian upper high school students' perceptions of the influences on their food choices, not only in school but in their everyday life. In addition the aim is to understand how food choices and patterns of eating change as young people move from childhood towards young adulthood.

Theory: The theoretical framework was based on a socio-ecological model. In addition, the sociological concepts "habitus", "socialization" and "transition" were used.

Methods: This was a qualitative study, involving four focus groups. Sixteen participants from various education programs (health and youth development, building trades, sports and general subjects) from a high school in Hedmark in Norway through purposive sampling were recruited. The participants were aged between 16-18: half of them were girls and the other half were boys. Data collection was conducted in spring 2017. An inductive thematic analysis identified four themes and nine sub-themes which highlighted the influence on and the development of young people's food choices.

Findings: The research identified the following influences on food choices: food preferences, time, knowledge and access, alongside social influences such as parents as role models, participation in food-related decisions, social media and eating as a social activity. A gender pattern was identified among all the social influences on young people's food choice. As the young people grew older (that is to say, as they made the transition through youth) they tended to make less healthy food choices. At the same time, knowledge and access increased in line with young people's increased independence and decreased parental control, and gender differences in influences through social media, body image and expectations appeared giving rise to differences in food choices between boys and girls.

Conclusion: The findings of this study support earlier studies in that there are differences in influences on young people's choices from childhood towards young adulthood. However, it adds another deeper layer in understanding food choices in young people by showing the importance of social influences across food choices, highlighting the importance of early development of young people's food choices within the family and later, eating as an identity and social activity with friends. This study suggests that young people's diet becomes more unhealthy as they move through youth by social experimentation and "risk" behaviour, increased independence in general (also in food choices) and changes in the environment. It may be a period of unhealthy eating which shifts when young people become more established as an adult. Longitudinal studies could help in understanding this. Also, this study confirmed that food choices are not necessarily – if at all – influenced by knowledge of healthy foods, particularly during youth. The findings in this study, suggest offering healthy food at a reasonable price which is quick to make and in addition, reducing unhealthy food in the areas where young people spend much of their time, seem effective in modifying adolescent's food choices.

5. Introduction

5.1 Young people and their food choices: a health public issue

National and international initiatives designed to promote healthy eating have, despite varying results, identified the importance of youth dietary choices for the short- and long-term health of the population (World Health Organization [WHO], 2016). Many interventions fail because they do not take account of the way in which young people's food choices develop from childhood through to young adulthood. The focus of this study is to understand how food choices and patterns of eating change as young people move through this period of their lives and understand the influences on their choices. A better understanding of young people's food choices can contribute to informing effective health promotion strategies that helps adolescents create healthy eating habits at a young age, which helps to provide a sound basis for good health later in life.

In recent years, there has been an increased focus on young people's eating patterns in a number of high income countries (Coulson, Eiser & Eiser, 1998; Fitzgerald, Heary, Nixon & Kelly, 2010; Samdal et al., 2016), given impetus by the concern over the growing prevalence of child and adolescent obesity and other chronic diseases such as type 2 diabetes, metabolic syndrome, and vascular diseases (Folkehelseinstituttet [FHI], 2016; Organisation for Economic Co-operation and Development [OECD], 2014). An unhealthy diet is known as one of the main causes of obesity (World Health Organization [WHO], 2014). Nutritional intake is also crucial for growth (Story, Neumark-Sztainer & French, 2002) and may also have long term implications for adolescents' health and wellbeing. For example, obesity can result in loss of independence, years of disability, or death, and impose a considerable economic burden on health services (Inchley et al., 2016). The Norwegian population who are overweight and obese is increasing the fastest among young people transitioning into adulthood (Hånes, Graff-Iversen, & Meyer, 2015). Statistics from the Norwegian military indicates that approximate 20 % of the Norwegian seventeen year olds, who apply for military service, are overweight or obese (FHI, 2016). Various factors that influence young people's diet have been identified, such as: the family, school and friends

(Gillman et al., 2000; Samdal, 2017; Salvy, De La Haye, Bowker & Hermans, 2012). This has mainly been from quantitative surveys which have not provided much detail relating to how different factors might be important at different stages of childhood and adolescence.

In order to develop healthy eating habits among children and young people various projects and initiatives have been implemented. With the aim of reaching as many children as possible across sex, age and social class, many of these have focused on school. For example, improving the diet of school-aged children has become a policy priority in Norway (Utdanningsdirektoratet [UDIR], s. a.), and The Norwegian Directorate for Health has published guidelines for healthy school meals in primary, secondary and upper high schools (The Norwegian Directorate of Health, 2015a; The Norwegian Directorate of Health, 2015b; The Norwegian Directorate of Health, 2015c).

This shows that healthy eating among youth is a major public health issue in Norway as elsewhere. It is especially viewed as important in a context of prevention.

5.2 What do we know about adolescents' eating habits?

In Norway statistics from nationwide dietary surveys among infants and young children (Spedkost 2006-2007, Småbarnskost 2007), children and adolescents aged four, nine and 13 years old (Ungkost 2000 and 2015) and men and women aged 18-70 years (Norkost 2010-11) have been collected. However, statistics about upper high school students, aged 16-19 years, is somewhat limited, where only Forskningsrådet (2011) have conducted data on school meals. Samdal et al. (2016) have collected data, up to first-year students in upper high school (aged 15-16 years). Research by Forskningsrådet (2011) and Samdal et al. (2016) provide the only specific data on this age group in Norway. It will therefore be used statistics from age groups below and above upper high school students in order to show what we already know about upper high school students eating habits in Norway.

In the last years, there has been observed a positive trend among the Norwegian population in general, with an increased intake of fruit and vegetables and a decrease in sugar intake (The Norwegian Directorate of Health, 2016). However, according to the

Norwegian government there still exists major nutritional challenges, and there are major health gains to be made, especially by the younger population (The Norwegian Directorate of Health, 2016).

Looking at the Norwegian children and adolescents, compared to national nutritional guidelines, they consume too much saturated fat and sugar, and many do not meet the recommendation on fruit and vegetables (Hansen et al., 2015; Samdal et al., 2016). They also eat too little fish and drink too many soft drinks (Hansen et al., 2015; The Norwegian Directorate of Health, 2016). Several international and national studies have shown that children and adolescents have poor diets that do not meet the recommended dietary guidelines (Inchley et al., 2016). In this regard, the children and adolescents of Norway are little different.

International and national studies have conducted various surveys at different ages, and this has made it possible to identify different patterns in young people's eating habits and how this change over time. For example, increased age is associated with a more unhealthy diet (Forskningsrådet, 2011; Inchley et al., 2016; Samdal et al., 2016) among youth in Norway as well as many other countries. Also, statistical differences can be seen between the genders. In a number of countries, boys tend to eat more unhealthy food than girls (Bere, Burg & Klepp, 2008a; Forskningsrådet, 2011; Inchley et al., 2016; Samdal et al., 2016). There are also more boys who are characterized as overweight than girls (OECD Publishing, 2015), despite the higher level of physical activity per week (Samdal et al., 2016). The gender differences in eating patterns seem to be clearer with increased age when looking at the consumption of fruit and vegetables, soft drinks and also weight loss behaviour (Samdal et al., 2016). In addition, young people's eating patterns are also related to socioeconomic differences. The statistics points out that young people from families with more resources tend to eat more healthy food from an early age than children from families with fewer resources (Bere, Glomnes, te Velde & Klepp, 2008b; Bere, van Lenthe, Klepp & Brug, 2008c; Inchley et al., 2016; Samdal et al., 2016). The relationship between socioeconomic status and age does not appear in the statistic.

At the same time as the eating pattern changes as the young people grow older, the social and physical environment changes as well. Increased access to food, diminished

parent control and increased influence of making food choices are some of the suggested factors for this change (Fitzgerald et al., 2010). This demonstrates the importance of studying this age group, particularly. The existing data on this age group are of small scale or nonexistent in Norway. Primary- and secondary school children thoughts on the subject may be very different from upper high school students' thoughts on the subject, because the social- and physical environmental changes during in this period.

5.3 Theoretical approach to the research problem

Conceptual models or theories are useful for understanding and explaining the dynamics of food choices, the processes for changing food choices, and the effects of external influences on food choices (Rimer & Glanz, 2005). However, a broad number of factors that influence young people's food choices have been identified. This has led to a call for the development of new theories on the differential health experience of various population groups living in different contexts and circumstances (Currie et al., 2004). More comprehensive theoretical models of eating behaviour that take multiple factors into account have gradually been developed (Fitzgerald et al., 2010; Story et al., 2002; Verstraeten et al., 2014). The period from childhood towards young adulthood contains many changes in young people's lives. The autonomy increases in a lot of ways as they grow older, making the young people become more independent. Because there are a lot of changes happening, this period is often talked about as a period of transition, where young people are, among other things, trying to discover the "social self". Previous research has looked at young people's food choices through psychological models. This study will however be informed by a sociological approach which has become quite common in public health in order to get a better understanding of the development and perceptions of young people food choices. The research problem is conceptualized in terms of a socio-ecological model, in which the idea of transition is embedded. This approach is explained in more detail in chapter 6.

Previous interventions are often directed at informing young people about what a healthy diet is because the assumption is that young people are not eating according to the recommendations because they don't know what is healthy. However, there is growing evidence that young people are, at least in broad terms aware of what healthy food choices

are and there are other influences that shape what they eat, when and who with that are more related to their transition from child to young adult.

5.4 What has already been conducted and the gap that the research aim/research question fills

A part of growing up, and, in particular, making the transition through adolescence towards young adulthood, is widely viewed as involving taking more responsibility for making one's own decisions in the process of becoming an independent adult who takes their own dietary choices and thus develops their own dietary habits. The habits developing during these years seem to have, to varying degrees, lifelong effects (Marmot, 2010). However, while a broad range of factors has been identified in the literature as important for food choices of young people, few studies have set out to examine young people's views in depth (Fitzgerald et al., 2010). In Norway in particular, in-depth research is lacking. There are conducted two qualitative master theses that examine high school students' food choices in school (Gjertsen, 2016; Nordhagen, 2011). Since the studies are master theses, they are of small scale. In addition to this, they have a limited theoretical framework compared to international studies conducted (Fitzgerald et al., 2010; Warren, Parry, Lynch & Murphy, 2008) and they only focus on the school arena. Several Norwegian studies point out that qualitative studies are lacking and that the voices of the adolescents in food choices are missing (Bugge, Lillebø & Lavik, 2009; Fossgard, Holthe & Wergedahl, 2013; Holthe, Fossgard & Wergedahl, 2013). Qualitative studies can contribute to enrich what we already know about adolescents' dietary choices, bring out new knowledge, and help us understand the dynamic behind why they are making the choices that they do. Getting a better understanding of this can be used to inform public health policy and practice. This might, for example, be in relation to supporting the development of healthy eating during the early years. This issue is considered further in Chapter 9.

The aim of the study is to develop an in-depth understanding of Norwegian upper high school students' (aged 16-19 years) perceptions of the influences on their food choices, not only in school but in their everyday life. In addition the aim is to particularly understand how food choices and patterns of eating change as young people move from childhood towards young adulthood.

The research question of this study will therefore be: How can we understand Norwegians upper high schools students' perceptions of influences on their food choices, not only in school, but in their everyday life? In addition to this, how can we understand how food choices and pattern of eating changes as young people move from childhood towards young adulthood?

6. Literature review on young people's food choices

6.1 Introduction

This master thesis takes as its starting point four international articles about influences on young people's food choices and three surveys in order to understand how food choices and patterns of eating change among this group. The search for Norwegian articles was mainly conducted through the Scandinavian Journal of Public Health. Since there were no studies found on influences on young people's food choices in Norway, only one qualitative study conducted on adults is used in the literature review. The international articles were mainly found through searches in Google Scholar, but also through searches in Oria and reference lists of relevant studies. The search process started with a slightly different starting point than the research question which is in this master thesis. By searching through the literature, the gap was identified and the research question was formed. The search process appears in the pico-form attached (Appendix 1). The relevant literature was reviewed and each of the seven most cited articles was used to provide an overview of the literature (see Appendix 2).

This chapter will be divided into two parts. Part one will cover both empirical research on the youth's food choices and the changes that take place from childhood to young adulthood. Part two will present and explore the socio-ecological theoretical orientations to the research problems, and link it to the research done in the field.

6.2 Upper high school students and diet

When it comes to diet, high school students (that is to say, those age 16-19 years) are little studied in Norway. National surveys have only conducted data up to first-year students in upper high school and qualitative studies on young people's perceptions of their eating habits have not been conducted. Nevertheless, the existing data indicates that there is a growing trend towards unhealthy eating patterns as young people move through adolescence (Forskningsrådet, 2011; Inchley et al., 2016; Samdal et al., 2016). As children grow older, social and environmental influences come into play, and parents take less part in the

children's dietary choices, which can change the diet established in home (Hamilton, McIlveen & Strugnell, 2000). In this way upper high school students are an interesting group to study. Food choices are something that they face in their everyday lives.

Reviewing the Norwegian literature, one qualitative study doing focus group was conducted on people working in the food industry, retail, public health, researcher and various non-governmental organisations related to food in Norway (Oostindjer, Amdam, & Egelanddal, 2015). They concluded that providing more food education and clearer food information, targeted toward children, families and parents, would be good strategies to get the Norwegian population to eat healthier. Looking at existing international literature, food knowledge does not seem to be - if at all - the main influence on young people's food choices (Deliens, Clarys, Bourdeaudhuij & Deforche, 2014; Fitzgerald et al, 2010).

There are conducted several international quantitative and qualitative studies of children and adolescents' eating habits within school. However, fewer studies are done on influences on food choices in young people's everyday life including beyond school. Previous studies from North-America and Europe have identified many factors influencing young people's food choice using focus groups or by reviewing the literature (Deliens et al., 2014; Fitzgerald et al., 2010; Verstraeten et al., 2014; Story et al., 2002). Using a framework based on the socioecological model and a psychological model, four levels of influences have been identified; intrapersonal influences (e.g. psychological and biological influences), social environment (e.g. family), physical environment (e.g. food stores) and macro system (e.g. mass media). Intrapersonal factors influencing young people's food choices were identified as: food preferences, self-discipline, time, food knowledge, self-efficacy, convenience, attitudes and beliefs, habit-strength, perceived food safety, gender and subjective norms. Social environmental factors were identified as: (lack of) parental control, family, family meals, food availability at home, friends and peers; physical environment factors as: availability and accessibility, appeal and prices of food products, school, food stores and fast food outlets/resurants; Macro environment factors were: mass media, media environment, media exposure and use, marketing, social and cultural norms, and advertising.

Some of the latest studies have also identified different patterns in diets among young people (Deliens et al., 2014; Fitzgerald et al., 2010). Deiliens et al. (2014) found that as the

young people grow older, independence increases and parent control decreases, and students are constantly challenged to make healthy choices. Identifying patterns may be helpful in understanding influences on young people's food choices. Why and how they will be helpful, will be describe in the sections on patterns below.

6.3 Patterns of food choices during adolescence

Several studies in different countries have looked at eating patterns among children and adolescents without taking the differences within the group into account. The period from childhood towards young adulthood is a time filled with major changes in young people's lives. This may be one of the reasons why studies on eating habits among children and adolescents show differing results. As an example, a Norwegian study looked at if changes in school food environment could lead to change in eating behaviour among primary school children (Gebremariam et al., 2012). After the intervention, they found that there were not significant differences in the diet among the study population and the control group. By looking at the study more closely, the study includes children in primary schools. The statistics point out that nearly all pupils in primary schools bring with them food from home (Forskningsrådet, 2011). In addition to this, five out of 35 schools included in the study had a canteen where two of the five canteens were open once or twice a week (Gebremariam et al., 2012). They point out the importance of taking account of the way in which young people's food choices and food environment developed from childhood to young adulthood. Looking at patterns may therefore enrich what we already know about young people's food choices.

By looking at the existing literature, three patterns became clear. In the following sections developments from elementary school and up to the first year of upper high school are reviewed.

6.3.1 Age differences

The WHO's Health Behaviour in School-aged Children (HBSC) survey has collected data from almost 220 000 young people in 42 countries of 11-, 13- and 15-year-old boys and girls (Inchley et al., 2016). The survey has documented that unhealthy eating patterns become more common as young people move through adolescence, with frequency of

breakfast consumption, eating fruit and having evening meals with the family decreasing between the ages 11 and 15 (Inchley et al., 2016). This pattern is overall the same between all the countries that participated in this data collection from Europe and North-America, including Norway (Samdal et al., 2016). Given the different cultural contexts across these countries, this suggests that there is something about adolescence that is important to understand. Norwegian studies indicate that the decline in healthy eating behaviour seems to continue in to upper high school (Forskningsrådet, 2011; Samdal et al., 2016). In Norway, a decline in fruit and milk consumption from primary to upper high school (Forskningsrådet, 2011) and an increased intake of soft drinks is also observed (Forskningsrådet, 2011). Reasons for the shift in dietary habits as children move into adolescence have been suggested as due to lifestyle, developmental, social, and environmental changes (Story et al., 2002). While doing focus groups with children and adolescents from different age groups, Fitzgerald et al. (2010) found that there were developmental differences in influences on food choices across childhood and adolescence. Older participants exercised more control over their food choice decisions at home compared with younger participants. Also, parental control decreased among older participants and at the same time their independence increased around food and other lifestyle factors.

Contributing factors including increased autonomy over food choice among those in older age groups (Deliens et al., 2014) and reduced influence of the family environment (Deliens et al., 2014; Pearson, MacFarlane, Crawford & Biddle, 2009) are supported from others studies as well. For example, Deliens et al. (2014) found that after the transition from secondary school to university, the independence increased and the parent control diminished, and students were constantly challenged to make healthful choices. Students have to be self-disciplined, have self-control and thus often had to prioritize healthy eating over other social (university specific) activities.

6.3.2 Gender differences

Samdal et al. (2016) observed gender differences in diet among Norwegian youth in primary school to upper high school. The gender differences were increasing with age, especially in fruit and vegetables and soft drink consumption. The statistics showed that girls eat more fruit and vegetables (Samdal et al., 2016; Forskningsrådet, 2011) and consume less

soft drink than boys (Samdal et al., 2016). Norwegian girls also tend to drink more water than the boys (Forskiningsrådet, 2011). At the same time, a small amount of boys eat oftener breakfast and fewer have tried to lose weight than girls. Among upper high school students, 15 % of the boys compared with 39 % of the girls have tried to lose weight (Samdal et al., 2016). The pattern in healthier food choices, the tendency to skip breakfast and the attempts to lose weight among girls is the same in most of the European and North-American countries (Inchley et al., 2016). In similarity with the patterns in age, this suggests that there are similar processes affecting young people regarding of food choices in all countries and that affect boys and girls differently in all countries.

Wardle et al. (2004) found significant gender differences in weight control and beliefs among girls and women, aged 17 to 30, in all of the (to a lesser extent) 23 participating countries. The countries were mainly from Europe, but also countries from Asia, North-America and Africa participated. Norway was not part of the study. In general, women were more likely than men to report avoiding high-fat foods, eating fruit and fiber, and limiting salt. They were also more likely to be dieting and attached greater importance to healthy eating. Shepherd and Dennison (1996) did also identify the pattern in food choices between genders and suggested that there were different levels of “social pressure” to eat more healthily among girls than among boys, which seems to continue to be the case some twenty years later. Also, a focus on body image (Voelker, Reel, & Greenleaf, 2015) and perfectionism, and increasing societal awareness related to various diets that promise a slim and successful body (Bugge, 2012) may contribute to the high number of girls trying to lose weight, which reflected in the food choices they tend to make during this period of their lives. Samdal et al. (2016) refers to gender difference in eating habits among the adult population as well. Women are eating more fruit and berries and drink more water than men. Men are eating more potatoes, bread, meat and sweets, and drink more soda, coffee and beer than women (Totland et al., 2012). It is therefore reason to believe that gender role socialization and identity development that characterizes adolescence may also help to explain the observed gender differences, argue Stang and Story (2005) (cited in Samdal et al., 2016).

6.3.3 Socioeconomic status and food choices

In Europe and North-America adolescents from families with high socioeconomic status have a higher consumption of fruit and vegetables, and higher frequency of eating breakfast and evening meals with their family (Inchley et al., 2016). Young people's soft drinks consumption is not consistent across countries and regions. The consumption was high among low socio-economic groups among girls in 19 of the 42 countries and 12 of 42 countries among boys. Despite that Norway is a country with small socioeconomic differences in general compared to other countries, the Norwegian Survey does indicate that there are socioeconomic differences among adolescents eating habits (Samdal et al., 2016). In Norway, adolescents from high-affluence families have a tendency of eating meals more frequently, have a higher consumption of fruit and vegetables, eat less candy and drinking less soft drinks than peers from low-affluence families (Bere et al., 2008b; Samdal et al., 2016). Also, a lower proportion of people have tried to lose weight in higher socioeconomic status groups than lower socioeconomic groups. The statistics in weight loss only looks at high and low socioeconomic status, and does therefore not show differences within boys and girls in socioeconomic status.

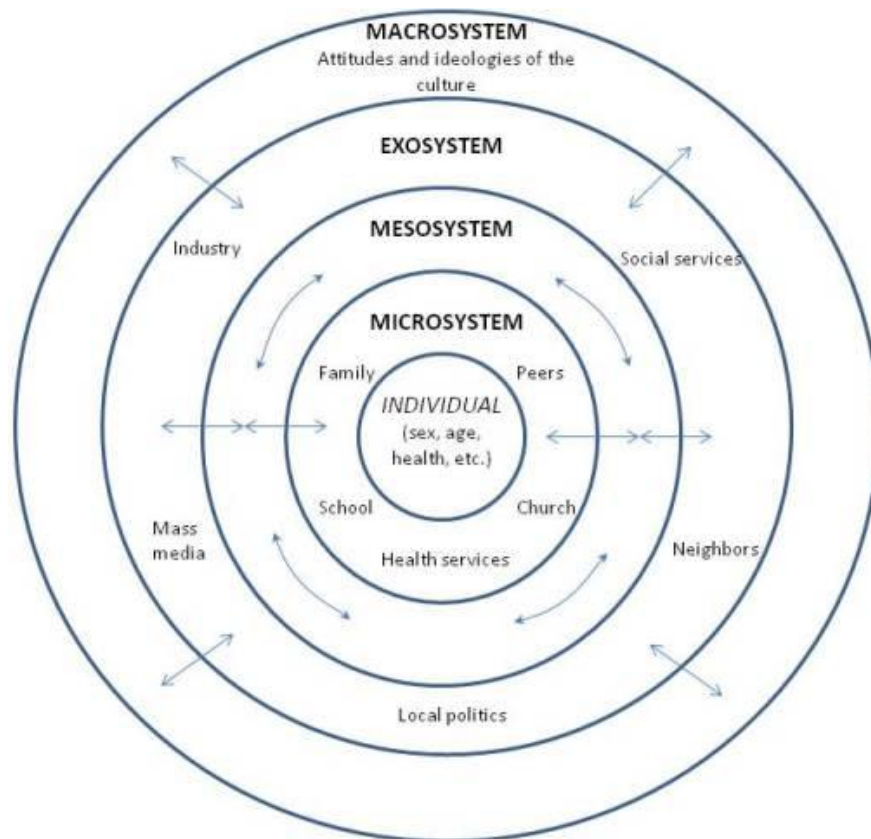
In order to understand social patterns in relation to socioeconomic status and gender in food choices, using a social theory or a social model can be helpful. For example, reasons for the patterns in food choices within different socioeconomic status groups is suggested as due to differences in role modelling between parents of high and low socioeconomic position, where the parents of high socioeconomic status' role modelling is more beneficial in the establishment of healthy habits and regularity in family meals (Krolner et al., 2011). This will be further explained in section 6.5 "Habitus and socialization". The theoretical framework of this study will be presented in the following sections.

6.4 Models used to explain young people's eating habits

Many researchers have over the past decades realized the importance of establishing healthy eating habits in early life in order to establish good habits that remain into adolescence and adulthood. Through the work that has been done, a complex picture of what influences dietary choices has been formed. From relatively simple theories it has been

developed and used models that are more complex and explain how different factors affect people's eating habits at different levels.

An example of a model that has often been used to get a complex picture of young people's eating habits is different types of the socio-ecological model (Deliens et al., 2014; Fitzgerald et al., 2010; Verstraeten et al., 2014; Story et al., 2002). Socio economical models were developed to get a further understanding of the dynamic interrelations among various personal and environmental factors. Bronfenbrenner (1979) developed the first socio-ecological model in order to understand human development which he continually revised until his death in 2005. The model is illustrated bellow (figure 2).



He organized five social subsystems that support and guide human development, where each system depends on the contextual nature of the person's life and offers an ever growing diversity of influences and sources of growth. At the core of Bronfenbrenner's socio-ecological model is the child biology and psychology which is based on individual and genetic developmental history. This is affected and modified by the child's social and physical environment (microsystem) but also interactions among the systems within the

environment (mesosystem). The exosystem is the large social system in which the child lives in which is influenced indirectly; for example a child being affected by a parent losing a job because of changes in labour market. The outermost layer (macrosystems) is composed of cultural values, customs and laws and is influenced by the general beliefs and attitudes shared by members of the society.

Qualitative research using focus groups has been conducted with adolescents to explore their eating habits informed by this model, in order to understand how food choices and eating habits are developed (Deliens et al., 2014; Fitzgerald et al., 2010; Verstraeten et al., 2014; Story et al., 2002). They argue that in the socio-ecological model, food choices are viewed as an interaction between factors within and across multiple levels of influences. In other word; it highlights people interactions with the physical and socio-cultural environment. In addition to this, several of these studies are taking an intrapersonal perspective in to account with using psychological models as Social cognitive theory (SCT) or Attitude, social influence and self-efficacy (ASE).

However, there has been little sociological examination of patterns of eating among youth. This study will use sociological theoretical concepts in combination with the socio-ecological model in order to understanding young people's food choices. Using new concepts may bring forth new knowledge which in turn may contribute to a better understanding. The sociological theoretical concepts will be presented below.

6.5 Habitus and socialization

Habitus is a term which involves a socially structured, a learned pattern of thinking and behaviour, which becomes manifest and embodied as a person's habitus (Bourdieu, 2011). According to Bourdieu, habitus is structured by social background, personal experiences and socialization. In other words, a child raised in a family with good economics, cultural and social capital, where the uncertainty of fundamental factors such as a place to live, food on the table and social constraints because money is a non-issue, will be part of shaping the mindset and pattern of action in a way which is different from a child raised in a family where these things are more precarious. This is give rise to different forms of habitus in

these children largely because of the differences in parental background. The process that influence habitus development relate to the way children are socialized from the moment they are born which generated particular forms of experience. Based on these experiences different people have varying dispositions that they act upon. The child's gender will also play a role in social background, personal experience and socialization. In this way, different habituses help to explain the pattern of socioeconomic differences and also gender differences in eating habits in adolescents, where children of parents in higher socioeconomics families are socialized in ways that are different from children in lower socioeconomic families. A consequence of this is that children from different socioeconomic backgrounds and/or gender tend to have different habituses, for example in relating to patterns of eating, which they will take with them into transition through youth.

6.6 Habitus and socialization in a longitudinal perspective

Another aspect Bronfenbrenner added later to his socio-ecological model was time (chronosystem) (Bronfenbrenner, 1988). Bronfenbrenner argues that time can be relevant to a person's development in two different ways. One way time can be an influence is the timing of a significant event during a person's development. For example, a divorce is likely to affect a two year old child differently than a teenager. Time can also be an influence because of historical events that happen during a person's life. For example, a person growing up under the great depression is likely to be affected differently than by growing up today with more than adequate amount of food and today's technology. Time interact with other factors as well such as socioeconomic status and gender. For example, those families that have more resources (not just financial ones) are more likely to be able to deal with significant events compared to others with fewer resources.

In the same way as the health of the individual is developing, the dietary habits are also. In the beginning of life, influence from the family through a process of socialization occurs. Later, kindergarten, school, work and retirement will influence the individual in different ways through processes of socialization, which again will influence the development of the young people's habituses and form predispositions they act upon. All of these "phases" will involve different layers of social influences, which can be explained

through the socio-ecological model, and in this way will have an impact on the individual development of dietary habits. In addition to this, these "phases" involve people in socialization processes in different ways depending on where the individual is in its life course. As an example, putting all of these things together in a longitudinal perspective, children in elementary school have particular in teachers and friends involved in different socialization processes. They may not have a canteen at school (microsystem: school influence on a person), they are not allowed to go to the grocery store during school breaks (mesosystem: the connection between school and grocery store which influences a person), have no phone and therefore limited access to social media (exosystem: a person influences through social media), and all of their friends are bringing food from home (macrosystem: culture of the young people at school influences a person). As the children grow older, the environment changes, the social environment in particular and the degree of independence tends to increase. The children may have other teachers and friends with other socialization processes surrounding them. Children may get access to a canteen at school (microsystem), they are allowed to go to the grocery store (mesosystem), they have a phone and free access to social media (exosystem), and at the same time their friends are buying food instead of bringing food from home (macrosystem). This example highlights the relevance of this master thesis which was pointed out in the introduction and in the literature review. This piece of research is not just important because of the qualitative approach, which is lacking in Norway. The example above demonstrates the importance of studying this age group, particularly. There are many factors that changes during the shift from childhood to adulthood, and it is therefore called a period of transition.

6.7 Transition from childhood to young adulthood

Transition is a change "From a start point to a known destination" (Roberts, 2009, p. 299). A life course of an individual consists of a socially constructed transition and biological age (Green, 2010). These transitions from childhood to adolescence towards adulthood goes via a number of economically and socially significant status transitions, such as; transitioning from school to work; leaving home and becoming a house holder; buying, cooking and establishing own eating habits; changing in relationship status and starting a family (Roberts, 2009). The transition from being a child to become an adult is a dynamic

process, which is associated with discovering the social self, emerging from the family and social experimentation (James & James, 2012). This results in greater independence, establishment of sexual, and others identities and relationships (Green, 2010). In the past decades, transition has become “more diverse, complex and unequal than in the previous generation” (Robb, 2007, p. 5). Age is no longer a marker of adult independency as it was earlier. Young people can become adult in some area of their life but not others. For example, some high school students may decide what they eat for school lunch, while their parents are buying and preparing their dinner at home. The degrees of adulthood may vary a lot within the same class. Some youth live by themselves, work alongside school and cook their own food, while others live with their parents, get money from their mother and father and get served their dinner every day. The development towards independency is not a linear process, but dynamic. Social class and gender are dimensions of transitions (Green, 2010). This illustrates the complexity of the group upper high school students and is important to take into consideration in the preparation of the focus group schedule, the focus group session and in the analysis.

6.8 Summing up the literature review and the theoretical concepts

Summing up this chapter, previous findings have found that food choices are viewed as an interaction between factors within and across multiple levels of influences. Four levels of influences have been identified, described as: interpersonal, social environmental, physical environmental and macro system. A psychological model is often used in explaining how eating behaviour develop. However, this literature review has identified a social pattern, such as socioeconomic status and gender, in food choices among young people. At the same time, it has highlighted the changes in pattern with increasing age. The period of transition from adolescents towards young adulthood has been described involving massive social and environmental changes (Green, 2010; James & James, 2012; Roberts, 2009). Therefore, this study has been informed by sociological concepts presented in this chapter in order to explain influences on young people’s food choices. The theory will further be applied to the findings in Chapter 8.

7. Methodology

7.1 Research strategy and study design

Qualitative research usually emphasizes words rather than quantifications in the collection and analysis of data (Bryman, 2012). This approach has become an increasingly popular approach in social science research, but at the same time, it has also been criticized as being too subjective in the way that the data reflects the researchers own opinion, that it has problems of generalization, that it is difficult to replicate and has a lack of transparency (Bryman, 2012). These criticisms are important to be aware of and try to minimize with conducting a study with few errors and valid as possible, which will increase the quality of the study. In order to do so, the researcher acted as systematically as possible throughout the research process in relation to all methodological choices. In addition a thick description of the sample and the conducted research has been provided and the interpretation of the data material was examined with the participants and the moderator. How this is done will be described throughout the chapter.

This study aims to explore Norwegians adolescent's perceptions of influences relating to their diet and on the development of their eating habits from childhood to adolescence. In order to explore adolescents' perceptions, an ontological position described as constructivism is used. Constructivism does not see the world as objective, but rather as social constructed (Patton, 2015). In this way, we can through young people's understandings of how they see their world understand the food choices adolescents make. In order to explore young people's eating habits through their social reality an epistemological position described as interpretivist is used. Interpretivism recognizes that there is a difference between the "objects" of the natural science and people (Bryman, 2012). It focuses on understanding the meaning the participants attach to their social reality in order to understand social action (Bryman, 2012). In other words, this research tries to understand social action, adolescent's diets and their food choices, through conversations with them. A qualitative approach is therefore used in order to get an understanding of young people's food choices, their physical- and social environment, and how these influences each other and changes from childhood and through adolescence.

This study takes a snapshot of young people's views at one point in time, and therefore constitutes a cross sectional study design. However, it also takes a developmental perspective by getting young people to reflect on the transition they are making (Bryman, 2012). In this study, a qualitative research strategy is employed with a cross-sectional design where the theory is the outcome of research, and therefore the approach is primarily inductive. Most of the inductive research draws on concepts and theories that help to frame the research and aid the analysis, hence why this study encouraged doing literature review and thinking about theoretical ideas. By using an inductive approach, this study generates theoretical explanation out of the findings, which some claim may have more potential for health education research, theory and practice than the deductive models (Mullen & Reynolds, 1978).

7.2 Data collection method: focus groups

Humans are social beings and are a part of complex and overlapping social, familial and collegiate networks. They learn about "things" through talking with and observing other people, and through conversations; and we act (or fail to act) on that knowledge in a social context (Kitzinger, 1994). This study seeks to explore young people's understandings, and it therefore uses data collection methods which actively encourage the examination of these social processes in action, namely; focus groups (Kitzinger, 1994).

The focus group helps organize group discussions to explore young people's views, identify group norms, and highlights the respondents' food choices, priorities, language and framework for understanding (Kitzinger, 1994). Also, they help the researcher examine how knowledge, ideas, motivations, concerns, options and perceptions operate within a given cultural context (Kingry, Tiedje & Friedman, 1990; Krueger & Casey, 2014; Kitzinger, 1994). The participants are also able to state their point of view and qualify or modify, or agree with things they wouldn't think of without hearing others participants' views. Bryman (2012) argues that the data is a more realistic account of what people think because they are forced to reflect and possibly revise their views. This can generate data more like the reality of the students. For all of these reasons, focus groups will contribute to a deeper and more

valid understanding of how young people's perceptions of their food choices, than by using interviews where the benefits of the group dynamic is absent.

7.2.1 Recruiting the sample

In Norway, upper high schools run over a period of two to three years, where the students are aged 15 to 19. Students who studies vocational subjects have two years of schooling and two years of practise, the other students have three years of schooling before they have to apply for higher education. The size and numbers of education programs will vary from school to school. The researcher approached three different upper high schools by sending an email to the schools rector through a period from December throughout January. The schools that were contacted were medium to large in size and had approximate 500-1400 students. One rector responded and said she was interested in participating in the research project. A further description of the school and sample will be presented under "Description of the sample and sampling process". The rector delivered the email further to a responsible teacher, which helped the researcher contact the students in different age groups and subjects. Optimally, the researcher would present the study in front of the class and distribute participant information about the research (Appendix 3). If there were any questions, the researcher would have had the opportunity to answer them. Due to practical issues, the teachers did the presentation and delivered participant information at the latest 24 hours before the focus groups was taking place. This is elaborated further in the paragraph Ethical Considerations. The teacher had been given the information to make four friends group out of, if it were possible, four different subjects with a various age. The teacher was told to make groups on four to six participants, with boys and girls separated. The group size is justified in the section of "Group consumption". Four classes, in different subjects and age were selected by the responsible teacher to participate in the data collection. The different subjects selected, which included bought vocational and other educational programs, were: "building trades", "health and youth development", "sport" and "general subjects". Only four students in each class were selected to participate and were put together in friendship groups. The selection was conducted by the students' teacher. One teacher delivered the participant information to the whole class, and the three others delivered the participant information to only the four students they picked out participating.

7.2.2 The focus group schedule

The focus group schedule was composed of four open-ended questions (Appendix 4), which had the purpose of covering the adolescents' diet today, how their diets were when they were younger, how their diets had changed in that period of time and why, and how healthy they thought their diet was. The purpose of asking four very open-ended questions was to stimulate the discussion, with the researcher intervening if necessary along with the discussion (Bryman, 2012). The researcher also had a second person alongside in the data collection; a moderator. The purpose of the moderator was to help the researcher in the focus group setting by ensuring that every question and that the checklist was covered, and also to help the researcher in the analyses. This will be explained further in the section of "the focus group session". The researcher and moderator had also a checklist (Appendix 5), in order to try to ensure that all relevant issues were covered. The checklist was somewhat more structured and contained topics and specific questions, which the researcher could introduce if the participants was not talking freely. The checklist was based on the focus group schedule in "Factors influencing the food choices of Irish children and adolescents: a qualitative investigation" (Fitzgerald et al., 2010). Although the checklist was structured, the questions were designed to be open, and not lead the participants to answer in a particular direction.

7.2.3 Pilot study

Before carrying out the focus group session, the focus group schedule as well as organizational matters was tested on four third-year high school students from a different high school from where the main focus group were held. The students were all girls studying "general subjects" at a relatively big high school, approximate 1400 students, in a city in the east of Norway. The selection of the sample for the pilot was based on friendship, and that the participants fitted the criteria for the sample in the main research. The pilot was also an essential experience for the researcher. There was no question that was amended or re-organized. However, the researcher experienced how hard it was to collect rich data, and also how hard it was to know what rich data is. This experience made the researcher reflect alone and with fellow-students on how rich data could be collected and how important it was to be aware and ask follow-up questions to stimulate the participants to reflect on what they

were saying and explain why they are saying it. This made a huge difference in the main data collection and shed light on the importance of having a helper in the room, which stepped in when the researcher missed something. Optimally, the researcher should have tested the focus group schedule on four high school boys as well, but because of limitations in time and access, only one pilot was completed.

7.2.4 Group composition

The teachers helped the researcher with picking out students and divide those who wanted to participate into friendship groups with boys and girls separated. The groups were based on age, gender and school subject. The reason why the groups were divided this way is explained below.

Research suggests that a group size of four to six young people is appropriate (Kennedy, Kools & Krueger, 2001; Morgan, Gibbs, Maxwell & Britten, 2002). Larger groups up to eight are possible with older children such as adolescents (Horner, 2000; Ekstrand, Larsson, Von Essen & Tydén, 2005). However, at the same time, groups that are too large may limit all children participating (Roose & John, 2003) and it may be more difficult for the researcher to know who is talking when. Also, a large group may result in fewer people talking because they perceived it as scary. Limited participation of students may also mean that they do not feel involved and the rich reflections do not come forth. Since rich data is important in the data collection, a group size of four to six people was proposed to the responsible teacher. The responsible teacher conducted groups of four students.

When working with younger people the variation in age within the group has to be taking into consideration. Kennedy et al. (2001) suggest that young people's style, ability, sensitivities, and level of comprehension and abstraction differ substantially at different ages, and that the age difference should therefore only be 1-2 year. Therefore, the students in the same class were divided into groups.

There is no existing definition on numbers of groups included in a research project. Kitzinger (1994) argues that large samples are important in order to capture as much diversity as possible, but others propose that large samples can contribute to a superficial

analysis, and unnecessary expense of time and rescoring (Malterud, 2013; Bryman, 2012). Bryman (2012) presents examples of the number of focus groups from eight to fifty-two, but points out that there seems to be a tendency for the range to be mainly from ten to fifteen. Calder (1977) proposes that when the researcher is able to know fairly accurately what the next group is going to say, then there are probably enough groups and the research has achieved saturation. This will depend on the range and the purpose of the study. The range of numbers of focus groups shows that there are different parameters that influence the saturation in qualitative studies.

It is important to note that there are two different purposes to this study. To start with, the study should investigate students' understanding of their food choices and its development in the best methodical way. And second, this is a master thesis with a defined framework. The main purpose of a master's degree is to experience how it is to conduct a research project with the time and resources available. Because of limitations in time and access of participants only four focus group sessions were arranged, which is an important limitation to take into consideration.

It was important to include young people from a variety of socioeconomic groups as it is documented that their diets tend to vary. Therefore, focus groups were divided into groups based on study programs, where "building trades" and "health and youth development" are vocational studies and can begin working after two years schooling and two years of practice, and where "sport" and "general topics" were able to go to university after finishing upper high school. The literature review and pilot study suggested that there were differences in influences on food choices between boys and girls as well (Samdal et al, 2016). Therefore, focus groups were divided into boys groups and girls groups. At the same time, separated boys and girls groups could create a safer environment for the participants to talk.

7.2.5 Focus group session

The focus group session took place in a group room at the students' school. The size of the room was appropriate for six persons, helping to create a good atmosphere. The school did serve coffee, tea and chocolate for the first two groups, but not for the last two. The plan was to conduct two focus group one day and two another day, but because the students

had not got the participant information as planned, the last focus group was moved to a day later in order to give the participant information 24 hours before the focus group session. The ethical requirements from NSD required students to be given sufficient time to think about their participation before they agreed to join the project (Appendix 6), so the timing of the circulation of the participant information sheets was important. This research had not a written consent, attendance after delivered participant information was considered as “Yes, I want to join the study”. The focus group session was arranged in school hours, and therefore the researcher got 45 minutes to one hour to conduct the focus groups, which is just below the time recommended in (Bryman, 2012). Three of the focus groups had 45 minutes available, which lasted between 40-45 minutes each, and one group (health and youth development) had one hour available, which lasted of one hour. The researcher and moderator presented themselves and shook the hand of every participant before they entered the group room. The session started with the researcher thanking the participants for coming, asking if the students had got the participant information and if they had any questions regarding to this. A short presentation of the purpose of the research-, the focus group session- and information regarding the recording where presented. Also, information was given about the approximate amount of time the session would take, that the data will be treated confidentially and anonymized, that everyone’s views were important, and that their participation was voluntary so the participants had the opportunity to leave at any time.

The moderator made a map of the location of every participant around the table in the focus group session, calling them 1, 2, 3 and 4. Because of limitations of time there was no further presentation of the participants. Instead, the focus group session began with an open question regarding the student’s diet where everyone had to say something before the researcher moved on. The purpose with asking an easy question in the beginning was to get everyone to say something about something they knew, and at the same time, that was relevant for the research. This may also contribute to loosening up the atmosphere and making the participants forget the recorder. In the end of the session, the researcher asked the moderator if there were something that was missing from the checklist or if there were things that should be examined further. The participants were asked if there was something more they would like to say. The focus group session ended with the researcher and the moderator thanking the students for participating.

To ensure credibility, which parallels with internal validity, respondent validation and triangulation were used. Credibility has the intention to ensure that research is carried out according to good practice and ensure that the perception of the social world being studied is correctly understood by the investigator (Bryman, 2012). Respondent validation was carried out through making summaries and asking the participant if the researcher have understood them correctly. Triangulation was attempted by involving the moderator in the interpretation of the data material (Burke, 1997). After the focus group session the researcher and the moderator discussed the collected data material and arrived at a common understanding of the material.

7.3 Description of the sample and sampling process

The participants included in this research were recruited through an upper high school from a rural area in east of Norway. The inclusion criteria for participating in the study were that the participants must attended to upper high school and be 16 years old, or older. The school was medium in size with approximate 500-600 students. A purposive sampling method was used in the selection of schools for participation. The researcher did not send the email on a random basis, but in a strategic way making sure that those sampled were relevant to the research question (Bryman, 2012). In order to get participants from different educational programmes with different age, the researcher asked the responsible teacher for picking out four classes in different educational programs in various grades, two boys group and two girls groups. The responsible teacher recruited participant according to the researcher's wishes, where four groups from various educational programs (building trades, health and youth development, sports and general subjects) aged 16 to 18 was recruited. The teacher in each class selected four participants from her/his class. These two selections of samples can be described as more convenience, since the responsible teacher and the teachers from each class did the selection.

This study does only ask students at one particularly school at a specific location in Norway. The school and participant are not randomly selected, and the result may therefore not represent upper high school student among the whole Norwegian population. In other words, the result from this study cannot be generalized (Patton, 2015). However, it can

provide an understanding of the development of diet habits among a small selection of the Norwegian youth.

7.4 Location

In order to make the participants feel safe and to try to equalise of power the imbalance between the researcher and the participants, school was chosen as a location for the focus groups to take place. Morgan et al. (2002) claimed that school can be an ideal option for students, as the participants are insiders. This may contribute to the students feel more empowered and in control over the situation and therefore more ease and more likely to talk.

7.5 Data analysis

Thematic analysis was used as the main tool in the data analysis. Thematic analysis is a method for identifying, analyzing and reporting patterns or themes within the data (Braun & Clarke, 2006). It organizes and describes the data set in rich detail (Braun & Clarke, 2006). First, data were transcribed verbatim. After finishing transcription, the researcher started to read through and got familiar with the data. The research then generated initial codes where the researcher had to considerate: making many codes in the beginning in order to not overlook any themes, extracting out appropriate amount of text in order to not lose the context, and to be aware that a sentence or sentences could have multiple codes (Braun & Clarke, 2006). A mind map over each of the focus group sessions was made in order to get a fully overview of the codes helping with searching for themes. After making potential themes, the themes were reviewed while rereading the transcript again in order to see to what extend the themes followed the dataset. The themes were organized with subthemes below followed by producing the data analyse report. This provided the researcher with the basis for a theoretical understanding of the data that could make a theoretical contribution to the literature relating to the research focus (Bryman, 2012).

7.6 Ethical considerations

Discussions about ethical principles in social research tend to revolve around particular issues. Diener and Crandall (1978, as cited in Bryman, 2012) have broken them down into four main areas:

- whether there is *a lack of informed consent*;
- whether there is *harm to participants*;
- whether there is *an invasion of privacy*;
- whether *deception is involved*.

An application was sent to NSD (Norwegian social science data services) which required to be approved before starting the field work. The teacher presented and distributed participant information to the students. Optimally the researcher should have presented the study because there is no guaranty that the teacher presented the research to the students with the impression that they are required to participate. Even if the teacher did not do this, there is a chance that students can feel pressed to participate when the teacher ask them if they want to or not. Still NSD concluded that this was the best way to fulfil informed consent. By getting the teacher to deliver the participant information, the researcher ensured that all the information regarding the participation was delivered well in time before the data collection started. This was important for the voluntary participation, in which the participants were well informed and had time to think if they wanted to participate or not. This information was repeated at the beginning of the data collection, when the researcher asked if the participants had any questions and informed that they had the opportunity to withdraw at any time. By being careful of giving the right information two times, and ask participants if they understood everything, deception was excluded and informed consent fulfilled (Bryman, 2012).

In focus groups, the disclosures by participants are shared with group members and not only the research team, and intense group discussions may give rise to discomfort in individuals (Bryman, 2012). The topic of this research was not by its nature sore or sensitive, but it was important for the researcher to be aware of and take this into consideration to that unforeseen discussion could had occurred in the focus group sessions. No names or personal data were recorded or written down, which ensured the data were anonymized. In addition to

this, there was no sensitive data collected. The awareness of challenges of using focus groups as a method and not collecting sensitive data ensured, beyond what the participant chose to share themselves, no invasion of privacy and minimization of risk of harm to the participants.

Differences in people can mean that they share different amounts of information. Some people like to- and are more confident to talk more than others. These differences are important to be aware of and take into consideration. Every participant was important in the data collection, so it was essential to try to encourage every student to speak in the focus group session. The researcher and the moderator ensured that every participant participated in responding to the four main questions, which also were essential for the participants to feel that their voice mattered.

8. Findings

The aim of the study is to develop an in-depth understanding of Norwegian upper high school students' (aged 16-19 years) perceptions of the influences on their food choices, not only in school but in their everyday life. In addition the aim is to particularly understand how food choices and patterns of eating change as young people move from childhood towards young adulthood.

Sub-theme	Theme
8.1.1 Food preference 8.1.2. Food knowledge	Intra-individual influences: food preference and food knowledge
8.2.1 Parents as role models 8.2.2 Participating in food-relegated decisions at home 8.2.3 Parental control of young people's food choices	Diminishing parental control
8.3.1 Independence in relation to parental control 8.3.2 Independence and eating as a social activity	Increasing independence in relation to eating
8.4.1 Social media affecting young people 8.4.2 Expectations of boys and girls food choices	Macro level influences: social media and expectations of boys and girls influencing young people's food choices

Table 7.0 Sub-themes and themes

Analyses of the data on high school students resulted in the development of four key themes and 9 sub-themes (illustrated in Table 7.0), and will be presented in this chapter. The time aspect is presented under the identified sub-themes. The results are presented with quotes from the transcribed material. The quotes are somewhat changed from linguistic to written text to make it more readable and comprehensible and also because of translation from Norwegian to English. For the purpose of the study, pseudo name is used for each participant in order to keep them anonymous. The most appropriate quotes were chosen to illustrate each sub-category. An overview over each focus group is presented in the figure below (Table 7.1)

Focus group number	Educational programmes	Age	Gender	How many participants
One	Building trades	16	Boys	4

Two	Health and youth development	16	Girls	4
Three	Sports	17	Boys	4
Four	General subjects	18	Girls	4

Figure 7.1 Overview of focus groups

8.1 Intra-individual influences: food preference and food knowledge

In this study intra-individual influences are considered as influences in the inner layer of Bronfenbrenner's model; individual influences. There were identified two different sub-themes through the data analyses: food preference and food knowledge. The two intra-individual influences developed with age.

8.1.1 Food preferences and how they change over time

Food preferences were constantly identified influencing the food choices of the young people. The participants discussed taste, smell, how the food was prepared and appearance. Taste was identified as a major influence on the boy's food choices. The girls did put more emphasis on smell and whether or not the food looked inviting. For example, in focus groups one, one of the participants explained how food preferences influenced her in choosing lunch at school "It's a bit more tempting with chicken wok than sausage and bacon grateng. It looks much more inviting and it smells so good throughout the school" (Hanna, 16).

Also, many young people talked about how their food preferences had changed from they were younger until today. They explained how their diet often was restricted at a young age, and how they now had a more varied diet. An example is illustrated by a young person in focus group three "I eat more types of food. Like more varied. Now I'm eating almost everything. I'm not that picky anymore" (Lukas, 17).

8.1.2 Knowing what we should be eating

There were reported big differences in food knowledge among the young people. Interestingly, most of the young people reported a marked preference for unhealthy and

healthy foods. Several of the young people discussed short term consequences of eating unhealthy and included reasons such as "you get fat", "you get lazy" or "these types of food do not get you through the day. Some of the young people had a clearer idea of long term health consequences than the others participants. Students at "health and youth development", in focus group one, explained how they had learned about long term consequences in school:

Hannah (16): Yes, we are taking the subject "health and youth development", you know. We have talked a lot about cholesterol and what happens if we eat too much of unhealthy stuff, and things like that.. So we kind of know...

As the young people grew older, they explained that they got more food knowledge through subjects in school, through friend and through the internet.

8.2 Parental influences on young people's food choices

Parents influenced young people's food choices in various ways and through different levels, for example through observations, participation and by regulating the food environment at home. Throughout the students explanations three sub-themes was identified: parents as role models, participation in food-related decisions and parent control of young people's food choices.

8.2.1 Parents are role models in relation to food and meal preparation

As young people grew older they increased control over their food choices as their ability to self-prepare food and cook developed. It was interesting to hear how the young people described their parents cooking and also talked about what they usually did when they themselves were preparing food. In the main, they described different patterns of cooking between their mothers and fathers. They talked about their fathers preparing food in a more practical way, describing factors as: that it should be easy and quick to prepare, and that it should be food that filled you up, which was important. One of the boys in focus group three described factors as time and that the food should be easy to prepare as factors important for his dad's cooking: "Dad does not use much time making dinner! It's like picking out some carrots, potatoes and meatballs... ..He does not spend much time on it.." (Alexander, 17). On the other hand, the young people described their mothers as tending to

be “healthier”, “more modern” and that they “made more varying food”, such as Mia’s mother in focus group four “When I and my mum are making dinner, it’s often fish and stuff... When my mother has control over the cooking, it gets healthier and more modern” (Mia, 18). It was most common that the mother had the main responsibility for making dinner and that dad did it “sometimes”. Although most of the young people lived in the city, old patterns of distribution of labor became particularly visible. For example, Alexander (17), who lived on a farm, explained how they used to do it at home “.. But we live at a farm so usually me and my dad goes to the barn while the women are making the food”.

Several of the young people also had divorced parents, where the boys talked about how they tended to spend more time with their father’s and the girls tended to spend more time with their mothers. The young people described the food environment between the parents as very differently:

I live with my mom.. And there it is brown bread and.. fruit. I think she is the only person that I can say truly eats five a day; EVERY DAY (laughter). But when I’m at dad’s.. he never buys brown bread.. or has an avocado in the fridge. So when I am at dad’s, it’s a completely different diet than what it is at moms (Sara, 16).

The reported gender differences at home seemed to be repeated when the high school students were talking about self-preparing food. Most of the boys talked about a practical approach, that the food should be easy and quick to make, when they were making food at home “If I’m making food.. let’s say I’m making dinner. It will never be difficult. It should be as easy as possible” (Oliver, 17). That food should be easy and quick to make, seemed to repeat itself when the boys talked about making food with friends. For example, Tor in focus group one describes the following as important when making food with friends:

“When you are with your friends, you often doing it easy. You do not bother to cook all day. You’re more like “Oh, I’m hungry. We need to make something quick!” So.. We very often use to make pizza or taco...” (Tor, 16).

The girls talked about liking making food especially with their friends, which was something they did often. They liked to cook things from the scratch, which, as they described, “gives you a good feeling afterwards”. It was also “social”, “fun” and “cozy”. In the context of identifying this gender differences one of the girls reflects:

I think it is “a girl thing”... Unless you’re very interested in food as a boy of course. Because boys don’t tend to cook through childhood, unless their parents say so. So I think that boys are making food just to eat and get full, but girls make food because they also think it is fun. And because they like doing it and they think it’s cozy and socially (Emma, 18)

8.2.2 Participating in food-related decisions

Participation in the different processes concerning food, such as decisions making of what foods the family were buying, doing grocery shopping and preparing meals, varied among the young people. Some of them had moved out from the family home and made all of their meals by themselves, while others were still living with their parents and had all of their meals served. Despite that, the girls tended to see themselves more active in the decision making around food, grocery shopping and cooking. Many of the girls also reported that they liked being active in those decisions and wanted to be involved and learn various aspects of how they could produced meals:

Sara (16): I love to go to the food store and buy what I want!

Lisa (16): I often go to the food store with her [mom].. And I often cook with my mom, it’s helping me getting to know the kitchen in a way.. But I can make food by my selves.. But sometimes, when she makes food that I have never done before, I want to join in so that I can learn to cook that as well

The boys tended to see themselves as participating less in these processes. They saw themselves as eating what they were served instead. “Usually when I come home, dinner is ready” (Noah, 16).

8.2.3 Parental control of young people’s food choices

Family meals were identified as influencing young people’s food choices. The youth described a decrease in parental control in food choices as they grew older. However, parental control seemed to vary on a continuum of high control and low control in which young people were allowed to influence meals in various degrees. The participants reported different levels of participation in deciding and preparing family dinner. Some found their choices somewhat limited, as the food made available by their parents at meals was what they ate, while others were allowed to decide foods at the store and what they wanted for

dinner. These differences are illustrated in focus groups one, when the young people describe their participation in food preparation at home:

Jenifer (16): My parents have always decided what's for dinner. They decide now, like they did when I was younger.

... Sara (16): Now, I'm picking up food that I want from the shelf and just put it in the basket without my mum minding it. It's like "okay" now. And she used to ask me like "We must have fish this week" and we will go together to the freezer and I'm like "I want that" and she's like "I was thinking we should have this" and we're like "Okay, then we will take what you want that day, and what I want the other day"

8.3 Increasing independence in relation to eating

As the young people grew older they explained that the independence increased in a lot of ways. Independence was seen in relation to the two sub-themes identified: independence in relation to parent control and independence and eating as a social activity.

8.3.1 Independence in relation to parental control

Mainly the young people experienced an increase in independence and a decrease in parent control. They described how changes in parent control affected their daily food choices when it came to breakfast, school lunch, dinner and supper. High parent control was identified especially at a young age. The young people talked about how the ability to choose food existed to a small extent or was absent when they were younger, because their parents decided what they ate and when they ate, and followed them closely under meals. The degree of parental control decreased with age. When the young people grew older they explained that they got more responsibility over their own meals and that they had the ability to choose what they ate and when they ate to a greater extent. Focus group three talks about how less parent control affected their breakfast and school lunch:

Lucas (17): Before it was more structured when eating breakfast, lunch, dinner and supper. Now, we don't get followed-up by mum and dad in the same way

Sebastian (17): Yes! It's a little more up to myself now really because my mum doesn't make me school lunch no more

Oliver (17): It's also easier to drop breakfast now than when I went to primary school and secondary

school

Sebastian (17): Yes indeed!

Interviewer: ... Because?

Oliver (17): I started half past eighth before, so I was always eating breakfast with my mum and dad, and they did always see if I was eating my food. When I get out of bed half past seven now, it's not always... Or, I often drop breakfast!

Interviewer: But do you eat your breakfast at school then?

Oliver (17): No, then I will wait for lunch.

In addition to get higher ability to choose with a decrease in parental control, an increase in independence is also identified with a growing availability of money and vehicles. The young people explained how access of money and vehicles made it possible to make food choices outside and inside school. Focus group one demonstrates an example of how this increased independence often may lead to easy, quick and unhealthy food choices outside school:

William (16): It is a bit easier now when you have a driver's license on a vehicle that you can.. Or when you are going home and you're parents are telling you that there is food that you don't like for dinner. You could just go by the gas station or something and buy you dinner [fast food] rather than go home and eat, you know

Less parental control and increased independence among the young people seemed to form different patterns in choices among the high school students, where boys tended to make more unhealthy food choices than girls. Most of the girls reported that they made breakfast at home, which they ate at home or at school. In addition, unlike the boys, most of them brought their own school lunch from home. The girls also explained that they were selective in their choices in the canteen. Buying lunch was something they preferred to do when the canteen sold food that they liked, such as chicken wok, chicken burger, salad and tacos. The boys identified foods they tended to buy for lunch as chocolate milk, ice tea, cakes and with bread with melted cheese upon. They also bought hot meals, but did not specify dishes as the girls did. The young people discussed how boys tended to use the school canteen more than girls. For example, in focus group four, one of the girls said "If you look at whose buying food often in the canteen, it's a lot of boys that's buy food all the time" (Emma, 18).

One of the reasons why young people may consume more unhealthy diets when they get older is that they have more nutritional independence in these situations and can make the food choices themselves. Such independence seems to play out differently in relation to gender when it comes to unhealthy eating. Many boys talked about eating more unhealthy when their access increased. For example, in focus group one, the boys reflected over their food choices the past six months:

Tor (16): When we are talking about this now, and I'm looking back at this semester I'm kind of thinking "F***, I have been eating unhealthily". When you are in upper high school.. the canteen is right there, you know. Or when you're at the store you can just go and buy strawberry milk or a chocolate..

Most of the girls reported an increased intake of unhealthy foods at the starting phase of making their own food choices. However, as they grew older, they reported that they were thinking more about the consequences of their food choices such as and of how they were spending their money. The girls identified several reasons for this change, such as: how they become more aware of their own economy, that their way of thinking had changed in the way that they could get bad conscience after eating, as they called it, "unhealthy food", and also that they thought about how "eating unhealthy" affected their body shape and daily function. In focus group one; the girls discussed what changed their way of thinking as they grew older:

Sara (16): .. We have learned how to limit ourselves. But I didn't do that before.. It was like, I was kind of hungry.. But I hadn't realized that it was better to take an apple than a chocolate, but later I did.. And then I began training and stuff for real in 9th or 10th grade, and become more serious.. So I change my behaviour.. Because I had read about this and found out that what you eat have a great impact on what you do [daily function].. And that I said to myself "You have to pull things together!". And it worked!

Money was also reported as the only barrier for not buying unhealthy food in the canteen among the boys. "The only reason why I don't eat more candy is the money" (Oliver 17).

8.3.2 Eating as a social activity and a demonstration of showing their increased independence

It appeared from the data that the young people placed more value on eating as a social activity as they grew older. Many of the adolescents reported an increase in eating outside their home from primary- to secondary school and from secondary- to upper high school. Eating outside the home was associated with making unhealthy food choices, especially as their independence began to increase and they made food choices on their own. The young people explained how they in secondary school used to bring food from home, but at the same time also had pocket money that they used to supplement what they brought from school. Eating outside home was seen in the context of being social with friends in their free time at school, but also something they did because they were old enough to do so. Moreover, they talked about it as a way of showing their increased independence from home. For example, in focus group one, in relation with talking about how their developed their own eating habits, they said the following:

Lisa (16): It wasn't allowed to go to the food store in primary school

Hannah (16): But when we started at secondary school... Everyone..

Lisa (16): Yes! Everyone went to the store in the free time.. Because it was kind of cool to do so.

Jenifer (16): True. The second people begin at secondary school everyone is going to the food store

... Hannah (16): At the beginning it was kind of cool. We could go and visit the children at primary school and just "Oh, look at me. I am old enough to go and buy me food in the city in my free time"..

8.4 Macro influences: social media and expectations of boys and girls food choices influencing young people

In this study, macro level influences refer to the outermost level of Bronfenbrenner's model, which represent the attitudes and culture of young people in relation to food choices. There were identified two sub-themes: young people's expectations of boys and girls food choices and social media affecting young people.

8.4.1 Young people's expectations of boys and girls food choices

Body image influenced the adolescent's food choices to varying degrees between the groups and also within the groups. Students spoke about their own body image and how it

could have an effect on their eating behaviour. The boys referred to some individuals who “wanted to build muscles” and in connection with this began to eat healthier in order to get better results. The boys also thought that girls in general are more concerned about eating healthily because they cared more about looks than they did. The girls explain that the boys “didn’t care much” about their looks and about eating, as they called it; “healthily as they did”. A girl in focus group one explained how images of bodies in social media influenced food choices:

Hannah (16): .. When you look at Instagram and stuff, you’ll see thin girls with a muscular body, right? You think like “I wish I was like that”. And it’s make you eat healthier and less and exercise more

The young people also discussed that there were differences in expectations between boys and girls. The boys talked about how they were supposed to be laidback and don’t care about school or their looks, and how girls were supposed to be good at school and care about their looks. In connection with discussing gender differences in expectations, the boys in focus group three summarized:

Interviewer: [summarizes] is it more accepted to be “good girl” than a “good boy”?

Sebastian (17): Yes, it is!

Alexander (17): And also it’s more accepted to be “not good boy” rather than a “not good girl”

The young people also talked about how differences in expectations between boys and girls could result in differences in behaviour. They bought though that a big motivation for eating healthy among those, as they said, “who eat very healthily”, was their looks. As an example the boys in focus group one discussed how looks could be a factor for healthy food choices among girls:

Noah (16): They are [the girls] better to make healthier things

William (16): They probably think more on diet because...

Noah (16): They are better to cook

William (16): They want to be thin and stuff, because that’s what’s popular, among the girls

The different expectations between boys and girls were clearly something that had come with a growing age. Many of the girls explained that when they were younger they did not think about how they looked; rather it was something that they had started with as they grew

older. Moreover, they talked about how young women could start to think and feel things about their body and how significance comparing you with others becomes as they grow older. For example, a girl in focus group four reflected over how things had changed from childhood to young adulthood:

Emma (18) ... When you go from being a child to being a teenager.. It is something that makes you more focused on your looks and what you eat.. And comparing it to everyone else. You are much influenced by the social

8.4.2 Social media affecting young people

Social media influenced the young people differently by collecting specifically information about what the person who owned the account liked to see pictures of. Most of the young people talked about how they constantly got food pictures of “very healthily food” and fit bodies on their instagram, and some on how chocolate pictures kept coming up all the time. The girls explained that they could be influenced to choose healthily by seeing pictures of healthy food, but also that it was important to show that what you eat was healthy:

... Because what you eat should look nice and pretty. There are many who put pictures of what they eat on social media. It is important that it looks nice and it's important that people know that you are eating healthy and such things (Catharine, 18).

9. Discussion

9.1 Introduction to the discussion

The research question of this study was: How can we understand Norwegian upper high schools students' perceptions of the influences on their food choices, not only in school, but in their everyday life? In addition to this, how can we understand how food choices and pattern of eating changes as young people move from childhood towards young adulthood? In brief, the research identified the following influences on food choices: food preferences, time, knowledge and access, alongside social influences such as parents as role models, participation in food-related decisions, social media and eating as a social activity. A gender pattern was identified among all the social influences on young people's food choice. As the young people grew older (that is to say, as they made the transition through youth) knowledge and access increased in line with young people's increased independence and decreased parental control, and gender differences in influences through social media, body image and expectations appeared giving rise to differences in food choices between boys and girls.

This chapter is sectioned into four parts. First, the findings, theoretical framework and previous studies will be discussed; second, the limitation of the study and suggestion for further work will be presented; third, the implications of this study for public health and practice implication will be discussed; and, at last, the conclusion with suggestions for further studies.

9.2 Findings, theoretical framework and previous studies

In this section, all of the themes will be discussed in relation to previous research and the theoretical framework. Because of this, the heading will be sectioned in to four different parts where the themes will be discussed in the following order: first, intra-individual influences: food knowledge and food preferences; second, parental influences on young people's food choices; third, increasing independence in relation to eating; and at last; macro

level influences: social media and expectations of boys and girls food choices influencing young people.

9.2.1 Intra-individual influences: food preference and food knowledge

Food preferences influenced, of course, the young people's food choices. Taste, smell and how inviting the food looked were the three influences mentioned in the focus group session. Findings from this study also indicate that young people have a general understanding of what it means to eat healthily. The young people explain how they learned more about healthy food choices as they grew older, which is not reflected in their practices as the young people tended to eat more unhealthily with age. However, an in-depth knowledge is only evident among some of the young people. In spite of the fact that food preferences were identified as an important influences on young people's food choices and that there were, in general, differences in level of knowledge between participants, a pattern between girls and boys was found when it came to thoughts, participation in food-related decisions and food choices. This suggests that there are other factors which influence – to a greater or lesser extent youth's food choices. Therefore, the findings of this study suggest that the influences identified in the innermost layer of Bronfenbrenner's model, such as food preferences and nutritional knowledge of youth, may not be the main determinants of young people's food choices, which is consistent with previous research (Fitzgerald, 2010). The patterns between boys and girls will be theorised in the sections below.

9.2.2 Gender pattern in food choices with age in relation to parental influences

Among the young people, a pattern of increased intake of unhealthy food was evident in the early stage of beginning to make their own food choices when the parental control diminished. However, as they grew older the girls explained that they were thinking more about the consequences of their food choices and this started to influence what they ate. Also, girls tended to be more involved in food-related decisions at home, and tended to make more food with their friends which they described as something they liked. Some of the origins of gender differences may be related to the different patterns of food preparation they had been exposed to informally in the home, in which their mother and father did different things. This can be explained using the framework of the study, where parental influences

can be considered as informal primary socialization through the micro system in the socio-ecological model. Parents as role models thus influenced the development of food choices and other actions of their children, for example social activities that young people do with their friend such as cooking, through informal primary socialization, which again influenced their predispositions to act in particular ways, in other words, the development of their habitus. Although Norway is one of the countries in the world that has reached a high level of gender equality (Statistic Norway [SSB], 2017), it may seem that social reproduction of gender roles unconsciously happens within the homes of the young people through informal socialization. The statistics show that gender equality has come a long way within the home, of which cooking are one of the most equal activities in housework (Statistic Norway [SSB], 2009). Nevertheless, the findings from this study show that there are differences in whose making dinner within the home and also differences in patterns in practice in cooking between mothers and fathers, which the statistics do not seem to capture. Therefore, according to this study, patterns in the division of labour between men and women in the home and approaches to cooking seem to still be quite traditional and hence why they are reproduced through informal socialization such that young boys and young girls, through their varying habituses tend to reflect also these traditional roles.

The findings of this study also showed differences in parental control within the same focus groups, which indicates that the degree of adulthood varies a lot within the same age group. This is also supported within the theoretical framework in which transition has become a more diverse, complex and unequal than it was before (Robb, 2007). This suggests that the degree of independence and parental control may be a better marker than age in order to understand the young people's development of food choices.

9.2.3 Unhealthier food choices in the period of transition in relation to dietary independence

There was not found any differences between socioeconomic groups within the young people participating in this study. This suggest that it is some conversion during youth, that is to say that youth leads to some homogenization with regard to family background because they are experiencing some general secondary socialization processes. However, this study indicates that the pattern in taking unhealthy food choices increases through youth, not just in Norway, but also elsewhere (Inchley et al., 2016; Fitzgerald et al., 2010). This suggests

that there are some general socializing processes at the macro level that influence youth. How this socialization processes may influences young people will be discussed in the sections below. This could explain why young people's diet tend to include a variety of 'junk' food: young people's lives involve increasingly spending time with friends rather than family, having fun and buying and consuming food – often take aways which are nearly always unhealthy – flexible and spontaneous activities. And in Norway most youth have the money to do this.

In accordance with previous studies, the young people experienced more control over their food choices with an increasing age (Fitzgerald, 2010; Warren, 2008). With age parental control tends to diminish and competed with young people's increased independence on food choices. This was associated with less healthy food choices, especially in the beginning of making their own food choices. Increased nutritional independence has been described as a risk factor for unhealthy eating in earlier research, which has used a psychological model (Fitzgerald, 2010). This is an individualized way of seeing young people, which is different from this study's socio-ecological approach. It describes nutritional independence as something separate from young people's general increasing independence, while the framework of this study suggests that it seems to be a universal characteristic of youth transitions that young people become more independent (James & James, 2012). One aspect of this is that they tend to show more independence in making all of their choices including nutritional ones.

Increased independence itself does not explain why youth as a group make less healthy food choices through the period of transition. Using the terms of socialization and habitus, one might think that the youth's habitus primarily was influenced by their parents' socialization but also by friends' and other influences. However, the less healthy food choices in the transition period can also be seen in context with social experimentation (James & James, 2012) and increased environmental influences (e.g. cost, time, availability of food and availability of vehicles). Engaging in so-called "risk" behaviours is taken as what youth tends to be associated with – experimenting with making choices, whatever they are. At the same time, the environmental changes and the possibility of taking less healthful food choices increases because it becomes more possible with diminishing parental

influences. The change in behaviour, as engaging in “risk” behaviour, also influences the development of habitus during this period. Even if children bring with them good patterns of eating, which have been established during childhood, during youth they can develop new preferences which take their actions in a different direction as spending time with friends becomes significant.

Many of the young people placed more value in eating as a social activity and reported an increase in eating outside home when they experienced increased independence and decreased parental control. This resulted in a rise of influences from friends and peers in that the young people were eating more of their meals with them. This may also be a part of the explanation of why young people tend to eat more unhealthy through the period of transition in which they also influences each other. How friends influences each other will be explained through the theoretical framework in the paragraph below.

9.2.4 Macro level influences: social media and expectations of boys and girls influencing young people’s food choices

The young people were at a stage of transitioning between childhood and adulthood, and as James and James (2012) said, fundamental to this period they were trying to discover their social self. As the young people grew older, they explained how social influences increased in social media and expectations. They began to compare themselves with others peers and, the girls especially, to care more about how they looked. Social media was identified as influencing food choices among girls, by showing pictures of thin and muscular bodies, but also in that they felt that they had to “show others” that they were eating healthily. The young people explained that there were differences in body image between boys and girls, where the boys were supposed to be big and muscular and the girls thin but muscular. Food also seemed to serve different purposes for girls compared with boys. The origins of some of these differences may be related to differences in expectations between boys and girls. The young people described differences between boys and girls in expectations of how they should be acting and how this had an impact on their food choices. In the same way as informal primary socialization influences the young people’s development of food choices at home through their parents, friends and peers can influence

each other through the second innermost layer of Bronfenbrenner's model. Further, young people's secondary socialization of which their peers are a part can influence the general beliefs and attitudes of young people, described as the outermost layer in Bronfenbrenne's model, which reflects how young people's expectations are influenced through both face to face process of socialization as well as through social media, which in turn, shape food choices of young people. Thus, the development of young people's food choices continues to be influenced by the innermost to the outermost layer in the socio-ecological model. The role of the influences will play various parts as the young people's move throughout the period of transition. Interpreting this, it seems that patterns of food choices vary by gender because the foods you eat as a young person are also symbolic of the person you are - being a boy or being a girl means that you act in particular ways including what you tend to eat, where you tend to eat it and who you are with. It may also be a process through which young people develop a social network with friends by sharing mutually liked activities and food is a way of sharing time together although how that actually plays out varies according to girls and boys.

9.3 Limitations and suggestions for further work

Although the focus groups generated a great deal of rich data, this study was not without limitations. Several limitations in relation to the study sample were identified. Surveys conducted by SSB shows that the dropout rate among upper high schools students in Norway is 15 % (Statistic Norway [SSB], 2016). Most of the studies conducted on young people have recruited their samples from schools, and the young people of the same age who have dropped out of school are thus not part of the data. Dropout in school seems to follow parents' education. Parents with lower education, have a higher dropout among their children (SSB, 2016). The same pattern can be seen in young people's dietary habits. Adolescents with parents with less education tend to eat more unhealthily (Bere et al., 2008b; Bere et al., 2008c; Inchley et al., 2016; Samdal et al., 2016). Since the pattern of diet and dropping out of school is seen in the context of socio-economic status, there is reason to believe that the 15 % of the youths who are not part of the statistics draws an unhealthier picture of how young people's dietary behaviour. It is important to point out that these 15 % are not part of

this study, and may be part of the explanation why socioeconomic pattern in dietary choices did not occur.

Others limitations of this study was that the sample was purposive but also convenience in which the responsible teacher selected classes and the teacher in each class selected participants. This meant that the researcher had little control over the sampling process, but at the same time focus groups with a good dynamic were formed. In addition, the study only included young people from one school which indicates that the participants were from a similar area. The sample was thus limited in terms of its variability in relation to geography, ethnic background and socioeconomic status, which may explain the little variation in the with regard to socioeconomic position. At the same time, it is well documented that food choices tend to vary by socio-economic status but it may be that during youth, food choice patterns are less different and gender is a more important variable. Future work could explore this further. Further studies are needed which recruit young people, from rural areas and cities, higher and lower socio-economic classes, culturally diverse groups, to establish how young people from different social groups view influences on young people's food choices.

As with any qualitative study of this nature, it is recognized that the findings are specific to the participants in this study and cannot necessarily be transferred to the population as a whole. Also, this study was small scale with relatively few participants from only one school in one county in Norway. Therefore it was unlikely that this was sufficient to achieve saturation, in which there were no more themes or meanings that would have been developed if a wider diversity of secondary high school students in Norway had been recruited. However, in as much as the participants in this study seemed typical of many young people in today's society, where previous studies in various countries show that young people's development of food choices is influenced by the same processes in that parental control diminishes and their independence increases, it is reasonable to expect that their perceptions would be similar, more or less, to other young people in the same situation, not only in Norway but also in other high developed countries as well. Although the pattern in socioeconomic status did not seem to appear in this study, one can understand how these

differences can develop through the theoretical framework, in which there are differences in the social influences in the different levels in the Bronfenbrenner model between the social classes (Bronfenbrenner, 1979).

Another potential limitation for this current study could be the focus group setting. Even if the researcher made it clear that everyone's views were important and the researcher encouraged the participants to talk, some of the young people talked more than others. This is a common feature of focus group. Also, the young people might have perceived talking in the focus group setting as scary, where the researcher, the moderator and the members of the focus group were present. The participants may also have had an experience of what they should eat or should be answering on some of the questions, and therefore talked about what thought the researcher wanted to hear, including that they had a healthy diet and made the 'right' food choices. For example, the girls in the focus groups could have felt that it was "expected" of them to eat healthily, and thus exaggerated this in the focus group setting. Differences in gender, age and school subject made every focus group session different from each other.

This was the first time the researcher had conducted focus groups and the sessions were experienced as demanding, especially considering asking relevant follow-up questions and to let it be quiet between the questions, if necessary. During the focus group session, the researcher needed to ask follow-up questions in terms of understanding what the participants were saying. Although the researcher was aware of the formulations of the follow-up questions, they could potentially been experienced as leading in a certain direction, which could have influenced the young people's answers.

It is possible that some of the young people avoided discussing some influences (e.g. body image, dieting) in these settings because of the sensitivity of these issues. In addition, it might be that the young people did not say what they meant about topics because they did not want to in a group setting, particularly if they had a different from those put forward. However, the advantages of using focus groups with young people is that they may be encouraged to give their meaning after they have heard others do so and their memory may be promoted by the contribution of others (Bryman, 2012), which was evident in several of the conversations and discussions in the focus groups.

The framework of the focus groups session was somewhat limited because it was conducted in school hours. The school gave the researcher 45 minutes to one hour at disposal for conducting the data material. This resulted in somewhat short focus group session, which in terms could have limited the researcher in collecting rich data. At the same time, the duration of the focus group session provided the researcher with a good overview in the analysis of the data which was helpful in order create good understanding of the research questions.

9.4 Public health policy and practice implications

Information and education characterizes much of today's public health work on the development of healthy food choices. For example, an education programme with the aim of improving the diet of school-aged children has become a policy priority in Norway as elsewhere. However, this study supported the view that food choices are not necessarily – if at all – influenced by knowledge of healthy foods, particularly during youth. This study therefore has important implication for public health workers and researchers', highlighting the importance of the early development of young people's food choices within the family. Developing initiatives which reach families within the home is difficult. In Norway programmes supporting families to achieve progressive improvements in early child development, such as providing paid parental leave in the first year of life with a minimum income for healthy living, already exists. Therefore, a good initiative may be to reach children is through kindergarten and school. Today, guideline in both school and kindergarten is developed (Helsedirektoratet, 2015; Sosial- og helsedirektoratet, 2007), but the children have to bring food from home. Giving young people a free meal, ensuring good nutritional status, may be effective in modifying young people's dietary patterns and in the longer term, help reduce the risk of obesity and in the best possible way achieve good health.

As the young people move towards young adulthood, they spend more time eating outside home and the role of friends becomes more important. Food eaten as a young person also seem symbolic to who you are as a person and at the same time, it is a way of sharing time together with friends. In this study, time, availability and money were identified as reasons for buying and choosing particular kinds of food. Offering healthy food at a

reasonable price which is quick to make and in addition, reducing unhealthy food in the areas where young people spend much of their time, might be effective in modifying adolescent's food choices. For example, it seems likely that as young people move through adolescence they would like to have increasingly more time and space to make their own choices and this has consequences for their food choices in particular. Take away food tend to be unhealthy so making take away foods healthier could be an effective initiative. In addition, this could be more closely regulated by for example limiting the spread of mainly American outlets such as KFC, Macdonalds, Pepe's Pizza, Subway etc, especially in close proximity to places where young people are, such as upper high schools and parks. Closer regulation of advertising directed at young people may be difficult given the role of social media in young people's lives.

It may be however, that this is a period of unhealthy eating which, if people have skills and knowledge to support healthy eating, shifts once young people become more established in young adulthood. Longitudinal studies could help in understanding this.

9.5 Conclusion

The findings of this study support earlier findings in that there are differences in influences on food choices from childhood towards young adulthood. However, it adds another deeper layer in understanding food choices in young people by showing the importance of social influences across food choices, highlighting the importance of early development of young people's food choices within the family and later, eating as an identity and social activity with friends. The findings have been explained using the socio-ecological theoretical framework of the study in which socialization from different levels (e.g. parent as role models, eating as a social activity with friends, participating in food-related decisions at home, social media) in the socio-ecological model is the mechanism of habitus formation of a person which developed through time, and leaves a person with predispositions to act. However, this study suggests that young people's diets become more unhealthy as they move through youth by social experimentation and "risk" behaviour, increased independence in general (also in food choices) and changes in the environment, or by that it may be a period of unhealthy eating which shifts when you become more

established as an adult. Also, this study confirmed that food choices are not necessarily – if at all – influenced by knowledge of healthy foods, particularly during youth. This study provided data on a small sample of young people from one school in one county in Norway, with clear differences in pattern between genders, but not in socioeconomic status. It is well documented that food choices tend to vary by socioeconomic status but it may be that during youth, food choice patterns are less difference and gender is a more important variable, particularly as this is a period of identity formation of which gender identity is a part. Future work could explore this further. Further studies are needed which recruit young people, from rural areas and cities, higher and lower socio-economic classes, cultural diverse groups, to establish how young people from different social groups view influences on young people's food choices.

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10. Appendix 1 PICO-form

How can we understand Norwegians upper high schools students' perceptions of influences on their food choices, not only in school, but in their everyday life? In addition to this, how can we understand how food choices and pattern of eating changes as young people move from childhood towards young adulthood?

P (population): Norwegian upper high school students

I (intervention):

C (comparison):

O (outcome): Norwegians upper high schools students' perceptions of influences on their food choices

P (population): Norwegian upper high school students

I (intervention):

C (comparison):

O (outcome): understand how food choices and pattern of eating changes as young people move from childhood towards young adulthood

Limitation of population: six years – early twenties

Limitation in years: 2000-2017

Limitations in language: Norwegian, English

Limitations in method: both qualitative and quantitative studies were used

P-key word	O-key words
Adolescent*	Influence*
Young people	Factor*
Upper high school students	Influencing factors
Student*	Change*
	Eating behaviour
	Eating habits
	Food choices
	Healthy eating

Guidelines and clinical references:

Data base	Scandinavian Journal of Public Health
Date of search	November 2016 –May 2017
Search history or approach	Used the words from the PICO-form
Comments	No relevant literature was found. One article was used in the theory chapter in order to show an example of what Norwegian studies had conducted.

Data base	Google Scholar
Date of search	November 2016 –March 2017
Search history or approach	Used the words from the PICO-form
Comments	Various numbers of hits, with various relevance's, were found depending on the words used and search date.

Data base	ORIA
Date of search	November 2016 –March 2017
Search history or approach	Used the words from the pico-form
Comments	Various numbers of hits, with various relevance's, were found, depending on the words used and search date.

Data base	Google
Date of search	November 2016 –December 2017
Search history or approach	Norwegian word was used: Videregående elever, mat, statistikk, forskning, skole
Comments	In order to find statistics of eating patten of Norwegian upper high school students, Google was used. Various numbers of hits were found.

11. Appendix Literature overview

Method					71	Findings		
Author(s) and title	Year	Study design	Sample, size	Comments	Findings	Conclusion	Relevance	
Studies on influences on young people's food choices								
<p>Story, M., Neumark-Sztainer, D., & French, S.</p> <p>Individual and environmental influences on adolescent eating behaviors.</p>	<p>2002</p> <p>USA</p>	<p>Literature review</p>		<p>No criteria's was motioned</p>	<p>Throughout a conceptual model based on social cognitive theory and an ecological perspective four levels of influence are described: individual or intrapersonal influences (eg, psychosocial, biological); social environmental or interpersonal (eg, family and peers); physical environmental or community settings (eg, schools, fast food outlets, convenience stores); and macrosystem or societal (eg, mass media, marketing and advertising, social and cultural norms).</p>	<p>The challenge of helping adolescents adopt healthful eating behaviours will require multifaceted, community-wide efforts.</p>	<p>Literature review on influences on young people's food choices resulting in a theoretical framework</p>	
<p>Fitzgerald, A., Heary, C., Nixon, E., & Kelly, C.</p> <p>Factors influencing the food choices of Irish children and adolescents: a qualitative investigation.</p>	<p>2010</p> <p>Ireland</p>	<p>Qualitative study</p> <p>Participants were recruited from randomly selected primary and secondary schools from the Irish Department of Education and science published list of schools.</p> <p>Semi-structured schedule was used. Six single-sex focus groups which lasted for 40 to 60 minuets.</p> <p>The group discussions were tape-recorded, transcribed and double-checked for accuracy.</p> <p>Inductive thematic analysis</p>	<p>Six single-sex focus groups, two at each age group, with approximately five participant per group (N=29). 13 boy and 16 girls aged between 9 and 18 years (mean age= 13.67, SD 3.24)</p>	<p>Further recruiting was not mention</p>	<p>-Differences between children's and adolescents' perceptions of factors influencing food choice. Among adolescents, parental control began to diminish and adolescents exercised increased autonomy over their food choices compared with children.</p> <p>-Gap between nutritional awareness and putting knowledge in to practices.</p>	<p>-Developmental differences in influences on food choice across childhood and adolescence.</p> <p>-Home environment influences diminished during adolescence and competed with influences such as nutritional autonomy and lifestyle factors.</p>	<p>Multilevel influences on food choices identified.</p> <p>Food knowledge not main influence</p> <p>Differences in influences on food choices with age.</p>	

<p>Deliens, T., Clarys, P., De Bourdeaudhuij, I., & Deforche, B.</p> <p>Determinants of eating behaviour in university students: a qualitative study using focus group discussions.</p>	<p>2014</p> <p>Belgium</p>	<p>Qualitative study</p> <p>Participants were recruited through snowball sampling, a purposive non probability approach (where the researcher recruits a few volunteers which again recruits others volunteers)</p> <p>Semi-structured question guide, five focus group discussions was conducted. Saturation was reached. Focus group sessions lasted for 90 to 120 minutes.</p> <p>All focus group discussions were audiotaped and transcribed</p> <p>Inductive thematic approach</p>	<p>Five focus groups, consisting of 14 male and 21 female university students, with 5 to 10 participant in each group (N=35). Participant age range 18 to 16 years (mean 20.6± 1.7 years)</p>		<p>-With increased independence, students are continuously challenged to make healthful food choices. Students reported to be influenced by individual factors (e.g. taste preferences, self-discipline, time and convenience), their social networks (e.g. (lack of) parental control, friends and peers), physical environment (e.g. availability and accessibility, appeal and prices of food products), and macro environment (e.g. media and advertising).</p>	<p>-Increased independence challenges healthy food choices</p> <p>-Multilevel influences on food choices</p>	<p>Multilevel influences on food choices identified.</p> <p>Differences in influences on food choices with increased independence.</p>
<p>Verstraeten, R., Van Royen, K., Ochoa-Avilés, A., Penafiel, D., Holdsworth, M., Donoso, S., ... & Kolsteren, P.</p> <p>A conceptual framework for healthy eating behavior in Ecuadorian adolescents: A qualitative study.</p>	<p>2014</p> <p>Ecuador</p>	<p>Qualitative study</p> <p>5 schools was selected through convenience sampling. Adolescents were randomly selected. Convenience sampling was used to recruit participants to the parent and school staff focus groups. To be eligible, parents needed to have a child (aged 11–15 y) at one of the participating schools and school staff had to be employed at one of the schools.</p> <p>Semi-structured question guide, 20 focus groups. Saturation was reached. Focus group session lasted for 32 minutes on averaged.</p> <p>Audiotape, debriefing with moderator and observer, transcribed</p> <p>Deductive thematic analysis based on the literature and the theoretical</p>	<p>20 focus groups (N= 144 participants) were conducted separately with adolescents aged 11–15 y (n (focus groups) =12, N (participants) =80), parents (n=4, N=32) and school staff (n=4, N=32) in rural and urban.</p> <p>3 urban schools and 2 rural schools, which represented districts with different level of socioeconomic status</p>		<p>-All groups recognized the importance of eating healthily.</p> <p>-Key individual factors in adolescents' food choices were: financial autonomy, food safety perceptions, lack of self-control, habit strength, taste preferences and perceived peer norms.</p> <p>- Home and family environment, time and convenience as barriers to eating healthily.</p> <p>-Participants acknowledged the impact of the changing socio-cultural environment on adolescents' eating patterns.</p> <p>-Availability of healthy food at home and financial constraints differed between settings and socio-economic groups.</p>	<p>-Food knowledge was seen in all SES groups. Participant from rural and lower socioeconomic schools reported lower availability of healthy food at home and could not afford to buy "healthy food".</p> <p>-Individual factors influencing adolescents food choices were: financial autonomy, food safety, self-efficacy, habit strength and socio-cultural changes as key cultural factors in adolescent's food choices.</p> <p>- Socio-cultural changes in translation from primary to secondary</p>	<p>-Food knowledge not main influence</p> <p>-Identified individual influences and barriers</p> <p>-Socio-cultural change with increased age</p>

		framework of this study.				school -Barriers (home and family environment, time, convenience)	
Statistics of food choices and pattern of eating as young people move from childhood towards young adulthood							
Inchley, J., Currie, D., Young, T., Samdal, O., Torsheim, T., Augustson, L., ... and Barnekow, V. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the, 2013/2014 survey.	2016	Quantitative Cluster probability sampling (systematic or random) of school classes. Sampling of schools (proportional to size) was carried out where lists of classes were not available, followed by sampling of classes within school. Samples in some countries and regions were first stratified (by, for example, geopolitical unit or language group). Self-report anonymous questionnaires were administered in school classes between September 2013 and January 2015	219 460 participants (boys N=108 161, girls N=111 299), 42 in Europe and North America. Responsrate was 60 % in most of the countries. Nine countries achieved less than 90 % of the desired sample on 1500 students in each age group in each country/region.	The statistics calculate percentages for the different year classes, girls and boys and socioeconomic status.	* AGE: Frequency of breakfast consumption, eating fruit and having evening meals with the family decreasing between the ages 11 and 15 *GENDER: Girls tend to skip breakfast and the attempts to lose weight among *SES: high-affluence families consumption of fruit and vegetables, and higher frequency of eating breakfast and evening meals with their family. Soft drinks consumption is not consistent across countries and regions	- Unhealthy eating patterns become more common as young people move through adolescence - Unhealthier patterns in low SES groups	Generating statistics of international: *Gender pattern in eating *Socioeconomic pattern in eating *Age pattern in eating
Samdal, O., Mathisen, F. K. S., Torsheim, T., Diseth, Å. R., Fismen, A.-S., Larsen, T., Wold, B. & Årdal, E. Helse og trivsel blant barn og unge:	2016 Norway	Quantitative The 11, 13 and 15 year olds were sampled though a list which was geographic stratified. For the 16 year olds a list over courses in upper high school was used. Self-report anonymous questionnaires were administered in March 2014, and Autumn 2014	250924 participants, where 59602 were 11 years old, 63382 where 13 years old, 6316 where 15 years old and 64925 where 16 years old (Boys and Girls is not motioned)	The statistics calculate percentages for the different year classes, girls and boys and socioeconomic status.	*AGE: Frequency of breakfast consumption, eating fruit and having evening meals with the family decreasing between the ages 11 and 15 * GENDER: Girls eats more fruit and vegetables and consume less soft drink than boys. Of 16 years olds: 15 % of the boys compared with 39 % of the girls have tried to lose weight *SES: high-affluence families have a tendency of eating meals	- Unhealthy eating patterns become more common as young people move through adolescence - Gender differences increases with age - Unhealthier patterns in low SES groups	Generating statistic of Norwegian: *Gender pattern in eating *Socioeconomic pattern in eating *Age pattern in eating

					more frequently, have a higher consumption of fruit and vegetables, eat less candy and drinking less soft drinks than peers from low-affluence families		
Forskningsrådet. Hva spiser eleven på skolen?	2011 Norway	Quantitative Online self-reported anonymous questionnaire conducted between September 19 th and October 8 th	15791 participants (boys N=7650, girls N=8141), where 15 % upper high school students, 19 % secondary school, 66 % primary school. The participants was from 299 schools in 162 counties in Norway	The statistics calculate percentages for the different year classes, girls and boys	*AGE: decline in fruit and milk consumption from primary to upper high school and an increased intake of soft drinks *GENDER: girl eats more fruit and vegetables and drink more water than the boys	- Unhealthy eating patterns become more common as young people move through adolescence -Gender differences increases with age	Generating statistic of Norwegian: *Gender pattern in eating *Socioeconomic pattern in eating *Age pattern in eating

12. Appendix 3 Participant information

Forespørsel om deltakelse i forskningsprosjektet

”Utviklingen i kosthold fra barn til ungdom: en kvalitative studie av studenters perspektiv”

Kjære Kjære elever,

Jeg er masterstudent ved Høgskole i Hedmark på Elverum, og skal i den forbindelse utføre et forskningsprosjekt. Jeg ønsker i den forbindelse å snakke med deg for å **forstå hvordan ditt kosthold har endret seg fra du var barn til hvordan det er i dag**. For å oppnå en slik forståelse trenger jeg hjelp av deg som elev. Hvilke krav stilles for deg som deltaker?

- Du må gå på videregående skole (16 år gammel eller eldre)

Takker du ”ja” til å bli med i studien, vil du og klassekameratene dine bli delt inn i grupper på 4-6 personer. Det vil bli rene jente- og guttegrupper, for at vi skal kunne snakke om ulike temaer innen kosthold i en mer avslappet setting. Gruppesamtalen vil bli tatt opp på bånd. Her vil ingen personopplysninger bli innhentet. Gruppesamtalen vil vare i ca 1 time, og vil gjennomføres i løpet av skoletiden på skolen. All informasjon som innhentes er taushetsbelagt, og det er kun jeg og min veileder, som har tilgang til informasjonen som innhentes. Personopplysninger og opptak vil bli lagret på en passordbeskyttet data. Ingen navn eller annen gjenkjennbar informasjon vil bli nevnt i en eventuell publisering. Alt av informasjon som samles, vil bli slettet når studien er ferdig 30.06.17.

Deltakelse er frivillig, og du kan når som helst trekke deg uten å oppgi noen grunn. Dersom du trekker deg vil alle opplysninger bli slettet. Studien registrert av Norsk Senter for forskningsdata AS.

Dersom du har noen spørsmål. Ta gjerne kontakt med

Forsker:

Marte Bjørli

Tlf:

E-mail:

Veileder:

Miranda Thurston

E-mail:

13. Appendix 4 Focus group questions

Fokusgruppe spørsmål

- Hvis dere tar for dere en vanlig dag, hva pleier dere å spise? (forskjell på helg og hverdag?)
- Tenker dere at det dere spiser nå er annerledes enn det dere spiste når dere var mindre? På hvilken måte?
- Hvorfor tror dere at kostholdet har endret seg?
- Hvor sunt tenker du at det du spiser er?

14. Appendix 5 Checklist

Fokusgruppe

- 1) **Tegene et bilde av dagen som videregående elev** (skole, lekser, hobbyer, venner, sosialt). Har dette forandret seg siden dere var små? På hvilken måte?
- 2) **Matpreferanser:** Hva var din favorittmat/-drikke som barn? Hva er favoritt maten/drikken deres i dag? Når spiser du denne maten? Med hvem? Finnes det noe mat dere liker med som dere tenker at dere ikke burde spise?
- 3) **Typiske matvaner:** fortell meg om hvilke type mat dere liker å spise? Ville vennene dine likt denne maten også, eller ikke? Beskriv det du vanligvis pleier å spise?
- 4) **Mat man ikke liker:** Finnes det mat som dere ikke likte før, men som dere liker nå (eksempel)? Er det noe du virkelig ikke liker å spise? Hvorfor liker du ikke denne maten?
- 5) **Frokost:** pleier du å spise noe før du går på skolen, vanligvis? Hvis ja, hva pleier dere å spise? Hvor spiser du denne maten? Har det alltid vært slik?
- 6) **Lunsj:** hvor mange av dere pleier å spise lunsj? Hva pleier dere å spise da? Hvis dere ikke har med dere mat hva gjør dere da (Butikk/kantine)? Hva pleier man som regel å kjøpe der? Hva gjorde dere når dere var mindre?
- 7) **Etter skolen:** Pleier dere å spise noe rett etter skolen? Hva og hvor? Har dette forandret seg noe med alderen?
- 8) **Middag:** Kan dere ikke fortelle meg litt om middagen deres? Hva pleier dere spise? Hvor pleier dere spise? Hvem pleier å ordne maten? Hvis dere ikke spiser hjemme, hva gjør dere som regel da?
- 9) **Kunnskap om sunt kosthold:** Hva vet dere om kosthold og helse? Tenker dere det er viktig å spise sunt? Kan dere komme med eksempler på sunn mat som dere spiser? Hvor er det dere har hentet denne kunnskapen fra? Hvor gamle var dere da?
- 10) **Kontroll:** Er det noen som pleier å hjelpe til med handling av mat hjemme? Eller velge dere selv hva der skal spise til mat? Har det alltid vært slik/når begynte dere med det?
- 11) **Familiemåltid:** Hva synes dere om å spise mat med familien? Tror dere ungdommer som spiser med familien sin spiser annerledes enn ungdommer som aldri spiser med familien sin? På hvilken måte da? Har der noen regler rundt matbordet hjemme?
- 12) **Valgmulighet:** Hvor mye valg har du av det du spiser hjemme? Hvor mye valg har du over hva du spiser når du spiser utenfor hjemmet?
- 13) **Påvirkninger av jevnaldrene:** Hvor like eller ulik er maten du og vennene dine spiser sammen? Hvor ofte pleier dere å spise med vennene deres? Når og hvor?
- 14) **Spise utenfor hjemme:** Hvor ofte spiser dere ute (Resturant, take-away?) Hva pleier dere å bestille da? Hva tenker dere om denne maten? Hvilken mat spiser du utenfor hjemmet?

- 15) **Ukedager vs helg:** Spiser dere annerledes i ukedagene enn i helga? Hva er forskjellen på maten dere spiser?
- 16) **Media:** Sosiale medier, påvirker det der i noen grad hva dere spiser? På hvilken måte?
- 17) **Normer:** Er det noen typer mat ”alle” pleier å spise? Hvis dere skulle komme med eksempler på ”kul” mat, hva ville det vært? Er det noen typer mat som ikke er godtatt? Ville fått en kommentar på, hvis man har der med seg? Er dette med på å påvirke valgene deres?
- 18) **Utvikling:** Hvis jeg sier at kostholdet forandrer seg fra man er barn til man er ungdom, stemmer det for dere, på hvilken måte? Hva tror dere er årsakene til dette?
- 19) **Tilslutt:**
- a. Oppsummering
 - b. Er det noe som dere vil si, som dere ikke har fått sagt? Evt noe dere har kommet på nå, som dere ikke kom på i stad?

15. Appendix 6 NSD approval



Miranda Thurston
 Institutt for idrett og aktiv livsstil Høgskolen i Hedmark, campus Elverum
 Postboks 400
 2418 ELVERUM

Vår dato: 11.01.2017 Vår ref: 51109 / 3 / MGS Deres dato: Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 15.11.2016. Meldingen gjelder prosjektet:

51109	<i>Schools as arenas for promoting healthy eating habits: a qualitative study of students' perspectives</i>
Behandlingsansvarlig	<i>Høgskolen i Hedmark, ved institusjonens øverste leder</i>
Daglig ansvarlig	<i>Miranda Thurston</i>
Student	<i>Marte Bjørli</i>

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://pvo.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 30.06.2017, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Kjersti Haugstvedt

Marie Strand Schildmann

Kontaktperson: Marie Strand Schildmann tlf. 55 58 31 52

Dokumentet er elektronisk produsert og godkjent ved NSD's rutiner for elektronisk godkjenning.

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Kontakt med NSD ble oppretter pga av endringer. Godkjent endring ble mottatt per mail
 03.02.2017