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Food literacy among a group of immigrants in Oslo, Norway and their experience with a food and health course

Elena Maria Hanssen

OsloMet – Oslo Metropolitan University

Faculty of health sciences
Department of nursing and health promotion

Preface

My thesis is based on the cooperation with the project “Healthy Start” developed by the Health Department of the Oslo Municipality and funded by the “Damm Foundation” (formerly Extrastiftelsen).

Working on this project for my master thesis has been exciting. I got the chance to interact and meet new people through the course, both the participants and the organizers and volunteers.

First and foremost, I would like to thank all the participants for taking part in the study and sharing their thoughts and feelings. Further thank you to all the volunteers at the Meeting Place for including me in the project, making me feel welcome and helped me get to know the participants. Thank you to the NAV leader who helped me to inform the participants about the study and to recruit them. I would also like to thank Nima Zama and Amin Al-Yassin for stepping up as interpreters and doing a great job in helping me during the interviews.

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Summary

Background

Studies have shown that immigrants are a vulnerable group when it comes to health and nutrition. Immigrants to European countries have a higher prevalence of non-communicable diseases (NCDs) than the general population. There is a need for culturally appropriate health and nutrition courses to reach equity in health. There is a need to study how to improve existing programs, understand how the immigrants perceive their own food literacy and how they feel it can be improved. It is also important to understand how they feel about the nutrition and health courses and get their input on how it could be improved to meet their needs and reach out to more immigrants with the information.
The aim of this study was to explore the food literacy among a group of newly resettled immigrants in Oslo and their experiences with a food and health course called Møteplassen or The Meeting Place.

Method

The study had a qualitative research design with a phenomenological-hermeneutic approach. 8 semi structured interviews were conducted of immigrants who participated at an 8-week food and health course. To analyze and interpret the results the IPA approach was used.

Results

The results indicate that the participants are familiar with several notions related to Food Literacy. There are some possible barriers to adopt healthier food habits, like religion and culture. A couple of the participants had tendencies to be food insecure from not having enough money for food all month. Participants had positive thoughts about the Meeting place and would like to have more offers for similar food and health courses. The participants did, however have some thoughts about themes important to them that could be included. They had thoughts on improvements and ideas for changes.

Conclusion

The Meeting place seemed to have increased the immigrant's knowledge about healthy diets and they were positive to the concept. Culturally appropriate food and health courses could promote the immigrants Food Literacy and motivation to adpt healthier diets.

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1. Background

There are 790 497 immigrants in Norway per 2019. That is equivalent to 14.7% of the Norwegian population. (Statistisk sentralbyrå, 2020).

Immigration to Europe has been increasing and it is seen that several of the groups that arrive have a higher prevalence of NCDs and poorer food habits than those born in Europe (Osei-Kwasi et al., 2016). Running away from your country is not an easy process. Many of the immigrants originate from countries with war, unrest and/or poverty. The road to Norway is not always easy and the journey can have an impact on their mental and physical health. Immigrants are considered a vulnerable group when it comes to health and nutrition (Gilbert & Khokhar, 2008; Valenta & Berg, 2012). A report from Norway states that moving to a new country represents big changes in someone's life, both physically, mentally, and socially. Immigration can have a big impact on their health in negative or positive ways (Kjøllestad et al., 2019).
Another study also shows that the increased risk for NCDs in this group can be caused by several factors like those mentioned above (Gilbert & Khokhar, 2008).

Research done on immigrant health in Norway, show that the portion of immigrants being physically active is lower than among the general population. There is a difference in gender, were immigrant women are less active than immigrant men (Kjøllestad et al., 2019). About 33% of this group are not physically active and the prevalence of obesity and overweight is higher among the women of non-western origin than among women born in Norway (Kjøllestad et al., 2019; Statistisk sentralbyrå, 2008).

A survey was conducted to examine the differences in coronary heart disease and diabetes between ethnic Norwegians and ethnic minority groups. The survey discovered a difference in self-reported heart disease between the two groups. Between 5.8 and 8.2% among the immigrant group reported that they had cardiovascular disease. To compare, this number was only 2.9% in the ethnic Norwegian group. The prevalence of self-reported diabetes was also higher among the ethnic minority group then among the ethnic Norwegian group, with 3-15% to 1.8% respectively (Tran et al., 2011). The report by Kjøllestad et al (2019) show that there is a difference in occurrence of cardiovascular disease (CVD) between immigrants in Norway and the general population. Immigrants tend to have higher prevalence of CVD (Kjøllestad et al., 2019; Tran et al., 2011). Similar findings have been made in another study, where

especially immigrants of south Asian ethnicity seem more vulnerable to CVD that the general population (Rabanal, Selmer, Igland, Tell, & Meyer, 2015).
Those of non-western origin gave a poorer assessment of their own health than the rest of the population. Among male immigrants, only 50% rated their health as good whilst among the ethnic Norwegian men, 80% rated their health as good. Already at age 30 you could see clear differences and it increased with age (Grøtvedt, 2002). Based on a collective report by the Institute of Public Health (2017), similar tendencies are found in surveys done on living conditions. Those of non-western backgrounds assess their health as poorer than the rest of the population (Kjøllestad et al., 2019).

The process of establishing oneself in a new country can often lead to an increased vulnerability among immigrants. According to the systematic review by Osei-Kwasi et al., several different factors were identified that could explain the food habits of immigrants. A lack of access to traditional, religiously acceptable food and preferred foods are among those factors that were identified as most important (Osei-Kwasi et al., 2016). There are socioeconomic differences that could result in negative effects on health among immigrants, such as lower educational level and less average income than the general population (Kjøllestad et al., 2019).

Integrating into the Norwegian society means learning a new language, new ways, and routines for grocery shopping and often a change in diet. It is a new and unaccustomed environment for many of them and it can be hard to adjust (Barbala, Grewal, Hauh, Eriksen, & Terragni, 2019). A change in food and eating habits is among the many challenges they face in a new country. The qualitative study done by Mannion et al., (2014) shows that low language understanding, lack of familiar food items and a sort of forced change in food choices are some struggles immigrants face in their new homes.
The change from a traditional diet to a more western diet with more processed meats, refined carbohydrates, fat and sugary snacks is called, Nutrition Transition (Mueller, 2013). A nutrition transition can happen at the same time as a diet acculturation. Diet acculturation is the process of which immigrants will take on the food habits of their new home country (Satia, 2010). Studies have shown that immigration can lead to a more rapid nutrition transition (Garnweidner, Terragni, Pettersen, & Mosdol, 2012). These transitions can be positive and lead to an improved nutrition status and adoption of healthier food products like increased intake of fish among immigrants (Garnweidner et al., 2012) However, it is often

seen that nutrition transition leads to an increased intake of fat and sugar, and thus could lead to an increase of the occurrence of non-communicable diseases among this group (Holmboe-Ottesen & Wandel, 2012).

Food literacy has been indicated as an important component for promoting a healthy diet. A correlation between the increasing prevalence of diet related diseases and low food literacy has been identified (Vidgen & Gallegos, 2014). Nutrition education programs to increase food literacy among vulnerable groups are increasing. Food literacy can be defined as the foundation that strengthens the individuals, households, communities and nations diet quality (Vidgen & Gallegos, 2014). It can be viewed as skills and knowledge about cooking, purchasing, preparation and planning. These skills should strengthen the food security and lead to a diet that covers nutritional, cultural and social needs. It is basically tools that are needed to maintain a healthy diet through life (Cullen, Hatch, Martin, Higgins, & Sheppard, 2015; Vidgen & Gallegos, 2014).

1.1 The "Healthy start project"

Healthy Start is an initiative of the Oslo Municipality aimed to promote healthy diets among newly resettled immigrants and facilitate the transition into a new food environment by strengthening food literacy. The project responds to the Norwegian Ministry of Health and Care Services law on public health in 2013. The purpose of the new law was to achieve equality in health among the immigrant population (Helse- og Omsorgsdepartementet, 2013).

The projects focus was to strengthen the knowledge of food and nutrition for families living at the refugee centers in Oslo. The project wanted to contribute to more healthy choices that could increase the health and quality of life among this group. Another important factor is to make sure these activities and initiatives are permanently implemented at the refugee centers. The results of the project could increase the health competence of the leaders who oversee the refugees and make integration easier. Additionally, the result could also be transferred to other reception centers (Terragni, Garnweidner-Holme, Næss, Hussain, & Eriksen, 2018).

Healthy start are modules that are based on the 10 recommendations from the Nordic Nutrition Recommendations (Ministers, 2013). In addition, there is one extra module focused on physical activity. The information and guidelines are adjusted and adapted to fit the participants skills and food culture (Terragni et al., 2018). The 10 modules that healthy start is based on are: The importance of a varied diet, the importance of consuming fruit, berries and

vegetables, minimizing the use of sugar. The sugar module focuses on both added sugar in premade foods and sugar use at home. Further they focused on the use of oil or vegetable margarine and consumption of fish and other seafoods. To eat and drink dairy products that have a low-fat content and to eat lean meats. Increase the consumption of whole grain products and minimize the use of salt. And to drink enough water. The last is the module for physical activity (Terragni et al., 2018).

In the spring of 2019, a new program was implemented in a district of Oslo. With the healthy start program as a guide, they arranged a place for immigrants with permanent residency in Norway to come and meet to learn about health and nutrition as well as practicing the language. It was a voluntary program called the Meeting place. The aim was to make the transition to the Norwegian society easier for immigrants. The project would in this way help to equalize the social inequalities in health between immigrants and ethnic Norwegians as the new law of 2013 dictates (Helse- og Omsorgsdepartementet, 2013).

The course was held at 2 different locations in the district that the participants belonged to. The meeting place had a duration of 8 weeks with 1 course day a week. The course consisted of an hour presentation of a health and/or nutrition related topic followed by one hour of interaction where they could practice Norwegian or ask questions about the topic of the day. Each of the presenters made a power point for the day and the Healthy Start pamphlets were used as a general background for the course. There was a mix of practical and theoretical learning with some competitions among the participants and visual presentations. An example of a visual presentation was with sugar. The leaders had bought different items from the grocery store and put sugar cubes next to them to show the amount of sugar each contains. Most importantly how much sugar is in products directed to children.

There are more aspects of food and meals than just being essential for good health and development. It is also important for the quality of life. There are social and cultural aspects of food that enhances its importance. It has an important role in our identities and cultural belonging (Caplan, 2013).
People from countries outside of Norway often have a strong food culture where the meal is a big and important part of the day (Pedersen, Müller, hjartåker, & Anderssen, 2013). When they move and arrives in a new country, they can experience a loss of that culture.

Immigrants as a group have higher prevalence of NCDs than their new European home countries and there is a difference between the different immigrant groups. Some of them

have a higher risk of developing diseases that can be prevented with the help of good nutrition (Holmboe-Ottesen & Wandel, 2012). A systematic review article by Gilbert & Khokhar (2008) shows that a deterioration of nutrition quality occurs after migration. The article show that immigrants often increase their intake of food with high fat, sugar, and salt content. The processed foot replaces fruits, vegetables and grains that used to be important components to their diets in their home countries. This results in an increasing trend for non-communicable diseases for this group (Diaz et al., 2017; Gilbert & Khokhar, 2008; Holmboe-Ottesen & Wandel, 2012).

Previous studies has shown that immigrants have difficulties orienting themselves in the new and changed environment when it comes to nutrition (Mannion et al., 2014). Some ethnic minorities have a higher risk of developing obesity and non-communicable diseases. This can be a result of genetic, epigenetic, and cultural differences in diets (Holmboe-Ottesen & Wandel, 2012). It indicates that it could be necessary to give this group more attention when it comes to health and nutrition. Health personnel have reported that they encounter difficulties in meeting immigrants because they don't have enough information about their diet and the change in diet that has occurred after migration (Holmboe-Ottesen & Wandel, 2012).

A full diet with all its components is complex and can be intimidating for many. Everyone must navigate through this system to make sure that their food intake builds up under a good health (Mannion et al., 2014). For someone who just recently came to Norway, this would be even more complicated. They must work around inadequate language, a change in environment and a difference in ways of preparing food. The food items do not look the same when they go to the store, and they can also lose a lot of the social aspects around meals that they are used to.

There has been conducted very little research on the connection between food literacy and food security among immigrants, and how their food literacy could impact their health. This study wants to take a closer look at what could be the personal challenges for those who are relatively new to Norway, when it comes to health and nutrition. Hereunder it wishes to assess their food literacy. It is important to examine how they will assess their own food literacy and cooking skills, and thus, how this could influence their food choices. As a vulnerable group, it is important to give newly arrived immigrants more attention on this subject to improve health, wellbeing, and integration.

1.2 Purpose and thesis statement/ research question

The aim of the study was to explore the food literacy among a group of newly resettled immigrants in Oslo and their experiences with a food and health course. The purpose was to get a deeper understanding of food literacy, hereunder the ability to cook, plan and the economic skills, among a group of newly resettled immigrants participating in a food and health course. The study investigated the participants subjective feelings about their food literacy and how well they have mastered the changes in environment. The study investigated the participants experience with the health and nutrition program, The Meeting place. More specifically, the study wanted to answer the following questions.

1: How is the food literacy among newly resettled immigrants?

2: What are the perceived barriers to food literacy?

3: How was their experiences with The Meeting Place and their thoughts on improvement?

2 Theory

2.1 Food Literacy

Food literacy can be defined as the foundation that strengthens the individual, households, communities and nations diet quality throughout changes, and therefore it strengthens the ability to resist changes in environment that could influence the diet over time (Vidgen & Gallegos, 2014, p. 55). It can be viewed as several skills and knowledge about cooking, purchasing, preparation and planning. These skills should strengthen the food security and lead to a diet that covers nutritional, cultural and social needs. It is basically tools that are needed to maintain a healthy diet through life (Cullen et al., 2015; Vidgen & Gallegos, 2014, p. 55).

The term "food literacy" has emerged as a relatively new concept and academic research has only just begun to define food literacy. There is a range of different understandings of the concept (Cullen et al., 2015).

Food literacy can be defined as a set of tools that we need to have a healthy and lifelong relationship with food. The skills include the ability to make healthy and affordable meals for themselves and their families. The ability to read and understand the labels and make conscious decisions about which products to choose (Vidgen & Gallegos, 2014). It is a set of skills and knowledge about cooking, purchasing, preparation and planning meals. A food literate individual will have a foundation that can strengthen them and their family's abilities

to withstand changes in the environment surrounding them, that could influence their diets over time. These skills will strengthen the ability to stay food secure and will lead to a diet that is adequately covering the nutritional, societal, cultural, and religious needs. It is several tools that are needed to maintain a healthy diet throughout life (Cullen et al., 2015; Fordyce-Voorham, 2011; Kimura, 2011; Macdiarmid et al., 2011; Thomas & Irwin, 2011; Vidgen & Gallegos, 2014).

The term Food Literacy is used increasingly but there is no shared understanding of the meaning. Food and eating is part of everyday life, and it can be challengig to keep a healhty diet over time. Our food and eating habits change in respons to outside influences (Bisogni, Jastran, Shen, & Devine, 2005). Food Literacy has emerged as a term to describe those everyday challenges one faces with navigating the food systems and it is used to ensure regular food intake consistent with the nutrition reccomendations (Frisch, Camerini, Diviani, & Schulz, 2012). In their article, Vidgen & Gallegos point out the need for a shared understanding of the Food Literacy term and how to measure it. This is important for the contiuing work of guiding people in healhty living and diet (Vidgen & Gallegos, 2014). Under follows a figure of components that Vidgen & Gallegos identified in their study with an explanation of the components and what they entail under the figure.

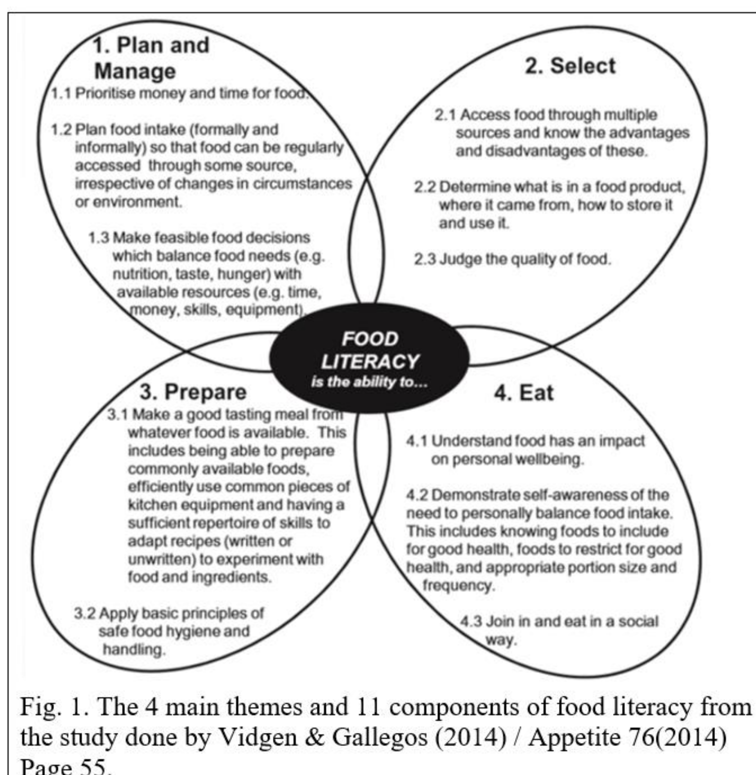

Fig. 1. The 4 main themes and 11 components of food literacy from the study done by Vidgen & Gallegos (2014) / Appetite 76(2014) Page 55.

The first theme is Plan and Manage. This is the ability to plan your days so that you eat enough healhty food through the day to meet the nutritional needs. Manage the ecconomy in a way that there is enough money to buy healthy food. It is the ability to prioritize money and time for food (Vidgen & Gallegos, 2014). The component of managing the economy could tie in with food security, as there are studies showing a correlation between food security and food insecurity (Begley, Paynter, Butcher, & Dhaliwal, 2019).

«Food security is defined as having access to enough food, safe food and nutritious food to lead an active and healthy life» (FN, 2018). Access to enough food means that you should have physical, social, and financial access to enough and safe food to cover all nutritious needs and be cultural acceptable. People that are food secure will be able to have an active life with good health. There are four dimensions to being food secure: The food must be available; all must have access to it, you should be able to utilize the food and all those above must be stable over time (FN, 2018; World food summit, 1991)

Non-communicable diseases are related to food insecurity. These diseases make up a large public health issue in western countries. Based on this it is important to explore the individual's food knowledge. As mentioned under food security, the utilization of the food would be tied to all aspects involved in the process of transforming produce to safe and nutritious meals for the household (Begley et al., 2019).

The evaluation study by Begley et al., (2019), indicates an association between having low Food Literacy and being food insecure. Food Literacy seems to influence the food security on many levels. Being able to plan, prepare and cook food that is nutritiously adequate for a good health has an impact on how food secure you are. If you are not able to cook you could resort to easy, unhealthy and quick solutions for your meals (Begley et al., 2019).

Whilst low food literacy could contribute to food insecurity, being food insecure could in turn limit the ability to develop food skills necessary to obtain adequate diet quality. Unlike the other aspects of food security, food literacy is something that can be improved with the help of proper education and practice (Begley et al., 2019).

The second theme of food literacy is Select. The components refer to the selection of food items in the grocery store, like selecting vegetables and fruits. It refers to the selection of food service items as well. For example, choosing between different take away options after how

healthy or unhealthy they are. Under selection also comes the ability to read and understand food labeling, know where the food comes from and with that information being able to choose healthy foods. There is a component on judging quality of food as well. It could be choosing items with less added sugar, salt and/or fat. This component correlates strongly with being able to read the food labels (Vidgen & Gallegos, 2014).

The third theme is Prepare. The components under this theme is about the ability to make tasty meals from whatever is available, including being able to read and adjust recipes to fit one's taste, culture, religion, and availability of food items. Prepare also entails being able to use common pieces of kitchen equipment and prepare commonly available foods. Incorporating foods from all the food groups is another element. The Prepare theme is about being able to adapt to the local food environment to maintain diet quality through change and/or when the money is limited. There is also one component about applying basic hygiene and handling of food items. This can have some ties to Food safety, as it is important to make food in a safe way as not to poison anybody (Vidgen & Gallegos, 2014).

Food safety is an important aspect with being food secure and to assess food literacy. Food safety is about preparation and storage of the food in a way where you avoid disease and contamination from the food. Food and water have always been important sources of disease for humans. Good routines and the proper handling of the food is important to avoid those diseases. Examples of contamination in food and water can be Salmonella and E-coli. Controlling the quality of the food by checking the date and being able to assess if the food is expired or safe (Almås, 2015; Nofima, 2010).

The 4th and last theme is Eat. These components entail the knowledge of the foods impact on personal well-being and health. One should know what foods to include and which ones to exclude to keep a healthy diet. It is also important to know about portion sizing and frequency of meals. One needs to be able to balance personal food intake to maintain good health. Joining in and eat in a social way is about the non-nutritious importance of food, the pleasure of social company during meals. Dining together could be a way of making social connections and have an importance on mental health (Vidgen & Gallegos, 2014).
It is very important to have cultural sensitivity in nutrition communication with immigrants. Many of them wishes to keep their diet habits from home, especially the religious food rules seem to be important (Garnweidner et al., 2012). They often find the food in their new

country boring and tasteless and they struggle to find familiar food items that they know how to use (Garnweidner et al., 2012).

3 Method

3. 1 Choice of method

This study uses a qualitative research design. When conducting a study using a qualitative method, a more in depth understanding of the subject's experiences can be examined and analysed. This method entails searching for an understanding of one or more phenomenon through a closer relationship to the subjects of the study, and understanding their perspectives and feelings of the chosen phenomenon (Malterud, 2017).

The research questions in this study is something relatively new, and there is little to no research done on the subject. A central purpose of the study was to delve into the theme and to create a foundation for further research. Therefore, a qualitative method was the best choice and considered suitable for this study. (Thagaard, 2013).

3.1.2 Scientific approach

A phenomenological hermeneutical approach was used for this study. Within the phenomenology one wishes to explore the subjective experiences of individuals and to find the deeper meaning behind their experiences. In Hermeneutics one seeks to construe and analyse phenomenon's and create meanings from texts and experiences (Malterud, 2017; Thagaard, 2013).

3.2 Methods of data collection

For this study, semi structured interviews were the main method of data collection. Participant observation was used to contextualize the results and gain insight in the group studied.

3.2.1 Semi structured interviews

This form of interviewing focuses on a more open and free conversation. The interview is based on an interview guide with some questions, often with set themes (attachment 1). With semi structured interviews you can differ from the guide and ask additional questions (Malterud, 2017). In this study, the use of semi structured interviews gave the researcher a possibility to go in depth of the participants feelings and attitudes towards preparation and planning of healthy meals. Understand the level of Food Literacy among this group and to examine if the Meeting place had increased their knowledge of a healthy diet.
The Meeting place was held from February to May 2019 and the researcher participated on

the course and recruited participants from the course.
The study was carried out from July – December 2019. The selection was participants at The Meeting place. A convenience sample was used to choose participants, meaning that the participants that where available and wanted to be part of the study was recruited (Thagaard, 2013). One of the leaders of the group explained the study, then the signatory talked to them one on one to ask if they wanted to participate.

Inclusion criteria was
1 – They had to participate on at least 5 of the topics concerning food and health.
2 – They had to be over 18 years of age.
3 – They had to have a permanent residency in Norway.

The recruitment happened during the end of the course. The number of participants varied each week. One of the leaders took attendance to see who participated on all the course days. Participants were chosen from the group of who had participated on most days. All the participants got an oral briefing on what the main purpose of the study was. Before the interviews, each participant got written information about the study and each of them signed this document before the interviews commenced. Out of the group at the food and health course, 10 people agreed to be interviewed. 2 of these retracted the consent during the study, so the total number of participants in this study is 8, 6 women and 2 men.

3.2.2 Preparation of interview guide

The interview guide was developed based on a study on Food Literacy. Food Literacy is increasingly used in studies on diet and health. It is, and has been, different views around the terminology and how you can measure someone's Food Literacy. The study that the interview guide is based on, is a systematic review of several studies on the subject. From the review they developed a definition and components that can be used to measure Food Literacy. The four components used in the interview guide are Plan and manage, Select, Preparation and Eat (Vidgen & Gallegos, 2014).
The table below shows an excerpt of the interview guide with some of the questions that where linked to the framework compiled by Vidgen and Gallegos (2014).

Table 1: Excerpt of interview guide

From framework	Theoretical domains	Question
Planning and managing	Skills in finding food items and planning meals. Finance and knowledge are included in this domain.	How do you experience having to plan and cook healthy foods?
Select	Knowledge of reading labels and choosing healthy items among several unhealthy choices. Influences on food choices, like religion or taste preferences.	Do you have any thoughts about what can influence your choice of food items?
Prepare	Food security is important in this domain. The capability to prepare healthy food that taste good.	What do you think is important to think about when preparing food?
Eat	An understanding of the effects of healthy eating or unhealthy eating and an understanding of what healthy eating means.	Could you tell me more about what you think about the effect of the diet on health long term?

The interviews were conducted after the end of the Meeting place and it took a few months to complete all of them. All the interviews where recorded using a tape recorder without access to internet. The interviews where transcribed in the form of slightly modified verbatim mode. Language mistakes from the immigrants are corrected in written form and the written language made more formal than the oral conversation (Malterud, 2017).

8 interviews where performed. The researcher performed all the interviews, 4 of them was conducted with the help of an interpreter. All the interviews conducted without interpreter happened in a mix of Norwegian and English. Google image and translate where also used as a help. Time spent on the interviews ranged between 30 minutes and 90 minutes.

3.2.3 Participant observation

The study focuses primarily on the results from the qualitative interviews, however participant observation was used in connection to the language and nutrition course for the researcher to get an insight about the course and to get to know the participants better. This was done as a way of triangulation of the data.

In participant observation the researcher takes part of the social context the participants are in, and at the same time observe the different interactions that occurs (Fangen, 2010). For this research, the method gives a unique possibility to observe the participants at The Meeting place. How they interacted with each other, how well they seemed to receive the information given and their language skills.

Participant observation is a good method when one wants to get more in depth understanding and knowledge about people's actions and how they relate to each other. The insight gained in the observation can be used to better the interviews and give the researcher more background knowledge of the people participating in the interviews (Thagaard, 2013).

A prewritten observation guide was not used, but fieldnotes, in the form of keywords and key sentences were taken during all course days. A summary was written from all the days and this is the notes used for contextualizing the content of the qualitative interviews.

3.3 Data analysis:

3.3.1 Interpretative Phenomenological Analysis (IPA).

This form of analysis builds on the phenomenological philosophy where it is meant to give insight in how a person understands a phenomenon in a specific context. For this study that entails how the participants understand their own knowledge of nutrition and healthy diet, and how they experienced the Meeting place. The participants are experts on their own experiences and the researcher interprets and explain their experiences (Malterud, 2017; Jonathan A. Smith, Flowers, & Larkin, 2012).

The researcher followed the 1-6, step by step recipe for IPA analysis as explained in (Jonathan A. Smith et al., 2012). The steps are not followed rigorously, and some steps where done together, or not in the same order as presented in the book. Under follows an explanation of how the analysis was done.
Step 1 was the reading and re-reading of the transcribed data material. After the first read through some initial coding was made deductively using the 11 components of food literacy from Vidgen and Gallegos (2014) as a guide. The interview guide was already made with those components and organized in the four themes as described in the introduction, Plan and Manage, Select, Prepare and Eat. All the transcribed material had been printed and during the initial reading, highlights where made of interesting themes the participants talked about that

was not originally a part of the thesis questions.
Step 2 was done during the last part of step 1. While re-reading all transcripts the initial noting began. Making notes and dividing the transcripts in themes and making changes to the initial coding and adding more codes or nodes inductively for later use in the analysis. This first part of the analysis is a thematic analysis and the purpose of this was to identify and analyse different patterns in the data. This analysis can be descriptive or interpretative, but it is often a median of both (Malterud, 2017).

In the analysis of the data for this study, the end of step 1, step 2 and step 3 were done in parallel with each other. The focus on the notes where interpretative comments about the participants view about the themes and their feelings and thoughts. The researcher focused solely on the participants in the first 2 steps of analysis. Later in the analysis the researcher began to analyse those initial notes and find meaning in the participants feelings and views (Malterud, 2017; Jonathan A. Smith et al., 2012).

Step 3 of the IPA analysis consists of developing emergent themes from the interviews and enlarged data after commenting and creating nodes. For this study, the main themes were already chosen during the making of interview guides. The last main theme was their experiences with the Meeting Place. During step 3, more themes were made from interesting points the participants came up with during interviews, as for instance the concept of "shame". Step 3 introduces the hermeneutic circle where the interpretation of the data put more of the researcher into the data results (Jonathan A. Smith et al., 2012).

Table 2: Excerpt from the analysis process.

	Plan and Manage	Food Security (Subtheme of Plan and Manage)	Select	Prepare	Food Safety (Subtheme of prepare)	Eat	The Meeting Place
Nodes	- Plan food intake - Make feasible food decisions - Plan shopping	- Budget	- Read content label - Judge the quality of food - Know advantages and disadvantages of food sources	- Make tasty meals - Use kitchen equipment - Adjust recipes	- Hygiene - Safe handling	- Effects of healthy eating - Food to restrict - Food to include - Adverse effects on health	- Thoughts about the Meeting Place - Themes to add - Improvement
Examples of Initial Comment /Notes	"The men have no experience in cooking as their culture hinders this. The men talked about packed lunch as embarrassing". "Some planning among the women".	"The males feeling about cheap products can have an impact on their food security as they spend more money than they have on expensive products".	"Higher price, better quality seems to be a shared feeling among this group". "All of them read the labels to some extent, understanding is varied". "Females want tasty meals for the family, men want food to look good and work out/gain muscles".	"no difficulties with kitchen equipment". "makes mostly traditional foods. There are a lot of exotic shops in Norway where they find all the products they need".	"Good hygiene among all". "wash hands, counter, vegetables and fruits. Some even wash the meat before use". "Some wash a lot, soak in salt water for hours".	"They have relatively good understanding of several diseases. They do not know all the names but explain it like sugar sickness and fast heartbeats and chest pain while active".	"positive to this type of course. They want more and they want it to be part of their introduction for a longer period. More practical learning". "some difficulties with language".
Question example	- What do you feel about packed lunch? - How is your personal experience of eating healthy?	- What do you think about keeping a budget for food?	- Do you read the content label? - Do you feel like you understand it? - Can you tell me how you choose food items at the store?	- Do you feel like you are able to make healthy food that you think taste good? - Do you adjust recipes to fit your taste preference?	- What do you feel is important while preparing food? - How do you feel about hygiene while cooking?	- Could you tell me what you think about the effects a diet has on your health? - Could you tell me if there are any diseases you associate with an unhealthy diet?	- What do you feel about the Meeting place as an arena to learn about food and health? - Do you feel like you learned something new at the Meeting place?

Step 5 of IPA analysis is called, moving to the next case (Jonathan A. Smith et al., 2012). This step was done before step 4. Signatory finished step 1-3 on all transcripts before moving on to the final two steps.

Step 4 is searching for connections across the emergent themes (Jonathan A. Smith et al., 2012). The main themes were decided before interviews and has followed into the analysis process. Under is an example of a connection made during this step.

Not budgeting → Not planning the food intake → High priced items preferred → Lack of money at the end of the month = Food insecurity.

This example shows how the different themes can be clustered under this one title "Food insecurity". This finding led to a larger understanding the connection between food literacy and food insecurity and thus was included in the study after completing this step. An alteration to the nodes and first part of the study was than done.

Step 6 was done together with step 4. Whilst searching for connections across themes in each transcript separately, researcher connected patterns between the cases. During these last steps, researcher found similarities between some of the participants when it came to themes not prewritten in the interview guide nor part of the research questions. Subjects that initially seemed to be one participants singular thought, emerged as shared thoughts between more than one participant (Jonathan A. Smith et al., 2012).

3.4 Ethical guidelines

Before data collection could start, an application of approval was sent to the Norwegian data protection officials -NSD. The application was granted.

I addition to an oral briefing before agreeing to participate, all the participants got a written informed consent form, that they signed before the interview commenced (attachment 2). It included information about the research, how the data collection would happen and how it would be used. Also, the participants were informed of their right and possibility to retract the consent at any time. The importance of having informed consent from all the participants is to ensure that the participate voluntarily and to inform them of their rights to withdraw from the research (Kvale, Brinkmann, Anderssen, & Rygge, 2015).

The ethical behaviour in the research, data analysis and publication of data follows the ethical principle of phronesis as defined by Aristoteles. This entails that the researcher uses their practical skills that makes him or her able to understand the vulnerability that can arise in the research situation. Phronesis or practical knowledge is an ability a qualitative researcher is recommended to cultivate. It is an ability to see and describe the events in its own connections and make decisions and judgements accordingly. (Kvale et al., 2015).

The theme of the thesis should also consider possible improvement of the situation that is explored. In the case of this thesis it is not only the Food Literacy level of the participants that is investigated but their personal thoughts and feelings towards the health and nutrition program they were a part of. With that information it is possible to do further research and improve programs like this to better the health of immigrant groups in Oslo.

During the planning of the thesis it was important to think about the confidentiality of the people involved. Some of the information asked in the research can be deemed sensitive and the privacy of the participants was therefore protected. The participants as well as the

organisation involved in the project has been anonymized in the publication of the data material. The only thing published is the name of the project, but not in which district it was conducted.

With the interview situation is was important to keep the participants privacy, but also keeping them comfortable during the process. Taking time to explain proper what is going on and what the information is going to be used for. It was important to be culturally sensitive, especially with the use of male interpreter with the female, Muslim participants. The researcher kept an attentive eye on the mood of the room to make sure they felt comfortable and safeguarded. When the participants expressed being unsure or discomfort, signatory stopped the interview and comforted the participants and made sure they felt like the information they gave was important even if they did not know the right answers to all the questions.

During the transcription of the data collected, all information that could identify the participants where cut out to protect their privacy. The audio files where kept on a tape recorder with no internet connection and stored in a private cabinet with lock at the researcher's house. Transcribed data was kept on a password protected PC, anonymized.

4 Results

4.1 Participant characteristics

The age span of the participants was 25-40 years. Of those who were interviewed, 2 came from Eritrea, 1 from Iran and 5 came from Syria. There was 2 male and 6 female participants, and they had lived in Norway between 2 and 5 years.

Table 3. Overview of the participants in the study

Participant	Gender	Age (years)	Country of origin	Length of residency in Norway
1	Male	30	Syria	4+ years
2	Female	36	Eritrea	2 years
3	Female	36	Syria	4+ years
4	Female	30	Syria	2 years
5	Female	28	Eritrea	3 years
6	Male	29	Iran	4 years
7	Female	25	Syria	5 years
8	Female	40	Syria	3,5 years

4.2 Food Literacy

The concept of food literacy in this study follows Vidgen and Gallegos themes and components. Food literacy is the ability to Plan and Manage, Select, Prepare and Eat. Food security and food safety are mentioned in connection with food literacy. These 4 themes are further divided in to 11 components.
When the participants talked about their previous knowledge about food and health from their home countries, it indicates less focus on food literacy before arriving in Norway. Most of them felt like their knowledge had increased after moving to Norway and that the Meeting place had improved their understanding of food and health. The results show a possibility that some of the participants could classify as food insecure in periods as they report trouble with having enough money. The food literacy varies a lot between the participants. This is especially clear when participant 5, who is an educated health professional mentioned to have learned more about the importance of a healthy diet after moving to Norway.

The results will also present the participants feelings about the Meeting place, and thoughts they had about important themes that could be addressed at the course.

4.2.1 Plan and Manage

Hereunder comes 3 components. These are the ability to plan food intake, balance food needs with available recourses and lastly, prioritize money for food. The third point touches upon food security aspects, which will be presented under this theme.

Table 1 gives an overview of the participants planning and managing. As seen, participant 1 and 6 who are male, seems to have less structure when it comes to planning meals and money. They all understood the table of contents on products, and most of them had a habit of reading it while shopping, the others would try to read it sometimes. Participant 1, 6, 7, and 8 reported less money at the end of the month and not enough to buy what they felt was healthy food. 3/4 of those also reported no budgeting. The males did not pack lunch but ate out and spent more money on that. All the women packed lunch except one who only packed lunch sometimes. Most of the participants planned what day to go shopping and many of them made a list before going.

Table 4. an overview of the food planning and managing amongst the immigrants.

Participant	Gender	Budgeting	Set day for shopping	Shopping list	Packed Lunch	Enough money for healthy food all month	Making time for meals	Reading the contents
1	M	No	No	No	No	No	Yes	Some
2	F	No	Yes	Yes	Yes	No data	Yes	Yes
3	F	Yes	Yes	Yes	Yes	Yes	Yes	Some
4	F	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	F	No	Yes	Yes	Sometimes	Yes	Yes	Yes
6	M	No	No data	No data	No	No	Yes	Yes
7	F	Yes	Yes	Yes	Yes	No	Yes	Yes
8	F	No	Yes	No	Yes	No	Yes	Some

As seen in table 1, all the participants tried to at least prepare dinner at home. They prefer to make all the meals from scratch and only two of the women mentioned the use of processed products from the stores, but neither one liked to use it.

(…) *In situations where I have to serve my children hot dogs from the store, I feel disgusted. I go around with a bad feeling for serving my children this and no vegetables* (Participant 7).

Sometimes I would buy processed foods like frozen pizza because it was so simple when I was in a hurry. But it was not so good because I used a lot of money and could not control what I ate (Participant 5).

Some reported to buy lunch at cafeterias or restaurants while at work, but most of the participants made meals at home and brought it for lunch. In fact, some expressed a dislike of premade meals. Their experience of what healthy food means, is that it is made from scratch.

In my country we do not have a lot of premade products. We make it all from scratch and this is healthier. It is healthier than canned food. Here you use a lot of canned food and it`s unhealthy (Participant 5).

Both the men did not like packed lunch, so they chose to buy out, even if that meant that they did not have enough money at the end of the month. The women with children would pack lunch for them daily. They felt it was important to pack another type of lunch than just bread and spread, so they would make warm dinner in the evening and pack leftovers for lunch the next day.

I am a person who does not like to bring packed lunch. Before, when I was working, I went out to a restaurant to eat. I do not like a lunchbox. I feel like it is embarrassing to carry around a lunchbox (participant 1, male).

Under plan and manage comes the component of being able to prioritize money for food. The questions in the interview focused on the ability to make a shopping list, setting a budget and plan the days to be able to prepare food at home. Enough money for healthy and cultural appropriate food all month is one important component of being food secure as well as being food literate. Several of the participants reported that they did not make a budget for food and of those most did not have enough money for food the whole month. Half of the participants reported to not have enough food for the whole month and that they had to compromise what they ate the last part of the month. This indicates a level of food insecurity for the participant as well as his/her family.

When it comes to my previous home, I followed a budget and was able to make the money last all the way until next salary, but now at my new place, my salary only last about half the month. I usually must sacrifice other things like clothing to be able to buy enough food, but this applies to food as well, I must make compromises there too. (participant 7).

Several of the women had families and they tried to make budgets to have enough food, but some had to prioritize food for the children at the end of the month.

(…) *At the end of the month I always end up buying less and less food (Participant 8).*

A female participant mentioned that a way to save money on food was to find other cheaper protein sources.

(…) *sometimes I try to buy other types of proteins instead of meet, like beans and lentils. As it is cheaper* (Participant 4).

None of the men made a budget for food and they bought what they wanted for as long as the money last. When the money began to run out the opted for cheaper items and not the items, they really wanted.

If I have more money, then I use it to buy more food. I never count the money I should use on food. What I like, I buy, if I have the money. If I do not have money, I just buy the items that are not expensive. (participant 1, male).

The male participant from the quote above did not give examples of what he had to compromise, but in another section in the interview he mentioned the quality of items and that he would buy the more expensive meats as they are leaner and healthier. And that he would eat healthy when he could afford it.

(…) *I cannot eat 100% healthy. When I can afford it, it is ok. (...) I buy meat with less fat. Like 5-10%. It is more expensive, but better* (Participant 1, male).

4.2.2 Select

Hereunder are components such as judging the quality of food and the ability to access food through several sources and being able to know the advantages and disadvantages of these. Being able to read the table of content and understand this, is another component under select.

When it comes to reading the contents of foods, several of the participants did this to a degree. The focus was to understand how much fat and sugar it contains and for the Muslim participants they also check if it is Halal. Several of them reported that the language made it difficult to understand everything written on the products. They learned a few words that they thought important and stuck to that when shopping like mentioned above, sugar, fat and/or pork.

Quality is important. Some products have lower quality and cost less whilst others of higher quality cost more. So, you can choose according to your financial status. (…) *Items with less sugar and fat. When I buy bread, I buy the whole grain and I make sure of that. With pasta I also choose the whole grain. I check the content for sugar, salt, and fat* (Participant 2).

One of the women expressed worry over the additives in foods. She is a Muslim woman and she believe that additives that start with E could be pork fat. She also was worried about added alcohol in some items, like chocolate. This would hinder her from buying items from the Norwegian grocery stores as she wanted to adhere to the religious food rules.

It is also something that scares me a little. I have heard that sometimes some of the chocolates contain alcohol. And there are certain substances that can have swine in them. For example, when I read a big E with some numbers behind, in the list of contents, some of those can have swine residue or gelatin. (Participant 8).

A couple of the participants mentioned the origin of produce as important in selection of food items at the grocery store.

(…) *There are many factors, like the price, if the food is fresh or not and sometimes ecological produce. If the item has an organic choice, I choose that* (Participant 5).

It came up that the different grocery stores targeted the rich or poor population. Quality of products was mentioned as important, and that their feelings towards good quality was that a higher price meant better quality. Some of the participants had the opinion that some different stores target the poor and the rich. Rema and Kiwi was mentioned as having poor quality because of lower prices. The store called Meny was mentioned as made for rich people. For some of the participants, higher price meant better quality.

*Some grocery stores are for the ones with limited economy whilst others are for the wealthier. What I experience with the cheaper grocery stores is that the food is not as healthy as it should be, a lot of it contains a lot of sugar and fat (*Participant 1, male).

This transcended to the different brands as well. Several grocery stores have their own brands and/or a cheaper brand in their assortments. Examples of these are first price, Rema1000 and Coop. For one of the participants, lower price meant that the products are bad and of poor quality. He would never buy these products because of the associations he had with the products.

I try not to buy any of the First Price products because I know they are old and do not keep as long. They only last 1-2 days before they spoil, and I must throw them away. I feel that you must pay more and buy a product which has a good quality. (Participant 6, male).

Other than price, the participants were able to judge the quality of food in different ways. They used the expiration date as a starting point, used smell and the look of a product to judge its quality.

When you buy meat, it is very important that it has good quality. You can see it when you open the package. If it smells weird or the color is bad than it is not good quality (Participant 6, male).

4.2.3 Prepare

Hereunder comes the ability to use common kitchen equipment, make tasty meals from whatever is available and being able to read and experiment with food recipes. Another component is to apply basic principles of safe food hygiene and handling. The last point merges with food safety.

All the participants were familiar with gas and/or coal stoves. None of them used electric stoves before they came to Norway. One mentioned the use of firewood outside to cook. The men had not used any of the equipment before, so they had to learn it all upon arrival in Norway.

I learned nothing at home. I had to learn everything by myself and from friends. Before I came to Norway, I had never cooked a meal before (Participant 1, male).

For the women they reported having little to no issue with using electric stoves. Both gas and electric stoves are used in a similar matter so changing between did not seem like an issue.

(…) *No, it was not so difficult. Even if you use gas, the ovens are the same, so it was not hard to learn* (Participant 2).

One of the female participants mentioned some difficulties adjusting to an electrical stove. She is the oldest of the participants (40 years old) and has been in Norway 3.5 years.

I was used to cooking food using gas and firewood. When I came here nothing was the same, so I had to learn it all again. It felt like everything was suddenly difficult (participant 8).

There was reports on the cheese slicer being very strange for some. A coffee maker had not been used in any of the homes before, because their type of coffee is boiled. One woman

mentioned the dish washer as being new and that she chose not to use it. Other than these examples, they all seemed capable of using common kitchen supplies and equipment.

We do not have the cheese slicer in Eritrea. When I first saw it, I just thought, what on earth is this and how do we use it (participant 2).

The coffee machines. We did not have it in Syria because Arabic coffee is usually boiled. So, I had to learn how to make the Norwegian style of coffee. Also, the dishwasher. We did not have this in Syria, but even now I choose not to use it because of the environment (Participant 4).

One woman commented that there was equipment lacking in Norway that she used in Syria for cooking.

In Syria we had several different types of pots. In Norway there is a smaller selection and not all of them are good enough for cooking. We have a special one made of iron and you lack a lot of that in Norway. (Participant 7).

The female participants reported to have extensive experience with cooking, and they felt secure of their knowledge and ability to cook when they came to Norway. They came from countries with a cultural notion of females having all responsibilities with cooking. The women felt like that gave them more security after arriving in Norway and made it easier to orient themselves in food markets and recognize food they were used to.

It is easy because in Syria it is the women who go grocery shopping, so you get used to it. (Participant 3).

They found most of the products they were used to from home in markets at Grønland, Oslo. Therefore, they could easily make good tasty meals from what was available for them here in Oslo.

There is a large selection, so many different things to choose from. Here in Oslo there are many different shops so if I do not find it in a Norwegian shop like Rema, I can just go to one of the several foreign shops (Participant 2).

For them, the language was the biggest problem, also getting used to how Norwegians shop compared to in their home country. Not going to a marked getting fresh items every day but planning and buying for several days and using the freezer.

*It is very easy to find my way (*in the shop*) but what can be difficult is that sometimes I want to buy something, but because of the language I am not able to read what it is used for or what it contains. There are new products that I want to try and use but I am not able because of the language barrier* (Participant 8).

The male participants had no pre-knowledge about cooking and grocery shopping before arriving in Norway. One of the participants explained that even if he wanted to help, he was not allowed in the kitchen.

My mom made all the food, and, in my culture, men do not cook, only the women. Even if I only take a cup of coffee, I cannot wash it, the woman must wash it. Even if I wanted to do it, it was not accepted. We men should not be close to the Kitchen (Participant 1, male)

They therefore had to learn everything after they came to Norway. Both the men who was interviewed are single and came to Norway alone. They therefore must take care of themselves for the first time. They reported having some help from the other immigrants at the refugee reception center.

I learned nothing at home. I had to learn everything by myself and from friends. I watched them cooking and watched YouTube. We lived at the reception center together and ate several meals together every day (Participant 1, male).

Both the males reported to have started working out in Norway and therefore learned their diet in this environment. Their focus was on getting enough proteins and some carbohydrates for the work out and building muscles. Easy food that does not take much time or is very complicated to prepare, seemed like what they had learned, but at the same time they had focus on a healthy diet that included what the body needs of nutrients.

When I choose food items, the first thing I look at is fat, proteins and carbohydrates. It must be less fat and more proteins. (…) *I often talk with the personal trainers at the Gym* (Participant 6).

I do not have so much knowledge, I am not good at cooking. I make some types of food and it is important for me that it is healthy. (…) *Now I work out, so I need a lot of healthy food* (Participant 1).

Of the 6 women in the study, some of them reported that they liked to experiment with new types of food and recipes. Some adjusted their recipes because of availability and some also tried to make foods they were not used to from home.

I mix different dishes from different cultures. For example, Pakistan food or Indian food mixed with bread from Eritrea. Sometimes I make Norwegian fish or another Norwegian dish and just add some other flavor and it makes a great food experience (Participant 5).

I make Norwegian salmon and other Norwegian dishes. I also make waffles. I love to learn, and you can learn a lot about culture by making different foods (Participant 3).

Under the point of hygiene and safe handling all the participants reported the importance of cleaning hands and work surface. They wash the vegetables in different ways, but they all washed them. Some soak them in saltwater and others just rinse them. A couple of the participants reported to wash the raw chicken before use, but no one talked about being careful with raw chicken even when asked if there are some food items that is important to handle careful.

For example, vegetables. I not only was them, but I soak them for 1 hour before I prepare it. I wash the rice several times before use. The chicken I soak for at least 4-5 hours to make it clean (Participant 7).

Vegetables can have bacteria and fungus, so they need to be cleaned. They also need to be boiled at high temperatures. It is important to know how to store the food. Like with rice, it has Listeria so it cannot be reheated (Participant 4).

One of the female participants went in more detail about why she feels like it is important to clean vegetables especially good.

Yes, Vegetables. You must wash it. If you are going to make salad or vegetables the next day, then you need to clean it and soak it in water and salt. Then we wash it again. There is a lot of bacteria in it so we think you can die if you do not wash it good (Participant 3).

With probe questions of bacteria most of them came back to the bacteria in vegetables not meats. Some mentioned the date of expiration, but they talked about "best before" and "last day of consumption" as the same. One of the participants showed a higher level of knowledge about food safety.

Bacteria and other microorganisms can multiply faster when it is warm. They can be contagious. Meat in general needs to be stored correctly. Not out on the kitchen counter without a cover (Participant 5).

4.2.4 Eat

Hereunder comes the understanding of diets effect on personal wellbeing and health, knowing foods to include or restrict for good health, portion sizes, and have self-awareness for the need to personally balance food intake.
All the participants displayed some understanding of the impact food has on personal wellbeing and some knowledge of different foods to restrict from the diet or foods that you should include in a healthy diet. They had a good understanding of how eating healthy would impact their health and knew several diseases associated with an unhealthy diet.

I think that when you eat healthier foods you will have more healthy days in your life. Like more good days with good health. If you eat a lot of vegetables and less of the bad fats, you have more good days and you avoid several diseases (Participant 4).

Not all knew the exact names, but they could explain the impact they had on the body. For example, calling Diabetes for sugar sickness. Not all could connect heart disease directly to trans-fat or high intake of trans fat, but in questions of general diseases they would mention heart disease.

The benefits of eating healthy is that you avoid certain diseases like, sugar sickness, high blood pressure and getting fat. When I eat unhealthily, I become fatigued. You get more energy with eating healthy. (…) *High cholesterol and one disease that I do not even know the name of in Arabic. It is when you have uneven heartbeats and you get tired with shortness of breath while moving* (Participant 7).

Some of the participants reported that healthy food in their home country was meat, because that was food for the rich, and so it was viewed as healthier. But at the same time, homegrown and organic is understood to be good for the health.

The participants showed a varying degree of awareness about balancing food intake and knowledge about foods to include and restrict in their diets.
Fiber was something they reported to have learned after they came to Norway. Several of them had started to include fiber in their diet and they had some understanding of the effect fiber has on health. It was some diversity in the amount of detailed knowledge they displayed.

When I first came to Norway, I just bought what I could find, but after a while I learned that it is important with fiber. So, now I only buy wholegrain bread that is marked with the keyhole (Participant 5).

Some said they knew dark bread was healthier than white bread, but not exactly why. Some knew that eating grains and dark bread could help their digestion and others had a more in depth understanding of the importance of fiber.

It affects the digestion. If you eat a lot of fiber it will make your digestion better. You do not get constipated nor other issues with digestion. You also do not feel as hungry if you eat more fiber (Participant 5).

I do not have as much experience or knowledge about that, but I know that dark bread is healthier than white bread and that white bread makes you thicker (Participant 1, male).

All the participants were aware of sugar and to restrict sugar from the diet. In fact, most of them checked the table of contents on food items to make sure there is no sugar.

It is smart to eat food with a low content of sugar, fat, and salt. You need to eat more fruit and vegetables and less sugar (Participant 2).

When talking about the selection of products with added sugar in the grocery stores, one of the participants mentioned the placement of those items. The issue with nudging, where they place small and sweet products by the cash register to nudge or tempt people onto buying them.

When you come to the register there is a lot of chocolate. This is the same as in Syria, and I think it is the same system in all grocery store. They place the chocolates and products with a lot of sugar next to the register. I think it is because of money (Participant 3).

All the participants knew that vegetables and fruits are healthy and that they need to include those in their daily diet. Some knew details about vitamins, minerals, and fiber, and some knew about portion sizes.

It is the healthiest thing for the body. Even if you eat a lot of it, it will not affect the body. It has all you need of iron and vitamins (Participant 8).

It has vitamins and minerals and fruits have sugar, so those you do not need to eat as often as vegetables. You should eat 5 portions every day, 3 of those needs to be vegetables and 2 can be fruit. They contain water and vitamin C. there are more vitamins in them but mostly Vitamin C (Participant 5).

The knowledge about fat was also varying. For some it was mainly that eating a lot of fat would make you fat, whilst others knew there are healthy and unhealthy fats. A couple of the

participants had knowledge about details surrounding the effects of fat in the body and mentioned LDL.

We have LDL and this is not good. We have good and bad cholesterol and the good cholesterol is good for your health. You can get this if you use olive oil and vegetal oil. And then you have the bad fat that you get in meats (Participant 4).

There is good fat in nuts. I do not remember everything, but I know about nuts. Unhealthy fat is mor from meat. You should not eat too much because you get fat. I do not really know it is difficult to remember all if you do not read a lot (Participant 6).

Some of their traditional food is high on trans-fat, but they seemed aware of this and that they should exchange it for vegetal fats.

The Arabic butter is very potent. When I ate it in Norway, I became very sick. It became better for my heart when I exchanged this with oils (Participant 3).

Eating healthy and making time for cooking was important for all the participants. Several of them had no interest in healthy eating from their home country, the most important thing was to have food that satisfied their preferences. Healthy eating changed for them when they came to Norway. The participants reported that this was due to the high exposure of information about healthy food and they felt that exercise is very important in Norway.

(…) *I feel like I eat healthier in Norway because there is a lot of fatty foods in Syria, and a lot of sugar. When I came to Norway, I got an epiphany around this and have stopped to eat as much of the unhealthy foods as I did before. You kind of get forced to change when you come here* (Participant 8).

One of the female participants had issues with digestion and had been told by her doctor to eat more fiber. She felt and knew the effect on her body, and she could feel that she had difficulties going to the bathroom when she only ate white bread and that this problem resolved itself when eating fiber.

(…) *I tried to stop eating bread from Syria and exchange it for Norwegian bread with avocado. I also ate oats. I tried for about 10 days, but it is not so good. It is boring to eat the same every day. So, I prefer to eat Syrian food. Sometimes I try, but it is hard.*

Because she preferred the taste of white naan bread, she chose not to eat the fiber and therefore had a lot of pain and issues with digestion.

(…) *When I struggle with my intestines and I am not able to go to the bathroom, I become so tired and sick. I cannot get out of bed, but then I eat oats and then it gets better after a while (*Participant 3).

Several of the participants had good knowledge about healthy diets and what not to eat, but they still reported to eat it because of their tradition and food preference. The women showed good knowledge of traditional foods but little knowledge about Norwegian foods. They had more problems with the language and how to read the contents or recipes. They felt more comfortable preparing foods from their home country because they grew up with this food and they are used to preparing and eating those kinds of dishes. Because of religion, for the Muslim participants it was important to make halal food and to feel safe about the things they made being halal. Traditional foods mentioned was Injera from Eritrea, which is a fermented bread made with TEFF flour and spicy lamb meat stew. Participants from Syria mentioned especially Kibbeh, Shawarma and Tabbouleh. Shawarma is a type of kebab. Kibbeh is a fried meatball with bulgur flour and onions. Tabbouleh is a spicy type of salad with bulgur.

I do not really think about if the food is healthy or not. You know when you have traditions that is the type of food you make. I learned it from my mother, who learned it from her mother, therefore I make it. The most common thing is to make traditional foods, not thinking about if it is healthy or not. Here in Norway it seems like people are more interested in healthy food (Participant 3).

First and foremost, comes religion. What is halal or haram. What my family wants to eat and what they are comfortable with. Like, I am not going to buy something and use a lot of time preparing it and then having to throw it away after. It is very important that my family likes what I prepare (Participant 7).

Participant number 3 had some views on food and health that separated itself immensely from the rest of the group. Two examples that stood out are the following,

In Syria we have this thing where we cannot drink milk on the same day as we eat fish. We believe that it is dangerous, and you would end up in the hospital. Yes, it is dangerous. You cannot mix milk and fish (Participant 3).

Vegetables, you must wash them. If you are going to prepare salad or vegetables the day after you wash it and put it in saltwater. Then you clean it again. There are a lot of bacteria in it and we believe that you will die if we do not clean it well enough (participant 3).

4.3 Experience with Meeting Place

Attendance varied a lot between the participants. Low attendance, tardiness and low focus was some tendencies seen during observation. All participant felt positively about the Meeting place as an arena to learn more about health and nutrition.

I think that it was a good idea because we can learn a lot and us immigrants need guidance about everything, not just the system and politics, but how to eat in Norway. It is so different from other countries, so we need to eat what is necessary for living in Norway. It is important to teach us immigrants about the diet and lifestyle here in Norway. How to prepare the food and how to eat since this can be a challenge for many. We do not know where to find the foods we are used to, or we do not know how to prepare Norwegian food. There are many challenges we experience while being new in the country, so it is very important to have a place like the Meeting place (Participant 5).

Some felt like they learned new and important things at the course, while others felt like it was repetition of knowledge they already had. One participant mentioned that she felt she had previous knowledge, but that attending the course had upgraded her understanding of healthy food.

After attending the course, I feel like I have upgraded my knowledge more (participant 7).

Yes, yes of course (question: if participant felt like she learned something new at the course). *Because we were from different backgrounds, we learned something new from each other every time we spoke together. I learned about the others culture and I learned about Norwegian culture. I learned from people who are knowledgeable in diet and nutrition. So, we learned from each other, I learned a lot* (Participant 5).

Yes, and repetition is always good. So, even if I know something it is always good to have it repeated to remember it (participant 4).

Some had thoughts about how it could be improved. how to increase attendance and more themes they would find useful at the course. Learning more about the Norwegian culture, food and how to meet and get to know Norwegians, seemed to be a reoccurring request from several of the participants. How to integrate in the society, how to raise the children right according to Norwegian law and social services guidelines. They expressed a wish to be more fluent in Norwegian, and that integrating more in the society would help them with this.

I think that it is a good idea, but it is a new thing and it is not easy to get people from our culture to come voluntarily (Participant 4).
Language is one part and maybe something more about Norwegians. How to treat and communicate with Norwegians. About Norwegian culture. It is important. If you do not know anything about the culture it can be very difficult to get into the system and get integrated. Learn more about activities and lifestyle. How to plan day to day life, how to be integrated, how the system work in Norway. For example, how the educational system work or what you can do to get help from the system (Participant 5).

During observation it was noted that some of the women, most of who wore hijab, would stand in the background, and not participate when the men where speaking. During interviews it was mentioned by some of the women that they felt uncomfortable with the men present at the course.

I think that they could have a course for women, only for women, where we could talk about healthy diets and about physical activity. Having more courses would be advantageous for the women I encounter, because when we are done with school or work, we go straight home. So, the Norwegian we learn are not being practiced. If you have more courses, we will be encouraged to use our knowledge and therefore it will indirectly be catching two birds with one stone (Participant 7).

Other important inputs about themes to have at a course was mental health, transmittable diseases that immigrants could contract on their journey to Norway. Preparing food and eating together, especially Norwegian food.

For example, mental health. People need to learn more about mental health in addition to learning more about diet and nutrition. I think that about 90% of the immigrants coming to Norway has some mental health problems due to war, or loneliness and the weather. It is important that someone talks about mental health. I think that would help a lot (Participant 1).

4.4 Participant observation

The attendance varied from each week and few attended all classes for the entire 8 weeks. Participants demonstrated low Norwegian understanding, and some had problems following the presentations. The researcher got questions after presentations from the participants asking what had been said and asked about specific information they had not understood. When more practical teaching was done it seemed like the participants were more interested and

participated in a larger degree than during the theoretical presentations. In those cases, the men stood in the front and talked, while the women kept in the back. When there were questions in the class some women were very quiet and stood in the back quietly and whispered together. The researcher noticed that they would ask what had been said, as the men's talking would make it hard to hear all the way in the back.
While the theoretical presentations were given, the men tended to group together in the back and talk a lot amongst themselves.

Some of the presentations seemed difficult in a way that the presenters talked fast and at times even the researcher had to pay close attention to get all the information given.

The men brought their wives to the final day of class, but during the entire course they had to stay home with the children.

5 Discussion

The aim of the study was to explore the food literacy among a group of newly resettled immigrants in Oslo and their experiences with a food and health course.

Participants in the study seemed to have familiarity with some basic principles related to food preparation and nutrition and some showed a deeper knowledge. Several of the participants showed some knowledge of the effects a healthy diet has on personal wellbeing but for most cases, tradition and religion was more important than eating healthy.

The data suggested some tendencies towards food insecurity in parts of the month, as participants struggled with economy and the managing of a budget. Participants reported an increase in their knowledge about a healthy life after moving to Norway because of the high focus on health and exercise in media and among the population. They reported as well to have increased their food literacy after arriving in Norway and after participating at the Meeting Place. They felt like a food and health course was a good arena to learn more about heathy food and other health aspects, like mental health and integration. At the same time, it could have been more culturally acceptable with focus on their traditional foods and how to adjust those to be more in par with the health and nutrition recommendations. Some participants wished for information about integration and how to make Norwegian food as well as more help with mental health issues.

5.1 Discussion of results

The study wanted to explore the Food Literacy among this group. The results indicate that the participants in this study have a relatively good food literacy. This study does not measure food literacy but wanted to understand if the participants had some notions related to the "interrelated knowledge, skills and behaviours needed to plan, manage, select, prepare and eat food to meet nutrition recommendations" (Truman & Elliot, 2018, p. 107). All the participants seemed to have an understanding about food having an impact on personal wellbeing. Several of them had a more in depth understanding of effects in the body like the difference between healthy and unhealthy cholesterol. The results from Vidgen & Gallego's study indicate that an overall understanding of the foods effect on health is more important than detailed knowledge (Vidgen & Gallegos, 2014). All participants in my study seemed to have a lot of knowledge. What could affect their overall food literacy was their motivation and willingness to make those adjustments in diet to make it healthier. Studies show that there are more aspects to food

literacy than just knowledge. There needs to be positive intentions and a personal motivation to make positive changes in diet (Block et al., 2011; Hyman & Guruge, 2002). In addition to structural aspects that makes it possible to make healthy choices (Vidgen & Gallegos, 2014)

According to a review by Osei-Kwasi et al. (2016) There are several factors that influence the immigrant's food choices, among these are tradition and religion. This emerged clearly in the study when some participants chose to eat their traditional food even though they knew it could have negative health effects, as in the case of the woman who did not want to eat whole grain bread. So even if the participants in this study had an understanding about this component, adopting a healthier diet was difficult and the findings from this study may suggest that religion and tradition is more important than healthy eating.

The other components that the participants showed a good understanding was the ones under Prepare. Making time for and preparing food at home seemed natural for all the participants. Some of the participants even mentioned to cook late at night to have a meal ready for the next day. There was a difference between the men and women, where the women could cook traditional food and had more experience with cooking, whereas the men could only cook simpler meals and not their traditional dishes. The Participants did not report any issues with using basic kitchen equipment, this is important as Vidgen and Gallegos mentioned that food literacy includes the ability to adapt to the local food environment, this includes using the kitchen equipment found in Norway (Vidgen & Gallegos, 2014). None of the participants had electric stoves at home but adapted quickly after arriving here. A study done in Norway found that that the availability of familiar foods has increased the later years and therefore making it easier for immigrants to keep their traditional diets (Terragni, Garnweidner, Pettersen, & Mosdol, 2014). This corresponds with the findings in this study as the participants could find all the food items that they needed to make traditional foods that they are confident and skilled at making.

The participants also exhibited knowledge about the Select components. The selection of healthy food items and choosing between homemade and fast food or prepared and processed foods is another core component of food literacy. The skill to read and understand food labels and understand where food comes from emerges as important (Vidgen & Gallegos, 2014). They show an understanding of home cooked versus processed and understand that what is in the food decides its healthiness. The participants in the study did not eat a lot of processed foods or fast food. Some mentioned that they would buy processed foods while new to Norway due to barriers such as language and not knowing where to go and what to buy.

Learning to read the labels seemed like it made the selection process easier for the participants and they could start choosing items based on more knowledge than before. A study mentions that understanding the content of food goes beyond knowledge, it can provide motivation and confidence in cooking healthy meals. One important component of food literacy is the ability and motivation to prepare and eat healthy (Block et al., 2011). The above-mentioned skills could provide motivation for healthy cooking and improve immigrant's health.

5.1.1 Food Security

An important finding from this study is the connection between food literacy and food security. Being able to plan food intake and manage the economy to have enough healthy food all month is an essential part of food literacy. There are studies that found an association between food literacy and food insecurity (Begley et al., 2019). This seems to correspond with the finding from this study, where some of the participants reported to not have enough money for food at the end of the month. Plan and manage is important to keep track of the economy and most of those who did not have enough money all month reported to not make a budget nor plan food purchases. Some had low incomes and large families whilst others simply did not know how to plan and manage properly. This indicates that good knowledge about the connection between food and health is not enough if they do not have the skills to plan and manage their economy and food intake (Begley et al., 2019).
Food security is a complex and multidimensional phenomenon where a household can experience episodic food insecurity. Participants in this study are not without healthy and enough food all month, but at the end of the month they must compromise what they buy and how much (Henjum, Morseth, Arnold, Mauno, & Terragni, 2019).

The women who reported to have a low income said they would prioritize having enough food for the children to eat and would rather reduce their own consumption at those periods where money was scarce. This was also found in another study, where the parents would severely reduce their own food intake to protect their children's health (Power, Small, Doherty, & Pickett, 2018). This could make the immigrant women more vulnerable to the effects of food insecurity and affect their health and wellbeing.

High level of food literacy in the sense they are able to budget for food is a skill that could provide a buffer for the participants as their circumstances change, as also indicated in another qualitative study done in Melbourne, Australia (Kleve, Booth, Davidson, & Palermo, 2018).

5.1.2 Shame

Another important finding of this study is the feeling of shame and its possible implication for healthy diets. During the interviews, a few interesting themes emerged that was not initially a part of the research questions.

The word embarrassing or "shame" was used in several occasions by the participants. About bringing packed lunch to work and school by one of the male participants. Both male participants talked about first price products, cheaper products, and grocery stores with lower prices as products for the poor, and bad quality. They did not buy these items and rather used more money on expensive products that they viewed as better quality. Spending money they do not have on products that exist in cheaper options could contribute to food insecurity in this group and it was interesting to see in literature that food shame is a thing and that it in fact could impact their economic situation negatively. Research have shown that food insecure households would sometimes reduce the quality or quantity of food purchased (Pfeiffer, Ritter, & Hirseland, 2011). As some males stated during interviews, they would rather spend more money on eating lunch at the cafeteria while at work or school and reduce the amount of food at the end of the month when the money ran out.

Whilst the article by Power et al., address the stigmatization and shame associated with food aid programs, it can also help to understand why the participants in this study would rather reduce quantity of food than go on accord with the perceived quality of the food (Power et al., 2018). As the word "embarrassed" was used towards cheaper products, it seems like there are some shame directed towards bringing lunch and buying cheap food.

There is a study that mentions that being able to provide for yourself and your family brings a feeling of empowerment and having to rely on food aid could damage the self-esteem (Horst, Pascucci, & Bol, 2014). Not being able to buy the products you want or eat out like your colleagues, could be yet another thing that place the immigrants on the outside of society. It could contribute to enhance those feelings of being an outsider. The view they have on cheaper product brands and even the grocery store itself impacts their selection of food and enhance the feeling of shame associated with buying these items.

There are some cultural differences in how societies tackle poverty and/or food insecurity. In Muslim countries they have Zakat (compulsory almsgiving for Muslims). This is a type of welfare system in Muslim countries. The money collected goes to charitable programs in associated with the Mosques as well as funding towards individual Muslim households (Dean

& Khan, 1997). Many of the participants are Muslim and have that possibility if necessary, but if they take advantage of this system or not here in Norway was not addressed during the interviews. The participants are from cultures where not only Zakat is normal, but also social welfare where their families, extended families and even neighbors help with food and teach food skills. Especially during festivities like Eid and Ramadan. The families provide emotional support and help with childcare (Power et al., 2018). As the participants came to Norway without extended family, only the core family with children and husbands, or alone like the males. They do no longer have that support and it can be hard to go outside the home and show or admit that they struggle with money and food. The gift of food is seen as a blessing in Islam. There is no shame in accepting as the givers do not ask if the receiver needs it, it is given without prompting as instructed in the Quran (Power et al., 2018). But, accepting food in another context can be associated with feelings of shame. For immigrants moving to Europe where this is not a custom, it could be difficult to adjust to our ways of welfare where they actually have to ask for help or as is the theme in this study, buying cheaper products and not feeling shame around bringing packed lunch.

As addressed in the former mentioned study, it is not clear exactly why it is so shameful to accept charity in the form of food aid (Power et al., 2018). The same for the issue found amongst the participants in this study, it is not sure why they have adopted those feelings towards some grocery stores, and this could be an interesting theme to further study.

5.1.3 Gender differences

Gender emerged as an important aspect in our study. As women traditionally have overseen feeding and caring for the family, they often choose differently than the men when it comes to food. For the women it is about caring for the family and they tend to choose healthier than men. As shown in a study, the ability to feed the family and guests is linked to the self-esteem of the women and it keeps the families honour. Therefore, the inability to provide for the family can be shameful for the women/mothers (Power et al., 2018). The female participants would mention their children's and husband's food preferences when talking about what influenced their food choices. It was not so important how she felt or what she preferred; her main concern was the family. In fact, the researcher had to specify, often more than once, that it was her preferences and feelings that would be interesting to learn about. They would sometimes mention what they liked, but it all linked back to feeding and caring for the family, as it gave them joy.

For the male participants, the focus was different. It was about fuelling the body for workouts and building muscles. When talking about food labels, they chose foods higher in protein and low in fat. A study about men and food talks about how food is mainly a source of energy for men whilst for women it is more about health and taste (Roos, Prattala, & Koski, 2001).

The gender differences in health choices is complex and could have many reasons like biological or cultural (Roos et al., 2001). For the participants in this study it seems like it is the cultural aspects that is determinant for food choices. The women report to have the main responsibility for cooking and purchase and strong feelings towards traditional cooking, as this is what they have done with their mothers before immigrating to Norway. The male participants did not have this connection to cooking and had no experience with cooking before coming to Norway. The men start with a clean slate and therefore seem to adjust to the local food culture and habits. A diet acculturation seems to have happened for the male participants but not so much for the women.

The difference in food practises seem to reflect male and female identity and relationships with family and each other. Culturally cooking is a woman's job (Roos et al., 2001). Therefore, it is important to address this gender differences while conducting food and health courses or in other forums teaching immigrants about food and health. The perception of cooking and caring for the family as a job for the women, seemed to be instilled in all the participants in the study. A few of the husbands would help with purchase or cooking but while talking to the participants it was clear that first and foremost it was her job, not his.

5.1.4 Possible barriers to Food Literacy

Immigration is not always simple. Immigrants must leave their home behind and travel to an unknown country, new customs, and a strange language. They might come from war, poverty, or other situations. After they come to Norway, they face many difficulties such as language, culture, and integration issues. Other studies like the one from Martinez et al., (2013) find the same barriers and in addition mentions that it is important to find culturally acceptable methods of teaching food and health, as is also addressed in a study by (Mannion et al., 2014). Both the studies mentioned above found that there are knowledge barriers to receiving diet information. The participants mentioned having little to no interest or knowledge about healthy diet before arriving in Norway. It seemed less important and the focus was having food at all.

Having something familiar could be soothing in a new and strange country. It seems like the participants in this study searched for familiar foods, so most of them would still cook very traditional, and especially made sure it would fit the diet rules of Islam. Culture and religion have been identified as barriers towards adapting a healthier diet (Martinez et al., 2013). That seem like the case of the participants in our study as well. The participants that reported eating Norwegian foods mentioned fish as the product of choice. They also tried making homemade lunch with fruit, vegetables, and whole grain bread with spreads. It could indicate that they are able to and willing to adapt some healthy food changes in their new country and that diet acculturation in this instance does not lead to negative health effects. Other studies have similar findings (Satia-Abouta, Patterson, Neuhouser, & Elder, 2002).

This fits with the findings of Truman and Elliot who highlighted the importance of external factors on the food literacy proficiency (Truman & Elliot, 2018). Attitude towards food, behaviours and knowledge about food all play a part in the food literacy level of a person or a group. Cabana et al., (1999) argue that external factors would play an important part in the ability to perform the recommended behaviour. Therefore, it is not sufficient to only provide information about a healthy diet for gaining knowledge, but to address those external factors like tradition, religion, and language. Further, it is important to understand that those are possible barriers for immigrants to adapt a healthier diet.

Lack of integration among the women in the study was an issue they themselves addresses as a barrier for adapting a healthier diet. They did not feel comfortable in the Norwegian food scene and did not know how to prepare and eat Norwegian foods.

Economy is a barrier for many of the participants and immigrants are known to have low income (Foley & Pollard, 1998). Lack of money is among other components that are mentioned as a barrier to a healthy diet in other studies (Hadley, Zodhiates, & Sellen, 2007; Terragni et al., 2014). Immigrants are very often part of a low socioeconomic group (Kjøllestad et al., 2019). All the participants mentioned low income, struggles with money of some sort, and would therefore indicate that the findings are like those other studies. Buying cheaper items from brands like first price could be another reminder that they are somewhat outside society and enforce a feeling of shame around financial struggles. In other countries, meat is usually very expensive and something for rich people. Some of the participants mentioned this in the interviews. That meat is considered high quality because of the status it had in their home countries.

5.1.5 Experiences with The Meeting Place

In the review done by Hyman & Guruge (2002), they mention that newly resettled immigrants are a diverse group with substantial variations in culture, traditions, language capabilities and food culture. Therefore, improving their food literacy is challenging as it cannot be a one size fits all when it comes to nutrition programs.

From the participants perspective, The Meeting place was positive. Some learned new things others got to repeat knowledge they had already. The social aspect of the course seemed the most appealing for the participants. As observed by signatory throughout the course, they socialized first and foremost. The theoretical aspect came in the shade of this. Participants mentioned the wish and need for a more practical take on the course. A health and nutrition course could help to enhance immigrant's motivation and confidence in cooking and adjusting their food habits to increase healthiness in diets (Barbala et al., 2019). There was self-reported increase in knowledge after the meeting place, but they wished for more practical knowledge to learn how to make Norwegian dishes and grow even more confident in healthy cooking.

Whilst some participants felt like the information was too elementary or repetitive, others felt like it was difficult to understand the presentations because of the language. There are some studies where they have had limited success because of language issues like the one from (Mannion et al., 2014). This was noticed during observation. Presenters tended to talk like they would to someone with higher Norwegian skills. Some participants really tried to pay attention, others lost focus early on and talked with each other instead. There were participants with higher language skills that would translate for those who spoke their original language. That could disturb those around who tried to listen to the presenter. Like in the study done by Barbala et al., (2019), future cooking classes, or even theoretical classes need to be language appropriate. The Healthy start, which was the foundation for the Meeting place focused on the content being simplified and adjusted to fit the participants general skills, language, and food culture (Terragni et al., 2018). This could have been done better in preparing content for the Meeting place as well.

From some of the cultures immigrants come from, it is normal that women are quieter when there are men there. It showed during the observations and some women mentioned it during interviews that it would be better to divide the course in women and men. Literature talks about the cultural differences between immigrants and how that could be challenging (Pedersen et al., 2013). There were some wishes to make it mandatory because when it was

voluntary, the women were kept home to tend the family whilst the men went to socialize at the course. Some mentioned that in their culture it was difficult to get people to attend voluntary courses. Other studies also look at the need for more culturally sensitive health and nutrition courses (Terragni et al., 2018).

Studies has shown that it can be easier for immigrant women to learn about nutrition and diet from women of the same or similar culture and who speaks her language (Mannion et al., 2014). There is already a project running that could be expanded to make the health and nutrition course culturally acceptable and therefore more effective. This project is called District moms (Bydelsmor, 2019). This are immigrant women who help and support newly resettled immigrant women. They already function as a link between the women and public authorities and could therefore, possibly be extended into health and nutrition education programs for minority women (Skogheim, Holm-Hansen, & Nygaard, 2019). The district moms could go through a course both practical and theoretical to learn how to make traditional foods healthier, how to make some Norwegian dishes and about nutrition. These moms can be used as teachers and helpers to reach out to the immigrant women of Oslo in a way that feels safe and comfortable for them. The study mentioned above by Mannion et al (2014) found that nutrition education programs are more effective when given in a safe environment for all immigrants, also men. Therefore, the program could possibly be extended to single men who come to Norway by using district dads. Using the same concept as with the district moms.

The male participants had no experience in cooking before coming to Norway. They learned how to from other refugees at the reception centre. A cooking class for asylum seekers has showed to be positive for them as this helps them immediately when they arrive, instead of having to wait up to 4-5 years, as some of the participants in this study had to. A study done by Barbala et al., (2019) in Norway supports the importance of offering cooking classes early on (Barbala et al., 2019).

Immigrants has a different meal pattern and traditions surrounding meals than Norwegians. They often have fewer meals, but large meals that take long to prepare, and they use more time on the meals. Mealtimes gather the family and is an important social function (Pedersen et al., 2013). The participants in the study came from countries where the above is important. They mention Norwegian meals as being lonely and that “they eat alone”. They miss the social aspect of meals and some reported that having a place to go and be social as well as learning about nutrition could be beneficial. They enjoyed the social aspect of The Meeting

place course. These aspects could be addressed with a practical cooking class. More social, more learning and less sitting still watching a presentation in a language they do not master completely. In the study of a participant cooking class published by Barbala et al., they had positive results regarding participants motivation and increased cooking skills (Barbala et al., 2019).

At the Meeting place it was mostly Norwegian foods and dishes that was addressed while talking about healthy foods. As mentioned in Caplan (1997), food is an important part of the participants identity and is so much more than just nutrition. Not even mentioning their traditional foods in context with healthy could be counterproductive. Trying to find ways of including healthy options in their traditional meals should be a focus. For example, making Naan bread with whole grains. Another study addresses the importance of food for immigrants who are often separated from all things familiar, that meals they are used to can be of comfort in a challenging situation (Harbottle, 2004). A key point mentioned under food literacy was that tradition and religion seemed more important than eating healthy. This could be a symptom of the what the article above talks about, with familiar foods being a comfort in a mentally challenging situation like immigration can be (Harbottle, 2004).

Culturally and religiously acceptable health and nutrition courses are necessary. Cooking classes with interactive learning could be effective. It is important to incorporate their traditional foods instead of tackling the courses with only Norwegian eyes. Meals can be altered to improve the nutritional value whilst adhering to their preferences. This could motivate them to make more healthy foods and to feel like the courses acknowledge their feelings towards foods and accommodate it. In both two separate studies done in Norway, they talk about how culture and traditions are strong among immigrant groups (Terragni et al., 2018; Terragni et al., 2014). The information is not new or strange, so it should be addressed while designing nutrition courses.

To further improve the quality of a food and health course, it seems like economy and budgeting could be an important issue to address. If a food and health course talk about products and quality and explain why these items are cheaper it could help their food security. Other studies have also found indications of bad economy and that this could affect the way they eat. It felt challenging for them to eat healthy because of the prices of products. This is found in other studies like (Barbala et al., 2019; Tiedje et al., 2014). There are studies done on cooking classes on a budget (Foley & Pollard, 1998). They report good results and a change

in eating behaviour towards diets with less fat and sugar when the course is adjusted to those of low-income groups (Foley & Pollard, 1998).

Food things in Norway is expensive, and the participants struggle with this. At the same time, they have a view of food that is very different from Norwegians. In their countries there are separate markets for the rich and poor. The more food costs the better quality it has. They have brought this to Norway, and they have negative feelings towards products made cheaper than others. They immediately thing these shops and those items are for the poor and they do not want to buy them. They prefer Meny because they feel this is a shop for the rich and therefore the quality is better. The cultural view of quality products could impact their economy negatively and contribute to food insecurity as they spend more on products than thy should and could. How to make a budget and recipes on a budget should be a part of food and health courses. It is not productive to only tell them what to eat but also how. Studies has shown that promotion of healthy diets should include more than the relationship between food and health (Lawrence & Barker, 2009).

The participants view and feelings towards nutrition and health courses is important for being able to figure out how this can be improved for the courses to contribute to a positive health related outcome. Future courses can assist in increasing immigrant's food literacy and tackle the external factors causing immigrants in Norway to be vulnerable to NCCDs, and to increase their own feelings of wellbeing.

5.2 Method Discussion

The aim of the study was to explore the participants level of food literacy and their experiences with participating in the course held at the Meeting place. A qualitative method is suitable for understanding the persons own experiences and understanding of the topics and themes of the study. The phenomenological-hermeneutic research approach makes it possible to, not only understand the participants subjective experiences and how they understand their surroundings, but it also gives the possibility to interpret the participants actions and experiences (Thagaard, 2013). For this study, it gave the researcher the possibility to understand how the Meeting place worked for the participants and a possibility to interpret their abilities to receive food and health information and try to understand their food literacy. Method discussion is about considering the reliability and validity of this study. While reliability refers to the stability of the findings, validity represents the truthfulness of the findings. In qualitative research, reliability is satisfied by making the research process transparent (Silverman, 2014). In the next section comes detailed information about how the field work has been conducted. Elements to evaluate the reliability of the study will be provided followed by considerations related to validity.

5.2.1 Semi-structured interviews

Qualitative interviews were chosen as the main method of data collection for this study. This was done because there was a need for some structure and to make sure all the themes was remembered. But it was desirable to have the participants talk freely and even have the possibility to bring new themes up that the researcher had not thought of beforehand. The participants talked freely, and the data became rich, but if analysis method had been chosen before interview guide was done, the interviews might have been less structured as mentioned in the article by (Biggerstaff & Thompson, 2008).
Positive aspects of choosing qualitative interviews are that this is knowledge producing process where the researcher and the participants produce knowledge together during the interviews (Kvale et al., 2015). During the interviews there where new and interesting insight that came from the participants that improved the quality of the results and gave a broader understanding of the difficulties and feelings the participants had towards food and health.

The in-depth study was conducted at an office at the researcher's workplace. With the quality of the recordings in mind, a room with no outside noise was chosen. One interview was conducted in the home of the participants as she was unwell. The latter interview faced some

problems with both noise from the road and language barriers as the participant did not feel comfortable having an interpreter present. Because of the semi-formal feel of the interview room, the researcher made efforts to make the participants feel relaxed before conducting the interviews. The office seemed like the best setting for the interviews. It was good acoustic, which enhanced the quality of the soundtracks and made transcription easier.

The participants in this study was immigrants with a permanent residency in Norway. They had that security of residency, but they can still be classified as a vulnerable group. Barriers like language and culture has kept them from integrating fully, even those who have stayed five years in Norway. They disclosed feelings of insecurity. Some had trauma during the journey to Norway. They spoke of psychological issues and difficulties in integrating and becoming a part of the Norwegian society. It is extra important to be culturally sensitive in meeting with this group and to allow them some room to talk about these feelings even though not all are relevant for the study. This is an important part of ensuring sensitivity to context which is one of Yardley's four criteria for assessing the quality of the research (Jonathan A. Smith & Osborn, 2009). The sensitivity to context is important to keep in mind during the collection of data where the researcher should be attentive during interviews, show empathy and make sure the participants are comfortable during the whole process (Jonathan A. Smith & Osborn, 2009). The researcher did pay close attention to the participants and stopped the interviews in a couple of instances to reassure the participant that the information they gave was good and that they did not have to know all the questions. The researcher also made sure to thank them and tell them how appreciative I was for their assistance. The good relation gained before the interviews was experienced as valuable. It felt like they gave a lot of information and that they willingly and easily gave personal information about themselves and their experiences.

My own cultural knowledge about this group of participants and long experience in working with immigrants from different parts, as well as living abroad in other countries, might have given me a better opportunity to connect with them and understand the information given both verbally and non-verbally.

Several of the participants expressed worry about not being able to answer questions in the interviews, and worried about being able to help with the study. This could be a result of the close connection gained between the researcher and the participants during the participation days. The active role of the researcher during the course could have influenced some of the answers about the Meeting place as the participants possibly thought me a part of the

organizing and the running of the course and therefore did not want to disappoint me with negative thoughts about the course. On the positive side, the connection I was able to make during the course seemed valuable in interacting with them during interviews. It could also help with strengthening the quality of the study. Commitment and rigor is another of Yardley's criteria and is about showing attentiveness to the participants during the data collection (Jonathan A. Smith & Osborn, 2009).

Despite the language being a barrier for a fluent conversation in many interviews, they tried to speak with me directly and tried as much as they could to answer and listen to questions in Norwegian. It was important to stay attentive to what the participants said even when they spoke in their language. Asking the questions towards them and not the interpreter and give them a chance to answer what they could in Norwegian before the interpreter translated. It is important to show respect for the interviewee and it gave the researcher the chance to read the non-verbal reactions in order to see if they felt comfortable or confused (Dahlgren, Emmelin, & Winkvist, 2007). When non-verbal cues to discomfort was shown, researcher paused the interview to reassure them and further explain the question if needed.

As the researcher is inexperienced, and this may have had an impact on the quality of the interviews. Different issues arose during the interviews, but also a greater understanding of what worked and not. Some of the questions got removed during interviews. With the translation, several of the questions became the same as the translator did not fully understand the subtle differences and in-depth questioning. More test interviews could have raised the quality of the interview guide, and some of the question that were too similar could have been identified and changed.

5.2.2 The use of Interpreter

The interviews were conducted with the use of an interpreter and/or google translate and speaking in English. It was very challenging, and it felt like the conversation did not go as smooth as it would have if interviewer and participant shared a common language fluently. There were some challenges like, sometimes there were long conversations between the interpreter and participant whilst the content translated to the researcher was short. At times it felt like it was a conversation between interpreter and participant, and that the researcher was excluded in some part. Keeping all that focus on them to search for clues disturbed the flow of the conversation and researcher did have some discomfort and sometimes forgot to ask good follow up questions which could have further enriched the data and bettered the quality of the

results. At times it did not feel natural to probe after a long conversation with laughter and jokes between interpreter and participant.

When planning out the study there was no intentions of using an interpreter. The participants that was joining the course were said to speak Norwegian at level B2 and thus no issues would arise in interviewing them alone. During the observations at the food and health course the researcher engaged in conversations with many participants. During this time, it became clear that their level of speaking was below what was needed to conduct interviews with no language barriers. An attempt was made to find participants with the highest levels of Norwegian. During the first two interviews without interpreter, it became clearer that one was needed. As there was no time nor money to employ a professional interpreter, the researcher asked two friends whose mother tongue is Arabic and Persian. They would help with those struggling most with language. The conversations did not flow naturally because it needed to go through interpretation. It made it difficult to probe and follow up statements. At times, the interpreters would explain the questions too much and at one point one of the participants answered "well as he said…" pointing to the interpreter. It was frustrating and affected the quality of the interviews.

Problems with the use of interpreters in interview situations has been addressed by (Kapborga & Bertero, 2002). They mention the fact that the researcher does not know if the interpreter has modified the response or the question. This can be a threat to the validity of the data. Further they explain that the interpreter should not only have the language capabilities required but also some training in the field of which is being studied (Kapborga & Bertero, 2002). The researcher tried to limit these effects by going through the themes and interview guide with the interpreter beforehand, and explain that they needed to be careful with not leading the participants in the direction of an answer even if the interpreter had his own answer to the question. During interviews it was a few instances where the researcher discreetly needed to shake the head to the interpreter to signal them to stop over explaining. This is another threat to the validity as the researcher cannot know how the interpreter has perceived the question (Kapborga & Bertero, 2002).

5.2.3 Selection

10 participants were recruited for the study, but 2 of them withdrew before the interviews had begun. Only 8 completed the interviews. How many who participated in the course, or how many who completed it is not known for the researcher. As the course was voluntary there was a big variation in who showed up each week, how long they would stay and for how many sessions they participated. This gives some uncertainty of the quality of the study. It made it difficult to recruit participants and, in the end, there were 2 women who did not participate at the course, but they were the wives of some who did and had gotten the notes from the course. The did have god insight and information, but for the Meeting place they could only speak based on notes and information given by their husbands. All the above could weaken the studies quality and validity.
It was challenging to manage the time for the interviews since it had to work for 3 different people. Therefore, 8 interviews took almost 6 months to complete. This could have affected the validity of the results, as the participants interviewed right after the end of the course might remember more than those interviewed 6 months later.

There is no golden standard for the number of interviews needed in a qualitative study. It could be as few as 5 or as many as 20 depending on resources available. It is important to interview as many as needed to find out what you need to know (Kvale et al., 2015). For this study, 8 was as many the researcher was able to recruit. It is possible that the results would have been different if there were more participants in the study.

Most of the participants originated from Syria, a couple from Eritrea and one from Iran. Of the 8 participants, 6 were women. It could have been some different results if more men participated in the study. On the other hand, the men had very little experience with cooking before they came to Norway and they had female family members who prepared all the food for them. Therefore, they had low knowledge about cooking and preparation, but some knowledge about health and diet. The participants varied in educational level, age and time spent in Norway. This gave interesting and diverse information and even some new information that undersigned had not thought of beforehand.
Considering that the study is focusing on a group of immigrants who participated in a course at one district, it could be representative for the whole group. It can also give some pointers for developing new courses around Oslo and how to improve it for these specific minority groups. The food literacy questions are more complex and would benefit from more studies,

mixed studies, and larger sample groups. For the group studied for this thesis, the sample gives a good impression of how the understanding of food literacy in general is among them.

5.2.4 Validity

To evaluate the credibility, or truthfulness of the data, the researcher must assess if the results found answers the research question and what the study wanted to figure out. Does the questions in the interview guide target the questions and did the participants talk about what you as a researcher needed to know (Malterud, 2017; Thagaard, 2013).
All the barriers faced before and during the data collection, as mentioned previously, has had an impact on the credibility. The questions could have been better, asked differently and there are several places where more follow-up questions should have been asked.

The researcher took part in the 8-week course which took place during the spring of 2019. Participant observation was used during the course. This means the combination of interaction and observation. The researcher is a part of the social setting at the same time as you study the participants in the same setting (Thagaard, 2013). The observation was done to strengthen the validity of the study by using it as a triangulation of the results. Method triangulation is used as a strategy in qualitative research to test the validity of the data. The use of observation with interviews is frequently used in qualitative research (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). What strengthened the credibility is that the participants had a lot of similar views and answers about topics during observation and interviews. They also confirmed some of the things the researcher had noticed at the course. This triangulation gives strength to the data and it give the impression that the validity of the study is acceptable.

The participation gave the opportunity to get to know the participants and build trust before recruiting them for interviews. Some of the questions asked during the interviews were inspired by the observation made during this course. Most of the observation was made by assessing body language and listening to what types of questions they asked, and who payed attention to the presentations. There were also conversations between undersigned and the participants during the course, where it was possible to recruit them for interviews and understand more about each of them prior to an interview guide was made. This strengthens the quality of the study as it gives the researcher an opportunity to be more sensitive to context before and during interviews which in turn strengthens the IPA analysis as the analysis is only as good as the data collected (Jonathan A. Smith et al., 2012).

Transferability refers to the applicability or generalisability of the data found in the study. As a researcher it is important to evaluate if the results found can be transferred to similar samples and situations (Dahlgren et al., 2007; Malterud, 2017). The interpretations done in this study could be transferred to other immigrant groups in Oslo, Norway and used in relation to other similar food and health courses. It is unsure if the results could be transferred to other parts of Norway as the availability of traditional foods is not as good in smaller cities around Norway.
The cultural and religious sensitivity issues will be relevant for several of the groups who immigrate to Norway. Therefore, the results found in the study can be of help in how these types of health and nutrition information courses best can benefit the group in need of the information. But, the sample size in this study is small, it does not seem like saturation was met and that there could have been more information gained from a larger sample size that could have increased the transferability and quality of the data.

When we talk about the understanding food literacy among the participants in this study it could be applied to other immigrants in Norway. It shows several cultural and religious views on food and diet as well as how they learn about food and hygiene in their home country. Food literacy is very individual and depends on education level as well as interest. It could be used as a pointer, but not give an exact image to how the level in general is in immigrant groups in Oslo. For that, it needs a larger data sample.

Dependability refers to the consistency of the data. Can the results from the data be reproduced if replicated by others in the same contexts and with the same participants (Golafshani, 2003). In qualitative research it refers to "the researcher's ability to account for the changing conditions of the phenomenon studied, interaction with participants and for the whole research process" (Dahlgren et al., 2007, p. 50). This could be done using inquiry audits as proposed by Lincoln and Guba (1985). Another researcher should be able to follow the whole trail from beginning to end as done by the initial researcher. It can be done by keeping all personal notes, audio, and decision-making records from the study (Lincoln & Guba, 1985). The researcher has kept all personal notes, audio recordings from the interviews, transcriptions, initial notes from reading thru interviews, initial nodes and thoughts occurring during the process. This strengthens the dependability of this study as another researcher has the possibility to follow signatory's trail from the beginning of the project.

Confirmability refers to the objectivity or neutrality of the data. To what extent has the findings been affected by the researcher preconceptions or personal interests (Dahlgren et al.,

2007). Studies have critiqued the possibility of a completely objective researcher and that some connection between the participants and researcher is unavoidable, therefore confirmability refers to the neutrality of the data instead of the researcher (Dahlgren et al., 2007). The researcher did in this instance have some preconceptions about immigrants cultural and religious traditions and some personal experience with this and it could have affected questions or interpretation of the data. The researcher did try to stay as objective as possible because these preconceptions where known to the researcher before starting the study.

Strengths of the study can be that there are few (none) similar studies that researches the food literacy among immigrants in Norway. Another strength that adds to the previous, is the implementation of a course intended to boost the immigrant’s knowledge of health and nutrition. This is a new idea that, with some more research and work, could potentially increase their health and food security.
Food security is a relatively new concept with different ideas as to how it can be measured. In Norway there has been no such studies done on this group. Where a nutrition and health course and food literacy study has been combined like this. It could play a role in finding a way of decreasing NCDs in a vulnerable group in Norway.

5.2.5 Framework

The research report from Vidgen and Gallegos (2014) has collected information from several researchers and articles and have in turn defined Food literacy and its components. From their research they have derived a figure with main themes and components that has been used in the structuring if the thesis. Using this report as a framework has worked well and the interview guide and analysis has been organized in the 4 components defined in that report (Vidgen & Gallegos, 2014).

Because food literacy is so new, it has been challenging and there are many different views on how to properly measure level of food literacy. Using this report makes the process easier to understand and it gave structure to the data collection and in turn the whole study. Also, several of the new studies done on food literacy refer to the components derived from Vidgen and Gallegos´s study.

5.2.6 IPA as an analysis method

The researcher in this study aimed to get an in depth understanding of the participants understanding of their food literacy and experience at the food and health course. As a

researcher it was important to try and make sense of the participants experiences and interpret it and analyze it. The phenomenological-hermeneutic approach to the study was important to use IPA to analyze the data. Using IPA, it was important to keep the participants views a focal point of the results and carefully make a nuanced interpretation of what they spoke of in their interviews (Jonathan A. Smith et al., 2012). As Smith et al. focus on examining validity is Yardley`s criteria, I found those steps helpful in both the analysis process and when discussing my chose of IPA as a method. The 4 criteria are sensitivity to context, commitment and rigor, transparency and coherence and impact and importance (Yardley, 2000). The method with the criteria made me a better interviewer, and it has given the opportunity to reflect upon the results and make interpretations that seems reliable and fair towards the participants.

In the study process a clear approach was not set to begin with, but because of the research view and writing the thesis in English, the IPA became the best chose. The semi-structured interviews where a bit more detailed than the usual approach of IPA. The researcher would usually have a very loosely written interview guide which consists mostly of main themes the researcher would discuss with participants (Biggerstaff & Thompson, 2008). There where the 4 main themes as has been followed throughout the whole study, which was the Plan and Manage, Select, Prepare and Eat. Under each theme was several questions trying to get more detail from each main theme and including all 11 components of each main theme from Vidgen and Gallegos (2014). This is not the usual approach when using IPA, but as the participants had varying and low level of Norwegian and English it ended up being easier conducting the interviews as the interpreter did not have nutrition background and it would be difficult gaining as much information if the interviews where long conversations between interpreter and interviewee.

The first step of an IPA analysis is reading and rereading the text material and identifying essential themes emerging in the interviews (Jonathan A. Smith et al., 2012). Writing comments as I read, highlighting interesting remarks and thoughts from the participants during the first read gave much information. Rereading it several times changed my perspective of the text. Views that at first seemed like a singular opinion emerged as a shared opinion between several of the participants. They had just expressed it differently and it did not become clear before reading the text more times. Following the steps of IPA made me a better interpreter of the text. It took some time too really understand IPA and it seemed difficult in the beginning, but it made my findings richer and better. For this study it was

important to not only get the participants thoughts of food, health, and the course, but also interpret their understanding to better understand how they really feel about food and health. How to make a food and health course appropriate for the target group and improve how information is given to this group.

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7 Attachments

Attachment 1

Spørsmål til food literacy – master oppgave (mat kompetanse)

Først, «bli kjent spørsmål».

- Hvor gammel er du?
- Hvilket land kommer du fra?
- Hvor lenge har du bodd i Norge?
- Liker du å lage mat?
- Kan du beskrive hva som er en typisk matrett fra landet ditt?
- Har dere noen faste ingredienser som dere ofte bruker i matlaging?
- Kan du utdype litt om hva som blir sett på som sunn mat i hjemlandet ditt?
- Hva tenkte du om kosthold og helse da du bodde i hjemlandet?
- Hvordan lager du mat hjemme (gass, elektrisitet, bål)?
- Hvordan er oppfatningen av kroppsvekt i hjemlandet? (noen kulturer ser på overvekt som sunt).

1 – Planlegge og håndtere

- Kan du fortelle litt om hvordan du planlegger måltider? (handler du litt hver dag, planlegger du flere dager samtidig?)
- Kan du utdype om hvordan du planlegger dagen slik at du har tid til å lage mat, selv på travle dager?
- Hvordan opplever du det å skulle planlegge og lage sunn mat?
- Hva føler du rundt det å lage matpakke?
- Hvordan tanker har du om matbudget?
- Hvordan føler du det er å finne frem til matvarer på butikken?
- Gjenkjenner du matvarer som du har brukt i hjemlandet?
- Hva tenker du om utvalget av matvarer på butikken i Norge?
- Hvilke tanker har du om utvalget av søt og fet mat på butikken?
- Er dette annerledes enn hvor du kommer fra?
- Føler du at kunnskapen fra hjemlandet kan brukes/relateres til Norge? Får du tatt i bruk disse ferdighetene nå?
- Føler du at dine erfaringer når det kommer til matlaging og planlegging kommer til nytte når du nå er på ett nytt sted.

2 – Velge

- Kan du fortelle meg om hvordan du velger mat på butikken/markedet?
- Har du noen tanker om hva som påvirker valget ditt?
- Hvordan velger du ut maten du kjøper?
- Tenker du over hva produktene du kjøper inneholder?
- Leser du innholdsfortegnelsen?
- Hva tenker du om kvaliteten på produktene du kjøper?
- Hvordan opplever du din kunnskap om hva maten inneholder?
- Hvor går du for å tilegne deg kunnskap om valg av matvarer?

3 – Forberede

- Hva tenker du er viktig å huske på når man forbereder mat?
- Har du noen tanker om spesielle matvarer som er lurt å håndtere forsiktig?
- Hvilke formeninger har du om håndhygiene. (Probing: Fjerner du ringer og lignende når du vasker hendene, lager du mat med ringer/klokker på).
- Opplever du at du klarer å lage mat som du synes smaker godt?
- Føler du at du har nok kunnskap til å lage mat som er sunn?
- Hvordan opplever du det å lage mat på elektrisk ovn?
- Har du noen nye opplevelser med kjøkkenutstyr i Norge?

4 – Å spise; Hva vet deltakeren om helse og kosthold

- Hvilke tanker har du nå i dag om hva ett sunt kosthold er?
- Har du noen tanker om grove produkter, som grovt brød, havre og korn (samlet kalt fiber)?
- Hvordan kan det å spise mye eller lite av korn og grovt brød påvirke helsen?
- Har du noen tanker om hva man kan gjøre for å få i seg mer fiber?
- Kan du fortelle meg det du vet om frukt og grønnsaker? (Pobing; Hva inneholder de, hvor mye skal man spise hver dag).
- Kan du vurdere om juice er ett godt alternativ til frukt?
- Kan du beskrive det du vet om bra og dårlig fett?
- Hva tenker du kan være bra med det gode fettet? (her vil jeg helt enkelt vite om de vet det kan være bra for hjertet å spise plantefett og fiskefett ikke noe mekanistisk).
- Kan du utdype mer om hva som kan skje om man spiser for mye av det dårlige fettet?
- Hvordan opplever du det å spise sunt?
- Kan du fortelle litt om hva du tenker om effekten av kosthold på helsen på lang sikt?
- Kan du fortelle meg om det er noen sykdommer som du forbinder med ett dårlig kosthold?
- Hvordan vil du vurdere din helse?
- Hva tenker du om kroppsvekt?

For å avslutte

- Hva føler du om det sosiale rundt å spise?
- Føle du at maten du få tak i, i Norge passer inn med din spisekultur fra hjemme?
- Hva tenker du om det å blande norsk mat med de smakene du er vant med?
- Føler du at du klarer å finne glede i å lage mat?
- Føler du at du har lært noe nytt på møteplassen?
- Hva tenker du om en arena som møteplassen for å lære mer om kosthold og helse?
- Har du noen tanker om nyttige temaer man kunne tatt opp på møteplassen?
- Føler du at du spiste sunnere i hjemlandet?
- Har du noen flere tanker du ønsker å dele om mat og helse?

Attachment 2

Informasjon om å delta i ett prosjekt om mat og helse kunnskap

Jeg er en master student fra Oslo Metropolitan University hvor jeg studerer samfunnsernæring. Jeg ønsker å invitere deg med på prosjektet mitt der jeg ønsker å finne ut hva du tenker om kosthold og helse. Jeg ønsker å gå inn på kosthold og helse kunnskap blant personer som har flyttet til Norge og høre mer om hvordan du opplever det å finne frem til mat i butikker i Norge.
Det er ikke mange slike studier i Norge og din hjelp vil derfor være svært verdifull for meg i mitt prosjekt.

Hvis du ønsker å være med så vil jeg stille deg noen spørsmål om mat, helse, planlegging av måltider og det å handle inn mat. I tillegg vil jeg stille en del spørsmål om hvordan mat kan påvirke helsen vår.

Intervjuet vil bli gjort på Norsk. Det kan gjøres med deg alene eller sammen med en annen deltaker. Om du ønsker å bli med, men finner språket vanskelig å kommunisere på så kan vi forsøke å se om noen andre kan være med for å hjelpe til med språk og oversettelse.

Om du ønsker å være med i studien og har noen spørsmål så kan du kontakte meg, Elena Maria Hanssen på mail; elenamariahanssen@gmail.com eller på min mobil som er 91129200. Du kan også kontakte min veileder, Laura Terragni, på telefon 90789479

Hva innebærer deltakelse i studien?

Denne studien vil innebære deltakelse i form av et kvalitativ intervju eller fokus gruppe intervju som skal vare ca en time. Intervjuet kan gjennomføres på «møteplassen» eller ved OsloMet, om du ønsker det. Intervju skal tas opp på båndopptak og transkriberes kort tid etter intervju. Lydfilen skal lagres på en passord-beskyttet PC.

Hva skjer med informasjonen om deg?
Projektet skal etter planen avsluttes 31.12.2019. Navnet og kontaktopplysningene dine vil jeg erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Alle personopplysninger vil bli behandlet konfidensielt. Det er kun vitenskapelig assistent og projektleder fra OsloMet som vil ha tilgang til datamateriale. Lydfiler skal slettes etter transkribering.

Frivillig deltakelse
Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykke tilbake uten å oppgi noen grunn. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg. Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Dine rettigheter. Projektet avsluttes i desember 2019 og innen denne datoen vi vil anonymisere datamaterialet (det vil si fjerne opplysninger som kunne gjøre deg identifiserbar). Så lenge du kan identifiseres i datamaterialet, har du rett til: innsyn i hvilke personopplysninger som er registrert om deg, å få rettet personopplysninger om deg, -få slettet personopplysninger om deg, -få utlevert en kopi av dine personopplysninger (dataportabilitet), og å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

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

Hvor kan jeg finne ut mer?
Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:
•Laura Terragni, førsteamanuensis , Project leder (lterragn@oslomet.no)
Personvernombudet ved OsloMet, Ingrid Jacobsen ingridj@oslomet.no•
• NSD – Norsk senter for forskningsdata AS, på epost (personverntjenester@nsd.no) eller telefon: 55 58 21 17.

Med vennlig hilsen

Laura Terragni	Elena Maria Hansen
Prosjektansvarlig	Vitenskapelig Assistent

Samtykke til deltakelse i studien

Jeg har mottatt og lest informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker, dato)

Samtykke/avtale om å delta i studien

Jeg har mottatt informasjon om studien og ønsker/er villig til å delta:

(Signert av deltaker, dato)