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Implementing Sustainable Meals at Norwegian Folk High Schools. A Qualitative Study of Barriers and Opportunities

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Abstract

Due to health concerns and climate change, a dietary shift towards less meat and more plant-based foods is necessary. More knowledge is needed to make such a dietary shift successfully. This thesis investigates the barriers and opportunities for more sustainable meal servings at Norwegian Folk High Schools, what and how changes have been implemented, in addition to looking at the students' opinions on sustainable diets in general. Four qualitative interviews with staff and two focus group interviews with students were conducted at two Folk High Schools to get in-depth knowledge about their attitudes, opinions, and experiences. The result shows that implementing sustainable menu changes is possible by providing the kitchen staff with sufficient information about the project and allowing them to feel ownership to the changes implemented.

However, the result also indicates that there exist several barriers that prevent the successful implementation of sustainable meal servings: there is a stronger emphasis on local and organic food than on meat reduction and plant-based food, both among employees and students, which could potentially derive from unawareness of meat production's environmental impact. Applying changes with a top-down approach and implementing too many changes in the food offer simultaneously are also considered to hinder successful implementation.

In the future, it is recommended to investigate strategies that can provide staff and students with information about meat production's environmental impact to potentially influence food-related behavior and successfully implement more sustainable meal servings.

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1 Introduction

There is a need to change our diet towards a more sustainable one due to the environment and human health (Jalil, Tasoff, & Bustamante, 2020). We consume too much animal-based food, which has detrimental effects on the planet and our health (de Boer & Aiking, 2021a; Macdiarmid, Douglas, & Campbell, 2016; Willett et al., 2019). According to the latest IPCC¹ report, the need for action has never been more critical, as climate change will affect us with heatwaves, droughts, heavy rain, floods, hurricanes, rising temperatures, and sea levels (H.-O. Pörtner et al., 2022). Food production is responsible for one-fourth of the global greenhouse gas emissions, as well as deforestation, fresh-water depletion, biodiversity loss, and degradation of habitats (Espinosa & Nassar, 2021; Kim et al., 2020; Mathur et al., 2021). Agriculture and livestock are accountable for 56-58 % of emissions released by the food sector (Garnett, Balmford, Sandbrook, Pilling, & Marteau, 2019). It is estimated that meat has an impact up to 9 times higher than vegetables when it comes to CO₂ footprint (Reinders et al., 2020). Meat consumption does not only harm our planet but also increases the risk of various non-communicable diseases (Espinosa & Nassar, 2021). It is thought that the over-consumption of red and processed meat is associated with a higher risk of cardiovascular diseases (CVDs), metabolic disease, obesity, and stroke (Mathur et al., 2021).

Although the evidence of the negative effect of meat on both health and the environment is clear, meat intake is still too high in Norway (Totland et al., 2012). According to the last official dietary survey, more than 50 % of men and approximately one-third of women consume more than 500 g of red meat² per week, which is the recommended maximum intake from the Norwegian Directorate of Health (Totland et al., 2012). The survey also shows that only 25 % consume the recommended amounts of plant-based products such as fruits, berries, vegetables, and whole grains (Totland et al., 2012). To reduce meat consumption and increase the amount of plant-based, our eating habits must change, and this is especially important for the younger population, as habits acquired in adolescence tend to last (Chortatos et al., 2018).

¹ Intergovernmental Panel on Climate Change

² Cattle, goat, pig, sheep

In Norway, many adolescents spend a year at a Folk High School after finishing high school and before starting university studies or working. A Folk High School is a non-formal boarding school that offers various courses lasting about nine months (Borgen & Borgen, 2016). There are 86 schools in Norway, offering 850 courses ranging from sports, music, theatre, art, outdoor activities, and travel, to international subjects (Folkehøgskolene, 2022). The schools provide the students with meals and a dorm, and the students get offered a scholarship and loan from Statens Lånekasse (the Norwegian State Educational Loan Fund) to finance the year (Folkehøgskolene, 2022). There are no exams or grades; the schools focus on providing the students with life experience through their courses and the social life at school (Borgen & Borgen, 2016; Folkehøgskolene, 2022). Personal development and self-realization are keys, and in the Folk High School Act, it is stated that *"the purpose of folk high schools is to promote general education and public education"* ("Folkehøgskoleloven §1," 2021).

In recent years, there has been an increased focus on sustainability and climate change at several Folk High Schools, and with the project *Aksjonsforskning og bærekraft – folkehøgskolen for framtiden*, this focus has (Folkehøgskolene & Framtiden i våre hender, 2017). Several schools have made sustainable menu changes, and these would be interesting to look at and learn from. There is a lot of research on what a sustainable diet is, but not so much on how to implement sustainable diets, and there are many barriers to making such a change (Macdiarmid, 2013; Macdiarmid et al., 2016).

1.1 The aim of the thesis and research questions

This thesis aims to look at the changes Norwegian Folk High Schools have made to provide a more sustainable diet to the students, the implementation process, which challenges they have faced along the way, and the students' opinions about sustainable diets by using qualitative interviews. It is a part of the project *"Sustainable Eaters – Consumers in a sustainable Norwegian food system"* (project number 320800), financed by the BIONÆR program of the Norwegian Research Council and led by Nofima. The thesis aims to answer one main research question and 4 sub-questions that lead to the answer to the main question.

My main research question:

What are the barriers and opportunities for more sustainable meal servings at Norwegian Folk High Schools?

The objective of the main question is to investigate what barriers Norwegian Folk High Schools encounter when trying to implement sustainable meal servings and what opportunities these changes bring. Not only is it desirable to look into these experiences, as it has not been done before at Norwegian Folk High Schools, but also to learn from these to find effective and successful methods for switching to a more sustainable diet, which both our health and the planet will benefit from.

The sub-questions:

1. How do Norwegian Folk High Schools define sustainable food, and what sustainable menu changes have been implemented?
2. How are menu changes implemented?
3. What are the motivations and challenges related to such implementation?
4. What are the students' opinions about sustainable diets?

The objective of the two first questions is to investigate the Folk High Schools' opinions on sustainable food, see if these opinions comply with the changes implemented, and look into the strategies and methods for making such implementations. The third sub-question seeks to find the reasons behind implementing the changes and what challenges made the process difficult. The last questions will examine the students' attitudes revolving around sustainable diets, their experiences of food servings provided at the schools, and if these experiences have influenced their opinions.

1.2 Clarification

1.2.1 Definition of a plant-based diet versus a vegan diet

The terms plant-based diet and vegan diet are subjects of discussion as people add different meanings and attributes to them: some classify a plant-based diet as less strict in avoiding animal-based foods (Satija & Hu, 2018). In contrast, a vegan diet is regarded as more extreme as the exclusion is absolute (Satija & Hu, 2018). Additionally, some think of a vegan diet as a philosophy

encompassing more than just the food choices, including clothing, furnishing, and personal care (Beck & Ladwig, 2021; North, Kothe, Klas, & Ling, 2019). In this thesis, the terms plant-based diet and vegan diet are defined as the same; they are both diets that exclude all sorts of food originating from animals. With this said, it is difficult to know what meaning or definition the staff and students have attached to plant-based and vegan diets during the interviews. Because of this, the mentioned definition does not apply to the staff's and the students' statements.

1.3 Structure of the thesis

The thesis is divided into six chapters. In the first chapter, the research questions and aims of this thesis are introduced. In the following chapter, the relevant literature is presented to create a better understanding of the topic. In chapter 3, the method used to acquire the data is presented and discussed. Chapter 4 presents the results from the interviews in sub-chapters: the students' experiences with food servings, changes, implementation of changes, and challenges. The fifth chapter discusses, interprets, and relates the main findings to existing research. In addition, the choice of method is evaluated to see if it is best suited to provide answers to the research questions. The final chapter summarizes the findings and discussion.

2 Background

This chapter presents relevant literature to contextualize and understand the research from this thesis. Different perceptions of a sustainable diet are presented, along with what consequences meat consumption has for health and the environment. Furthermore, factors that influence food choices are presented in order to understand students' reactions to changes and their opinion on sustainable diets. Lastly, different implementation methods are examined.

2.1 Sustainable diet

A sustainable diet is a complex concept with many definitions, and it entails many aspects. The Food and Agricultural Organization (FAO) defines a sustainable diet as *“those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe, and healthy; while optimizing natural and human resources* (FAO, 2012). Thus, the food we produce today and for future generations must do as little harm as possible to the environment while promoting health. The way we produce our food must take care of ecosystems and biodiversity. Food production is complex containing a whole set of processes from farm to table like the production of raw material, transport, processing, packaging, storage, and distribution. All these processes have different impacts on the environment.

In the EAT-Lancet report, Willett et al. (2019) suggest a universal healthy and sustainable diet consisting of mainly fruits and vegetables, whole grains, nuts, legumes, unsaturated oils, and a low to moderate quantity of poultry and seafood. The report suggests a low or even no intake of red- and processed meat, added sugar, starchy vegetables, and refined grains. Furthermore, healthy and sustainable diet advice must consider geographical differences (Aleksandrowicz, Green, Joy, Smith, & Haines, 2016; Kim et al., 2020). This is because food consumed in one region has different impacts and implications on the surroundings and thus might not be regarded as sustainable in another region (Aleksandrowicz et al., 2016). Food consumed in one place does not necessarily have to be sustainable in another place, and the reason for these differences is the use of different practices and conditions (Kim et al., 2020). One example is bovine meat production in Brazil and Paraguay; due to deforestation, the meat from these countries is much more harmful to

the environment than the same type of meat from Denmark (Kim et al., 2020). This demonstrates that defining a healthy and sustainable diet is complex (Aleksandrowicz et al., 2016).

2.1.1 Organic versus conventional food production

Organically produced food is thought to have several environmental benefits over conventionally produced food, like higher respect for the biodiversity and use of less fertilizers and chemicals during production, thus leading to less local pollution (de Boer & Aiking, 2021a). This kind of practice also leads to a higher amount of carbon stored in the soil which also lowers the emission, however, these emissions can increase as a result of lower crop and livestock yields (Ivanova et al., 2020). Organic food is believed to have a less toxic impact on the surroundings, to increase soil quality, and to be better for our health due to less use of heavy metals and lower amounts of pesticide residues (Hansmann, Baur, & Binder, 2020).

Although organic food is thought to be better in many areas, there are still some uncertainties regarding production and its impact on the environment. It is believed that organic agriculture produces lower yields and is more demanding in terms of land (Seufert & Ramankutty, 2017). There are also uncertainties regarding soil erosion, water use, availability of nitrogen, and how nitrogen loss influences the system (Seufert & Ramankutty, 2017).

2.2 Meat's impact on the environment

It is well documented that excessive meat-eating has adverse effects on our health and the planet (Amiot, El Hajj Boutros, Sukhanova, & Karelis, 2018; Arnaudova, Brunner, & Götze, 2022; Bianchi, Garnett, Dorsel, Aveyard, & Jebb, 2018). It is estimated that food production counts for 19-29% of the greenhouse gas (GHG) emissions worldwide (Vermeulen, Campbell, & Ingram, 2012) and is therefore regarded as a considerable driver of climate change (McMichael, Powles, Butler, & Uauy, 2007). The production of livestock counts for almost 80% of these emissions (McMichael et al., 2007). Carbon dioxide (CO₂), methane, and nitrous oxide are regarded as the most important GHGs, with methane from ruminant production being the most potent (Godfray et al., 2018). Livestock and aquaculture are inefficient as they only provide us with 18% of the calories and 37% of proteins while claiming 83% of the farmland (Garnett et al., 2019). According

to Craig et al. (2021), the production of the same amount of protein from beef compared to tofu emits 25 times more GHG, requires 74 times more land, and needs eight times more water. Not only is meat production harmful in terms of GHG emissions, water depletion, and land degradation, but it also reduces biodiversity and consequently overexploits our resources (Cheah, Sadat Shimul, Liang, & Phau, 2020). Meat production also emits unfavorable by-products that could potentially harm the environment (Chai et al., 2019).

Research suggests that one effective measure to reduce our ecological footprint is to eat less animal-based food (Chai et al., 2019; Garnett, Balmford, Marteau, Pilling, & Sandbrook, 2021; Garnett et al., 2019; Godfray et al., 2018; Kim et al., 2020). Today, it is estimated that the global meat consumption per person per year is 43 kg, while in the EU, this number is estimated to be 81 kg (Garnett et al., 2021). According to the EAT-Lancet report, this number must be reduced to 16 kilograms annually if the world population is to have a healthy and sustainable diet (Willett et al., 2019). However, meat production is expected to increase because of the estimated population growth, as the United Nations (UN) predicts that by 2050 the world population will reach 9.8 billion (United Nations, 2019). In addition to population growth, increased income and affluence in the developing world are expected to contribute to this rise in meat consumption (Gerber et al., 2013). FAO estimates that meat consumption will rise by 73% in 2050, compared to the registered levels reported in 2010 (FAO, 2011). A study suggests that the people already consuming a high level of meat are increasing their intake (Mann & Necula, 2020). This group will prove the most difficult to change, and they are the ones who must change the most (de Boer & Aiking, 2021b).

Although there is a prediction of an increase in meat consumption for various reasons, there are changes in a positive direction with the creation of new food guidelines in Germany, the Netherlands, and Sweden that encourages a reduction in meat consumption (Arnaudova et al., 2022). The younger generation in Switzerland seems to be aware of the problems related to meat consumption as both veganism and vegetarianism are common (Arnaudova et al., 2022). The vegetarian diet has become more prominent and visible, and during the past decades, omnivores have become more familiar with the idea of this diet (Cheah et al., 2020). Something similar has been observed in Norway, as an increasing number are identifying themselves as flexitarians and are interested in reducing the amount of animal-based protein in their diets (Bugge & Alfnes, 2018).

2.3 Meat's impact on human health

Eating less red and processed meat is not only beneficiary to the environment but also for our health. A high intake of red and processed meat is associated with a higher risk of several diseases, like cardiovascular diseases (CDVs), type 2 diabetes (T2D), and several types of cancer (Craig et al., 2021; Jalil et al., 2020; Richi et al., 2015). CDVs are regarded as the leading death cause in the world, and the risk factors are linked to poor diets: diabetes, hypertension, high levels of fat in the bloodstream, and being overweight (Craig et al., 2021; World Health Organization, 2021). A plant-based diet is associated with reducing the risk factors, as it is rich in fruits, vegetables, whole grains, nuts, seeds, and legumes (Craig et al., 2021). A reduced meat intake and increased fruit and vegetable intake might reduce the risk of developing cancer (Craig et al., 2021; Tantamango-Bartley, Jaceldo-Siegl, Fan, & Fraser, 2013; Tantamango-Bartley et al., 2016). According to Craig et al. (2021), several studies demonstrate a relationship between meat consumption and an increased risk of developing T2D, while plant-based diets with high levels of whole grains, legumes, and nuts are associated with a lower risk.

What we eat affects the microbiota in our gut (Hills et al., 2019), which again affects our health (Singh et al., 2017). Our microbiota consists of bacteria that can ferment non-digestible carbohydrates, like dietary fiber and starch, that are typically abundant in plant-based food (DeMartino & Cockburn, 2020; Singh et al., 2017). The fermentation of these compounds produces metabolites that are thought to have anti-inflammatory effects, enhance gut health, and reduce the risk of colon cancer (DeMartino & Cockburn, 2020; Hills et al., 2019; Singh et al., 2017). Overweight and obesity are a growing problem worldwide, and studies show that those following a vegetarian or vegan diet tend to have a lower BMI and fat mass than omnivores which is thought to be related to a lower intake of fruits, vegetables, and fiber among the latter group (Craig et al., 2021).

Although meat, especially red and processed, is linked with an increased risk of several non-communicable diseases, it possesses valuable nutrients (high-quality protein and essential micronutrients), making it more complex to cut it out from the diet (Macdiarmid et al., 2016). Meat is an energy- and a significant protein source and contains vitamin A, B1, B12, niacin, iron, and zinc (Godfray et al., 2018; Richi et al., 2015). Meat provides nutrients benefitting our health, but

these can also be obtained from other sources, as a varied plant-based diet can provide sufficient nutrients with the help of fortified foods or supplements (Craig et al., 2021; Jalil et al., 2020).

2.4 Dietary behavior

To understand why it is challenging to reduce meat consumption, it is essential to understand its role and why we buy it. What we decide to eat is influenced by a long range of different cognitive, economic, physical, physiological, psychological, religious, and sociocultural factors (Cheah et al., 2020). Understanding people's behavior related to food choices will make it easier to find more effective interventions targeted to specific groups (Mullee et al., 2017). Mullee et al. (2017) reveal that people are reluctant to reduce their meat consumption because of a lack of interest or awareness; they prefer the taste of meat; or do not know what to prepare instead of meat. Additionally, habits, social norms, and attachment to meat are significant barriers to eating less, according to de Gavelle et al. (2019). Varela et al. (2022) found that convenience could be a barrier if plant-based options were perceived as less practical than animal-based food.

2.4.1 Unawareness

Various studies have demonstrated that unawareness of meat's effect on the environment is a barrier to a reduction in meat consumption (Macdiarmid et al., 2016; Mullee et al., 2017; Sanchez-Sabate, Badilla-Briones, & Sabaté, 2019; Truelove & Parks, 2012; Vanhonacker, Van Loo, Gellynck, & Verbeke, 2013). Macdiarmid et al. (2016) found that even scientific information about the effect of meat on the climate was not sufficient to change dietary behavior. Interviews with adults in Scotland revealed that most were unwilling to eat less meat even though they were presented with information (Macdiarmid et al., 2016). As meat's impact has been neglected, consumers seem to think that eating local, organic, and seasonal food, recycling, and reducing packaging are more efficient measures to combat climate change (Lea & Worsley, 2008; Tobler, Visschers, & Siegrist, 2011).

Though some people are unaware of meat's impact and the ethical problems revolving around the meat industry, some are aware and yet continue to eat meat, known as the "meat paradox" (Mathur et al., 2021; Milford & Kildal, 2019; Aaltola, 2019). People from western cultures have recently

become more concerned about animal welfare, while we simultaneously are seeing an increase in meat consumption (Aaltola, 2019). The reason for this cognitive dissonance can be explained by the fact that for some, it is an uncomfortable topic or that animals are ascribed little as they are perceived as food for humans and not as individuals who can feel pain, suffering, or other emotions (Mathur et al., 2021).

2.4.2 Habits

Another factor influencing our food choices is habits. Habits are acquired actions that are repeated, usually in stable environments, and they are formed by creating memory associations between actions and the stable circumstances under which they are carried out (Verplanken & Wood, 2006; Verplanken & Aarts, 2011). According to Verplanken and Wood (2006), habits are difficult to change as they often are unconscious acts triggered by circumstances in the surroundings. They continue arguing that since practices need minimal decision-making, they will be more readily available compared to alternative actions, as these require more active thought and determination mechanisms (Verplanken & Wood, 2006). So even though you are aware of an issue, it will probably not be enough to have a desire to change your habit, as there is a gap between intention and behavior (Arnaudova et al., 2022). Eating habits formed during adolescence can potentially last a lifetime, thus, it is important to establish good routines early on and make sure healthy and sustainable alternatives are available (Chortatos et al., 2018). Arnaudova et al. (2022) investigated the behavior of Swiss students in relation to meat consumption and found that meat-eaters had concerns regarding eating a plant-based diet, and even though they possessed knowledge about meat's impact on the environment, they were not interested or convinced to change. As the study identified different profiles and characteristics related to meat consumption, it concluded that interventions must be targeted to these specific profiles to be effective (Arnaudova et al., 2022).

In the literature, there are several examples of meat-eating being “business as usual”, in the sense that there is no particular reason for eating meat (Mullee et al., 2017). Meat-eating is a norm and people see little wrong with it (de Boer & Aiking, 2021b), and it is for many a big part of their culture (Cheah et al., 2020). Consumers do not want to look for information that could interfere with or raise questions about their habits (de Gavelle et al., 2019). Consumers do not necessarily make well-informed and deliberate choices when they shop for food; instead, their reasoning is

based on habits and routines, and they often find themselves trapped in consumption patterns as their habits and behavior are influenced by social norms (Cheah et al., 2020).

2.4.3 Social norms

Social norms are a common understanding of appropriate behavior within a social group, and food choices and behavior can be influenced by such norms (Amiot et al., 2018; Higgs, 2015). People follow a specific type of food norm because it makes them more liked or gives them a feeling of belonging (Cheah et al., 2020). Social norms must change to reduce meat consumption as meat continues to be the preferred choice due to individual, organizational, social, and economic mechanisms (de Boer & Aiking, 2021b). For many, meat is linked to traditions and is a natural part of the eating regime and has been so for centuries (Chiles & Fitzgerald, 2018). A meal is not proper for many people if it does not contain meat (Macdiarmid et al., 2016; Markowski & Roxburgh, 2019). Furthermore, meat is linked with our identity, and men associate meat-eating with attributes such as masculinity, strength, and toughness (Amiot et al., 2018). Soldiers from Norwegian military camps were reluctant to the implementation of a Meat-free Monday, according to Kildal and Syse (2017), as masculine values were used to justify meat-eating.

2.4.4 Taste

Another reason for preferring meat over plant-based options is physiological factors like appetite and hunger and the taste or sensory characteristics of meat, with taste being one of the most important factors that influence what we choose to eat (Arnaudova et al., 2022; de Mestral, Khalatbari-Soltani, Stringhini, & Marques-Vidal, 2017; Garnett et al., 2021; Kearney & McElhone, 1999). Taste is also often listed as a reason for not wanting to eat more plant-based foods (Mullee et al., 2017). People have positive emotions linked to eating meat as it is tasteful, so why would you want to change or reduce something positive (Amiot et al., 2018)? There is a conception that diets containing little red and processed meat do not taste good and do not provide the same feeling of pleasure and joy (de Mestral et al., 2017). According to an online survey conducted on Swiss students (Arnaudova et al., 2022), the sensory characteristics of meat and preparing and cooking meat are regarded as pleasant, while meat alternatives do not taste as good (Götze & Brunner, 2021). Additionally, survey results on Danish consumers reveal that fear of not

feeling satiated after consuming plant-based meals is common (Reipurth, Hørby, Gregersen, Bonke, & Perez Cueto, 2019). Preoccupation with satiety was observed among the soldiers in a study where the Norwegian armed forces tried to implement a meat-free day in the mess halls (Kildal & Syse, 2017). Lack of satiety was also listed as one of the reasons for not reducing meat consumption in an experiment investigating the effects of awareness-raising interventions on meat consumption (Jalil et al., 2020). Students' purchasing habits in the college cafeteria were analyzed after exposing students to a lecture about food choices' impact on climate change and meat's effect on health, and although the portion size of the meat-based and plant-based meals were similar, problems with not feeling full after the meal were reported. Social factors, like feeling isolated and different and lack of variation, were listed as other reasons for not eating less meat among the students (Jalil et al., 2020).

2.5 Implementation of change

When implementing sustainable diet changes, it is important to be aware of and understand the potential barriers. Several studies emphasize the importance of necessary training and information to the staff implementing the changes (Behr, Oertzen, & Dienst, 2021; Dawkins et al., 2019; Smith et al., 2016). Poor communication and decision-making will make it challenging to implement changes (Kildal & Syse, 2017; Milford & Kildal, 2019). It was also reported that the kitchen staff did not want to serve plant-based food as they were concerned that the soldiers would react negatively (Milford & Kildal, 2019). To avoid this, it is essential to find a way to communicate the importance of reducing meat without pointing the finger and focusing on the solutions and the opportunities (Milford & Kildal, 2019). Smith et al. (2016) emphasize setting clear goals, strong leadership, sufficient funding, commitment, and collaboration between all participating parties.

Bianchi et al. (2018) looked at studies where physical alteration of the environment was tested, and they found that the most effective strategies for reducing meat consumption were reducing the size of meat portions, offering meat alternatives along with educational information, and altering the sensory attributes of the meat or meat alternatives. Such interventions are regarded as easy to implement and uncontroversial, however, it remains to be seen how effective they are in the long run (Garnett et al., 2019). Physical alterations like providing reduced meat portions sizes and increasing the amount of vegetables are backed by Reinders et al. (2020) as an effective way of

influencing food consumption. Other methods to increase vegetable and reduce meat consumption are portraying and presenting the vegetables in a better way and making them tastier, providing more vegetable options, and using attractive language to describe the vegetarian dishes (Reinders et al., 2020).

Providing more vegetarian options is a strategy that might be regarded as less controversial than meat-free days – however, training personnel to cook more vegetarian food might cost (Garnett et al., 2019). In order to make people change their habits and eat less meat, the meatless options must be available, convenient, and affordable (Jalil et al., 2020). Providing consumers with concrete suggestions for meat substitutions is essential because it does not necessarily help if people are told to cut something without being given alternatives to what they should eat instead (Mathur et al., 2021). Consumers are more likely to welcome sustainable initiatives if they are not regarded as burdens or making things more difficult thus, convenient and easy changes are more likely to be welcomed (Sullivan, Smeltzer, Cox, & MacKenzie-Shalders, 2021).

Amiot et al. (2018) conclude that an effective strategy to reduce meat consumption is by applying several measures simultaneously; informing and educating consumers and stating the importance and benefits of change; setting concrete and achievable goals and follow-ups to motivate; appealing to fear and providing detailed solutions on how to avoid the negative consequences. In the study, the participants who had reduced their meat consumption revealed that the education about the harmful effects of eating meat (on the environment, animal welfare, and human health) had the most significant influence on them when choosing to reduce their meat consumption (Amiot et al., 2018).

Informing and educating consumers is an important step to raising awareness about meat consumption's impacts, according to Espinosa and Nassar (2021). The study investigated factors influencing the acceptability of food policies in the British population, and it revealed that weaker and less invasive policies, like labels and information campaigns, were accepted the most as British consumers prefer to make informed decisions and not be forced to make one (Espinosa & Nassar, 2021). Because policymakers regard these information policies as ineffective, there is a need to find a balance between coercive policies and acceptability among consumers (Espinosa & Nassar, 2021). The study revealed further that aware consumers are more likely to accept stronger measures as they do believe weaker implementations are ineffective in facilitating change in

behavior (Espinosa & Nassar, 2021). Other researchers question how effective these educational measures are in the long run and if they actually lead to a lasting change of behavior (Garnett et al., 2019). Bianchi et al. (2018) argue that providing information alone is not an effective method to make consumers change their behavior and that awareness about meat's environmental impact will not make them stop buying meat, as other factors than knowledge influence human behavior. It is believed that messages focusing on both the health and environmental aspects, and containing several benefits of reducing meat consumption will have a more significant impact (Jalil et al., 2020). The study lists several interventions that could contribute to a change: messages about social justice and animal welfare, reminders, labeling, repositioning, changing default options, meat taxes, and subsidies on plant-based options (Jalil et al., 2020).

The EAT-Lancet Commission argues that a combination of weak and strong measures is needed to see a change to a sustainable diet, along with a collaboration between stakeholders and science to inform and educate (Willett et al., 2019). Mathur et al. (2021) suggest that using stronger or more forceful measures are more effective than weaker ones. The results from the meta-analysis suggest that appealing to the well-being of the animals will be a stronger tool in reducing meat consumption, for example provoking physical or moral disgust by describing or showing pictures of the conditions of the farmed animals (Mathur et al., 2021). Although the results seem promising, it is important to keep in mind that the long-term effects of these measures are unknown (Mathur et al., 2021).

There is a lack of research conducted on implementing sustainable changes in meal servings in Folk High School environments, although a project revolving around sustainable development, in general, has been carried out previously (Folkehøgskolene & Framtiden i våre hender, 2017). Several Norwegian Folk High Schools participated in the project *Aksjonsforskning og bærekraft – folkehøgskolen for framtiden* initiated by the environmental organization the Future in Our Hands (Framtiden i våre hender), where one of the goals was to implement sustainability as part of the school's operations, teaching, and activities (Folkehøgskolene & Framtiden i våre hender, 2017).

3 Methodology

For my thesis, a qualitative method was used, and in this chapter, I will explain why such an approach was chosen. In addition, the chapter will explain how I collected the data material and how I did the analysis and interpretation.

3.1 Choice of Method

Deciding on a method depends on what you as a researcher are comfortable with but also what your research goals are and what suits these goals better, and the method you use in your research can influence what you achieve, and your results (Tracy, 2019).

3.1.1 Qualitative versus quantitative

The purpose of this thesis is to investigate how Norwegian Folk High Schools make changes toward a more healthy and sustainable diet and students' opinions on sustainable diets. A qualitative method was chosen to acquire this understanding, as it gives a deeper understanding of the topic investigated. In contrast, a quantitative method gives a representative overview of a topic or phenomena (Johannessen, Tufte, & Christoffersen, 2016). The qualitative approach allows the participants to express themselves more freely than a questionnaire and was thus regarded as more appropriate for this thesis as there has not been much research on this matter before. It would be challenging to develop a good questionnaire to explore the topic and gain more insight without much previous knowledge. Furthermore, this thesis is a part of a bigger project, and a quantitative method with a questionnaire is planned at a later stage.

3.1.2 Semi-structured interview versus open interview

A semi-structured interview was chosen for this thesis. A semi-structured interview consists of some pre-determined questions and topics, and these can vary and be adjusted according to the context of the interview (Saunders, 2007). As I had research questions that I wanted to get answers to, it was necessary to have some structure to assure all these questions were asked. However, semi-structured implies some openness, allowing new and unexpected knowledge to appear. By

using a too strict and predetermined interview structure, this discovery of new knowledge would not have happened. An open interview could also be risky as there is a possibility of the interview taking a whole different direction than intended beforehand. You could potentially end up with no answers to the research questions. Both one-to-one interviews with staff and focus group interviews with students were conducted for this thesis.

3.1.2.1 One-to-one interview

A one-to-one interview is a qualitative interview that allows the interviewee to give detailed and comprehensive descriptions of their opinions, attitudes, feelings, perceptions, and reflections about the topics to be investigated (Johannessen et al., 2016). This type of interview is appropriate when it will address topics that are delicate and potentially difficult to speak freely about within a group. It may also be easier for the interviewer to handle than a focus group interview. Based on these characteristics, one-to-one interviews were chosen to gather insights from the schools' headmasters and chefs because the school staff could provide information and experiences from the change process that would not otherwise be easy to obtain.

3.1.2.2 Focus group interview

A focus group is a type of group interview that gives a deeper understanding of the participants' attitudes and behavior. Originally the method was used in market research to acquire knowledge about consumer behavior (Tracy, 2019). It has also typically been used to investigate how voters react and behave in relation to politicians' policy implementation or political strategies (Saunders, 2007). Today, focus group interviews are still used for these purposes and in many other fields within academic social research (Kvale, 2009).

A moderator leads the interview, and the topics for discussion are decided beforehand. All the participants are encouraged to share their opinions as there is no right or wrong answer; the diversity of the opinions gives value to the research. The purpose is not to come to an agreement or to solve a problem but rather to discuss the chosen theme and explore different opinions (Tracy, 2019). The moderator's role is to inform the participants about the themes and purpose of the focus group interview and make them feel comfortable enough to share their opinion. It is also the

moderator's role to ensure that the participants stick to the predetermined themes (Kvale, 2009). The advantage of a focus group compared to a one-to-one interview is that it provides a wider range of opinions and attitudes because the participants can feed on each other's contributions (Johannessen et al., 2016). Focus group interviews were used in this master's thesis to gain a deeper insight into the students' attitudes and experiences with healthy and sustainable food servings.

3.2 Conducting the interviews

3.2.1 Selection of case study schools

The process of selecting the schools started with contacting Folk High Schools using the website www.folkehogskolene.no. I tried contacting the headmasters at four different schools via phone. I asked them some simple questions about whether they had implemented some sustainable diet changes over the past years and whether the kitchen staff was the same as when the changes were implemented. Three schools responded, but due to some difficulties with the covid-19 pandemic, only two schools were able to answer the questions. These two schools were regarded as suitable for the research objectives, so there was no need to look further for other alternatives. One of the schools (school A) is known for having a green profile, and it was thought that it would be interesting to compare this school to one with a traditional meal profile (school B). The two selected schools for this master's thesis offer courses in, among other things, sports, music, global issues, hunting, and outdoor life. The school that has a green profile offers several courses concerning the environment.

3.2.1.1 Selection of staff

The staff chosen to be interviewed were the head of the kitchen and the headmaster. The head of the kitchen was thought to have the most knowledge about the practicalities of the food servings and be the person among the kitchen staff that was in closest contact with the administration. The headmaster was chosen as he or she is the leader of the whole school who makes decisions and would seem to have the most knowledge about the school's finances.

3.2.1.2 Selection of students

The selection of students was based on volunteering. At school A, I informed the students about the master's thesis project. Three girls and three boys were asked to volunteer, and among all those who raised their hands, the staff selected six students. For school B, the students had been informed about the project by the headmaster beforehand. When I came to the school, the first two students that I met agreed to participate and went around asking fellow students to join until I had three girls and three boys. The students who volunteered were aged 19 to 25.

The number of participants for the focus groups was discussed with my supervisors beforehand, and it was decided that the ideal number would be six students. The reason for this decision was because I conducted the focus group interviews alone without any referent, and with a higher number of participants, it could be difficult to manage the discussion and include all the participants. Moreover, a bigger group could lead to fewer people sharing their opinions as they rely on others in the group or are afraid to speak up in front of a bigger group. On the other hand, a group containing fewer participants than six could potentially disturb the discussion dynamic and lead to a little productive discussion with little relevant information (Johannessen et al., 2016).

3.2.2 Interview guides

To ensure that the interviews are conducted according to plan, it is helpful to create an interview guide. This guide contains a script of the themes or questions you want to ask during the interview, provided in a logical order and written in a way that falls natural for the interview (Tracy, 2019). However, an interview can take unexpected turns and thus break the planned order. This does not necessarily need to be a bad thing as it can lead to the discovery of new information. If the interviewer feels that the information from the participants is becoming irrelevant, the interview guide can prove useful to get back on track. However, when conducting several interviews a revision of the interview guide might be helpful if the interviewer keeps deviating from the guide during the interview (Johannessen et al., 2016).

When creating the interview guides, it is useful to look at the research question and the literature and make some sub-themes from these. From the subthemes, the questions are developed, and if necessary, potential follow-up-questions or sub-questions (Johannessen et al., 2016; Tracy, 2019). I created the interview guide in collaboration with my supervisors (Appendix A). I also had a Zoom

(Zoom Video Communications, Inc) call with one of my supervisor's colleagues, who had a lot of experience with conducting one-to-one interviews and focus group interviews. She gave me advice on how to format and write the interview guides, and how to conduct focus group interviews. My supervisor also provided me with feedback before conducting the interviews. Before I conducted the focus group interviews, I had a test run with some friends to become aware of my role as a moderator and to get some feedback.

3.2.3 One-to-one interview with staff

I conducted a total of four one-to-one interviews with the kitchen staff and headmasters. The interviews lasted about an hour. I informed them about my thesis project and the formalities regarding recording and privacy concerns. The first topic addressed was sustainable diets, and the staff provided me with insight into what this term meant for them and the school. Then I asked about the school's sustainable diet changes, the implementation process, and the practicalities regarding the food servings. The participants spoke freely and had a lot to say about each topic. The conversation did sometimes slide out and revolved around topics less relevant to this thesis, and then the interview guide proved valuable to guide the conversation back on track.

3.2.4 Focus group interview

I conducted two focus group interviews which lasted about an hour. The students were informed about recording, privacy concerns, and what a focus group interview is before starting the interview. They were asked to present themselves with their name, age, and course at school and share their favorite food served at school. The purpose behind the simple opening question was to break the ice and make them comfortable with the setting. The first topic they were asked to discuss was the differences between food served at school and at home. The students talked about what they were used to eating at home and what food they ate at school. They were then asked to discuss the term sustainable diets and what it meant for them before they shared their opinions about plant-based diets and eating meat. At both schools, there were some students who were more talkative and took a leading role, while the majority preferred to give shorter answers. During the second focus group interview, I tried to ask the less talkative students directly in order to get their point of view and get them more involved.

3.3 Ethical considerations

The interviews for this thesis were recorded and thus contained personal information about the participants. To use the data for the thesis, it was necessary to apply to *Norsk samfunnsvitenskaplig datatjeneste* (NSD), as research that uses personal information electronically and contains information that can identify individuals is notifiable (Johannessen et al., 2016). The project was approved by NSD (ref nr. 114663, see Appendix B), and the participants were given information about privacy concerns and signed a letter of consent (Appendix C) before the interviews started.

3.4 Literature research

Existing literature on the different topics for this thesis was reviewed throughout the process. The main topics for this thesis were healthy and sustainable diets, barriers related to diet change, behavior and habits related to food, and implementation of diet changes. Finding existing literature was necessary to establish a context for the research and to support the findings. Databases like Web of Science, PubMed, and Google Scholar were used in the search.

3.5 Analyzing data

Analyzing qualitative data is a process that requires interpretation, and for this thesis, the data analyzed was the transcriptions from the interviews. Analysis and interpretation are necessary as qualitative data does not speak for itself (Johannessen et al., 2016). After the interviews were conducted, I transcribed the recordings and transferred the material to NVivo, a qualitative data analysis computer software. As I transcribed the interviews, I started looking for themes or patterns before organizing the data material into categories and adding codes to quotes in NVivo (Alfasoft AS). The main categories used for the analysis were: the change process, sustainable diet, food servings at school, and changes implemented at the school. The categories were given descriptions to clearly demonstrate the meaning to avoid confusion when adding codes. These codes further systematized the material, as they were attached to excerpts or quotes from the transcripts. For example, the category “sustainable diet” contained different codes like “local food”, “organic food”, “eat less meat”, and “reduce food waste”. When the participants talked about these topics, the relevant part was added to the code and thus organized in a fashion that made the further

analysis and interpretation process easier. During the analysis, I discussed the codes I had developed with my supervisor to ensure that codes were appropriate for the findings and to get suggestions on new codes that could further systematize the material.

4 Results

This chapter will look at the main findings from the study and provide insight into how Folk High Schools have made changes towards a sustainable diet and what challenges they have faced. Additionally, I will present students' reactions to these changes and attitudes and thoughts about sustainable food. In the first part, I will look at the students' general experience with the food served at the schools. Then I will look at the changes, how they were implemented, and the challenges the schools faced during the implementation. Finally, I will present how the staff and students perceive sustainable diets. The students are given fictional names for anonymity.

4.1 Food serving at school and students' experiences

The schools practiced food servings differently: school B had a buffet, while at school A the food was usually served at the tables where students helped themselves. The staff at school A said the reason behind this practice was to create a calm atmosphere and an area for socialization. They also stressed the importance of teaching the students solidarity and modesty when taking food from the serving plates. They also revealed that they serve the dishes with vegetables first and the meat dishes last to encourage the students to eat more vegetables and less meat, and the motivation behind this thinking was environmental concerns. As for school B, the kitchen staff said there was no specific reason behind their choice of food serving. The meals served at both schools were breakfast, lunch, dinner, and supper. At school A, they served oats for breakfast, except for Thursdays when they had a themed breakfast serving low-carb or vegetarian or different types of breakfasts from around the world. The idea behind this themed breakfast was to provide the students with variety and make them try new types of food as a preparation for their study trips abroad. For lunch, they often served leftovers from dinners. Leftovers were also served at school B, but normally for dinner once a week.

Overall, students from both schools expressed that they felt they were provided with varied meals. Most of the students mentioned variation in the food served as one of the most significant differences from what they were used to back home, as shown in the quote below. This was also something the kitchen staff at both schools talked about; the importance of providing the students

with a varied diet. Additionally, the students from school A experienced the food as healthy. One student said that this was probably going to be the healthiest year of their life food-wise.

” The difference from home is the variation we have here at the school – we have a wide selection. At home, you make things simple, you might eat some eggs and cheese, but here we have many options. We have all sorts of vegetables, peppers, cucumbers, tomatoes, mackerel in tomato sauce, liver pâté, cheese, brown cheese, jam, some types of cereals, and oats – so we have a lot to choose from, which makes everything simple. I think this is the most significant difference from home.”

Lukas (school B)

4.1.1 Healthy food

The topic healthy diet was, to some degree, discussed at both schools. Olivia from school A thought that her diet at school was more nutritious than at home. Emma (school A) also experienced the food provided as healthy and compared the diet to another Folk High School they had visited. They were served French fries and ketchup for dinner during the visit, which made her appreciate the food served at school A more. The students from school B were to some extent concerned with healthy diets, and one student believed that both meat and vegetables were necessary, while another student said he was unsure of what a healthy diet was. Another student, who practiced a lot of sports, expressed concerns about whether a plant-based diet could provide him with all the proteins he needed, as shown in the quote below.

”Occasionally, I buy some food outside of school because there isn’t always a lot of protein in the food. So I feel that I don’t get enough proteins by eating the food served here. (...) For example, if we have tomato soup for dinner, which does not contain a lot of proteins, and I have had a tough workout, I’ll need nutrients to be able to perform.”

Filip (school B)

At school A, the fear of not getting enough proteins was barely discussed. When discussing exercise and eating plant-based food, the students said this was not an issue. The most important thing was feeling satiety after a meal, which was possible without meat. Emma, who followed a vegetarian diet, said that she had become a bit more aware of what the food contains regarding nutrients, and as long you get enough proteins, there is no problem doing exercise.

At both schools, the themes of plant-based and vegan diets were quickly addressed when they discussed a healthy diet. The students from school A expressed some concerns about whether a vegan diet could provide all the necessary nutrients. One student believed that a vegan diet was not compatible with being both healthy and sustainable and that you have to prioritize one of them. The other students agreed with her on this matter, as they stressed the importance of not becoming too extreme by cutting out too many food groups from your diet, and rather find a good balance.

”If you want to become a vegan, you eliminate even more: sources of protein and vitamin B12 (...) I don’t know, it requires more from your body. And you need to be careful. I haven’t tried it, but yeah, do you want to prioritize your own health or sustainability? This could potentially become a challenging calculation.”

Olivia (school A)

When the students at school B were asked whether a diet could be healthy and sustainable at the same time, they were even more skeptical compared to students from school A. One student, Oskar, did not believe that a healthy diet could be sustainable and used a vegan diet as an example. He thought that a vegan diet was not healthy as this diet could lead to vitamin deficiency.

Oskar (school B): *”I don’t believe healthy equals sustainable.”*

Interviewer: *”Why is that?”*

Oskar (school B): *”The fact that we tend to put certain diets on a pedestal even though they are bad for people and one can get sick.”*

Interviewer: *”Which diets are you thinking of?”*

Oskar (school B): *”For example, vegans. Hope no one is vegan here ... Yes, people who do not get the right vitamins. Then we all think it's healthy, even if it's not necessarily that. And we think that it's sustainable, even if some people think it's not sustainable, I do not know.”*

Lukas agreed with Oskar's opinion and raised further questions about what a healthy diet was – how much fish, vegetables or meat should you eat? He also acknowledged that he did not know much about the environmental impacts of producing different kinds of food. Sandra also agreed with Oskar, as she felt she did not get all the nutrients by cutting out meat and fish from her diet; *“I don't feel like I get all the nutrients I should by eating just plant-based foods”*. This reluctant attitude toward a vegan diet was also seen among the staff at school B. The headmaster said that they had trained the kitchen staff to cook vegetarian food, but not vegan. This was something they did not want to be responsible for, as they thought it demanded too much from the staff to make sure that the students would get their nutrients.

4.1.2 Meat servings

Although the students from school A experienced the food served at school as healthy, they also thought that the amount of meat served was excessive. They mentioned that this was especially the case in December when the school prepared traditional Christmas food from all over the country. Furthermore, the students commented on the variation of the meat served at meals and the amount of red meat served. The students following a vegetarian diet expressed the excessive meat serving the most, but the other students said they agreed.

Olivia (school A): *“Yes, but I do feel that we get a lot of meat. They often serve meals with meat. We have fish once a week and vegetarian once a week.”*

Emma (school A): *“It happens quite often that when we have meat for dinner, they provide us with two-three different kinds of meat.”*

Interviewer: *“So you feel that there is a lot of variation in the meat served?”*

Emma (school A): *“Yes, when we eat, for example, Christmas dinner, which is probably an exception, but there are several times I have experienced that there are three different dishes with three different types of meat for a meal, so I think that it is a bit excessive.”*

The students from school B did not share the same experience as those from school A regarding excessive meat servings. They talked about how meat had always been a natural part of their diet and how they had taken part in several hunting activities at the school, where they learned the importance of making use of all parts of the animal. They also talked about all the different animals they could hunt in the local area and that the hunting and fishing course would provide them with meat and fish.

4.1.3 Vegetarians' experience with food servings

In addition to feeling overwhelmed by the amount of meat served at the school, the two students following a vegetarian diet thought that the vegetarian options were scarce in comparison and lacked variation.

"In my experience, the salad bar provided at dinner is usually the same, and when you're a vegetarian the meals are sort of... it's a lot of the same, at least at times it has been like that - it's just a green salad and chickpeas."

Emma (school A)

In addition to experiencing the vegetarian meals as less varied, Emma also experienced some of her fellow classmates as skeptical toward her diet and she felt that she had to explain why she did not want to eat meat. She told that when she explained to fellow students why she did not eat meat she was met with disgust, and she felt like she was the villain. The opinion of less variation in vegetarian servings was also shared by a non-vegetarian student, Jakob: *"In my opinion the vegetarian students have been more dissatisfied with the food than me, as I think they feel like their food is not as varied or exciting enough."*

As school A is known for having a green profile and focusing on organic food, some students admitted that this had influenced their choice to apply to the school. For Emma, it was important that the school prioritized food and could provide good food options, despite her being a vegetarian. However, as already mentioned, she expressed some dissatisfaction with the vegetarian food served at the school.

“I did think quite a lot about it [the school’s green profile]. There are quite a few Folk High Schools that offer the course I chose. I thought that this school’s attitude towards food and ecology, (...), made sense in a way. As a vegetarian, it was important for me to find a school where food is taken seriously and that serves really good food even though you are a vegetarian.”

Emma (school A)

4.1.4 Food servings changed students’ views

When discussing whether the school had changed their view on food, some students from both schools said yes. They said that they had become more aware of what kind of food they chose to eat and what they should avoid, such as tropical fruits like bananas, oranges, and avocados. Food waste was also mentioned as something the students thought more about as they tried to put less on their plate when eating and throwing away less food. Another student said that his positive views on local food had been reinforced by his stay at the school. A vegetarian student from school A said she had been inspired to make mixed salads for her dinners, as this was something that the school provided often at dinners.

4.2 Changes

The schools had implemented several types of sustainability changes. School A had implemented a vegetarian day, “Green Tuesday,” where no meat nor fish were served that day. School B tried to implement something similar, but interviews with the kitchen staff and students revealed that it was not entirely successful. This issue will be discussed in more detail later. Both schools said that a vegetarian option was provided for those following a vegetarian diet for all meals, without additional cost. The headmaster from school B also revealed that they tried to encourage the students to try a week where they only eat vegetarian options during the school year. Apart from providing the students with vegetarian meals as a sustainable change, the schools had made changes in the food servings emphasizing other sustainability goals. School A had emphasized organic products. Today, the amount of organically produced food is 70-80 %.

"We have taken a stand at this school - so to be on the safe side we have chosen organic food. We do not say that conventional agriculture in Norway is harming the environment or anything like that, but what we serve students and guests, it is without pesticides. Then we know that it's mostly clean."

Kitchen staff (school A)

The reason for choosing organic products was not because they thought that conventional agriculture is harmful to the environment. Still, they feel that they are on the safe side by using organic products. However, they addressed a dilemma related to the use of organic versus local food, as they sometimes had to choose between the two. This was because they could not always get hold of locally and organically produced products. When school A decided to emphasize organic food, one of the implications was higher food costs, especially the organic meat. As a result of the higher costs, the school had to reduce their meat consumption and include more vegetables in food servings, as these are cheaper.

"We set an ambitious goal to reach 50 % [organic food] within five years. We had to change how we run things around here, and a part of the synergy effect of becoming organic when organic food costs a lot more (...) is to use a lot more vegetables (to be able to meet our limit for the cost of food per person per day)."

Kitchen staff (school A)

School B had changed to more locally grown food and had local farms and producers supplying them with food. Some of these farms provided them with discarded vegetables that could not be sold in supermarkets due to their size or a weird shape. They also focused on minimizing food waste and consuming less processed foods and tropical products like oranges and bananas. They avoided completely the use of avocado. This school preferred locally produced food over organic.

“We could buy organic food, but we prefer to buy locally over long-distance organic food. It is a principle we follow. (...) We have looked at the environmental side of it, and not just at the use of pesticides and how far from a road the cultivations have taken place. We believe that it is better to choose food locally even though pesticides have been used. We don’t believe you should feel better if you choose organically produced food from Spain.”

Headmaster (school B)

According to the kitchen staff at school B, a salad bar had been introduced once a week. This was introduced to reduce meat consumption, although it did contain ham. The headmaster also mentioned the introduction of a salad bar once a week but expressed that it had not been done completely.

"We have a salad bar once a week, or we try at least, we haven't had it that often lately. But we try to use locally produced food."

Headmaster (school B)

4.3 Implementation of changes

Both schools reported that the process of implementing changes had started with increased environmental awareness among staff and students. School A said that the initiative to change menus started in the early 2000s as a reaction against food wholesalers and their campaign with ready-made meals. In addition, around the same time environmentally conscious students began asking questions about why the school did not do more for the environment. The kitchen staff agreed on some goals, and through these, they set a plan on how to achieve them. Their first goal was to reach 50% of organic food within five years. The change process was led by the people working in the kitchen, and they were responsible for the implementation.

” (...) if changes are applied with a top-down approach, it will be challenging to make them happen (...). I believe the best way is for the kitchen feels ownership to the changes. Because the development must happen from those working in the kitchen, if they are negative, you won't see any development, and you would have to force through changes down the system, and then you'll be met by resistance. Here, at school A, the kitchen has led the development, and it is satisfactory to see that it actually pays off and is a success.”

Kitchen staff, School A

As for school B, it was also a combination of the people working at the school and students that started the process of making sustainable changes. New personnel with an environmentally conscious mindset and students becoming more conscious initiated a new way of thinking. All the personnel sat down and agreed on goals they wanted to achieve. According to the headmaster, the collaboration between the administration and kitchen staff was reported as good, and everyone was on board. Usually, when implementing changes, an effort is required during the initial stages and both schools confirmed this, as shown in the quotes below.

“Of course, there was more work in the beginning. Everything that is new takes time.”

Kitchen staff (school A)

“Yes, we spent a lot of time planning and there were a lot of changes with the menus and things like that.”

Headmaster (school B)

School B also said that the workload had increased when they started using unwanted vegetables from local farms. This was because the staff picked up the food themselves from the farms. Sometimes these products needed extra preparation before cooking and serving, but the headmaster said that it was worth the extra effort as they felt they were doing something good for the environment. Therefore, the school reported that they probably had spent extra money on transport and salaries for staff. On the other hand, the school spent less money on vegetables by taking advantage of these local suppliers.

4.4 Challenges

4.4.1 Implementation of a vegetarian day

There were some inconsistencies regarding implementing a weekly vegetarian day at school B. Even though the headmaster said that the implementation was one of the changes that had been successful, interviews with the kitchen staff and students indicated otherwise. When they were asked whether the school had a vegetarian day once a week, their answers revealed that this was not always the case. The use of the word “try” in the quote indicates that this is not always carried out. Their unclear and inconsistent responses demonstrate that the implementation has not been systematically done and indicate that having a vegetarian meal every week can be challenging.

Interviewer: *“Do you have a vegetarian day once a week?”*

Maria (school B): *“We are supposed to have one.”*

Interviewer: *“You are supposed to, but there isn’t one?”*

Maria (school B): *“It varies from year to year; it depends on the students.”*

“(…) And we try that once a week, it should be vegetarian; that is, vegetarian for the whole school.”

Kitchen staff (school B)

4.4.2 Economy

Another challenging factor was the economy. Both schools regarded the economy as a limiting factor for implementing sustainable change. The schools have a set limit on the cost of food per person per day. The students pay for the food at school (food is included in the tuition money). School A said they could have provided even healthier food for the students by investing more money into food, but this would possibly price them out and make them lose students. The kitchen staff from both schools said that the ready-made and processed vegetarian alternatives were

expensive. School A said that they usually did not use processed vegetarian options, but, on some occasions, they did. This was to provide the vegetarian students with variety. At school B they had reduced the use of processed vegetarian products because of the high cost. Providing the students with homemade meals with vegetables was not challenging when thinking of the price. The challenge was providing vegetarian options in terms of processed meat-free alternatives, as these products were regarded as expensive.

"Yes, price is a limiting factor. (...) A lot of food is made with tofu and those things, but then again, tofu costs a fortune, so I believe that is why it's not used that much, or other vegetarian or vegan products. That is at least my impression. (...) We must consider the cost because the school has set a limit on how much we can spend on food per student. But there shouldn't be a problem providing the students with normal home-cooked food and vegetables."

Kitchen staff (school B)

4.4.3 Implementing too many changes simultaneously

Another challenge during the implementation process was forcing through too many changes at once. During the initial stages, school B tried to implement too many changes in the food offer simultaneously which prompted negative reactions from both the staff and students. Some of these changes were only serving oats for breakfast and reducing the amount of cold cuts at the buffet table. As a result of the negative reactions, they had to reverse some of the changes. The school underestimated the time required to carry out the changes, and in retrospect, they should have invested more time in each change and implemented fewer changes simultaneously.

"Perhaps we could have taken it more slowly when introducing the changes because we introduced a lot at once during the first couple of years. We wanted to do a lot during those years, but the students and staff reacted negatively. We had to slow things down and go back on some points."

Headmaster (school B)

4.4.4 Lack of staff continuity

For school A, lack of continuity in the kitchen staff had been a challenge, as they had been through a period with replacements of kitchen personnel. Although much of the food serving process is automated, as the menus are already determined and based on organic food, it takes time before the new staff understands the school's values and ideology.

“Yes, we’ve had some challenges in the last six months in the kitchen as we’ve had some replacements. We hired a new assistant chef, in addition to replacements due to illness and long-term sick leave. We hired a chef who was here for three weeks before he returned to his old job for different reasons, so yeah, all these replacements have been a challenge. I don’t think it has affected the school’s ability to provide organic food because the food is ordered, and we have the menus. It is more about continuity, qualifications, and competence, and understanding what it means to work at this school and our values (...).”

Headmaster (school A)

4.4.5 Variation in vegetarian options

The kitchen staff at school B admitted that providing vegetarian students with a varied diet is challenging at times. As mentioned in chapter 4.1.3, some vegetarian students complained about the lack of variation in the vegetarian food servings. The kitchen staff occasionally attended seminars to learn about vegetarian cooking, which gave them a motivational boost. However, staying motivated was not easy.

“Yes, it is (difficult to stay motivated). It is challenging throughout the year to make sure that a vegan or vegetarian student does not get tired (of the food) – that it doesn’t get repetitive. You can’t really make 365 different meals.”

Kitchen staff (school B)

4.5 Sustainability

4.5.1 What does sustainable food mean for the schools and students?

The findings reveal that the school staff and the students at both schools emphasize locally produced food when thinking about a sustainable diet. This was the most common first answer when asked what sustainable food meant to them. They had a lot to say about local food production, its importance for the environment, and all the different kinds of food you could acquire from the local area. The students from school B emphasized hunting and game meat as an essential sustainability aspect, while the staff from the same school spoke about how they preferred food produced locally over food imported from other countries.

Interviewer: *“What do you think of when I say “sustainable diet”? What is the first thing that comes to your mind?”*

Jakob (school A): *“I think locally produced food. I believe that it is sustainable to eat what is easily accessible.”*

The others (school A): *“Yes, totally agree.”*

Oskar and Maria (school B): *“Local food.”*

Lukas (school B): *“Yes, local. Right outside our doorstep, we have mushrooms, berries, and local farms producing vegetables.”*

Oskar (school B): *“Red deer, roe deer.”*

Lukas (school B): *“Yes, red deer, roe deer, moose, and a lot of fish.”*

Maria (school B): *“Goose.”*

Lukas (school B): *“Yeah, a lot of geese. So yeah, local food is sustainable. We slaughter pigs at school ourselves, which we get from farms nearby.”*

“We emphasize food produced in the local area. We live in the middle of the fields, so it’s important to take advantage of what’s around you. Price is one reason, but the biggest reason is that we care about the environment.”

Kitchen staff (school B)

When the students from school B were asked about their opinions on reducing meat consumption and climate change, their first response was to increase game meat consumption. Maria added that it was possible to eat more vegetables. Apart from this, the students did not have much to say about this topic.

Interviewer: *“Regarding climate change - it is said that the consumption of red and processed meat should be reduced. What do you think about this?”*

Oscar (school B): *“Eat more venison.”*

Lukas (school B): *“Yes, agreed.”*

Maria (school B): *“There is a lot of meat you can replace too, with vegetables.”*

At school A, eating less meat was more often mentioned as part of a sustainable diet. Both the students and the staff talked about this issue. The students said that reducing GHG emissions and animal welfare were reasons to consume less meat. When the headmaster was asked what was important to focus on when making sustainable changes, he replied: *“I think one of the most important things is to reduce meat consumption. One of the ways you can do that is to have a lot more vegetarian-based food.”* Furthermore, he emphasized that you do not necessarily have to become a vegetarian but rather reduce the amount of meat you put on your plate when you are eating.

“But our goal is to have a balanced diet; meat and fish; we are not just talking about serving vegetarian food instead of fish and meat, but also arrange the serving of the food so that you have the opportunity to take a little less on the plate of what is less sustainable - so less meat and more vegetables. ”

Headmaster (school A)

Other themes mentioned when talking about a sustainable diet were organic food and reduction in food waste. While the staff from school A put much emphasis on using organic food, the students and the staff from school B were preoccupied with reducing food waste. The staff said that little food was thrown away, and this was something they tried to teach to the students. The focus group interview with the students confirmed that this was a topic that the school focused on. They said that they had participated in seminars about sustainable food at the beginning of the school year, where they were encouraged to throw away as little as possible.

4.5.2 Challenges related to eating more plant-based food

When discussing reducing meat consumption, the students mentioned culture, willpower, taste, texture, habits, lack of nutrients, and fullness after a meal as factors that can prove difficult when intending to eat less meat. Lukas (school B) said that culture, willpower, desire, and freedom of choice were barriers to reducing his meat consumption. He also believed that meat is better than plant-based food, so he did not see the point in reducing his meat consumption. Filip agreed as he believed that *“meat is better. The taste is better, and I am worried that I do not get full if I only eat plant-based food”*. Sandra agreed with him, as shown in the quote below. Both Filip’s and Sandra’s hesitant attitudes toward plant-based food originate from their fear of not feeling full after the meal, along with saying that meat’s taste is superior to plant-based foods. When the students discussed meat reduction they focused on replacing meat with vegetables, and they did not really talk about other sources of plant-based protein as an option.

"Yes, culture. Willpower and culture. I want to eat meat; why shouldn't I be allowed to do so. I can make a burger from a moose I've shot or cattle from a local farm or buy myself a plant-based burger. But in my opinion, meat is better."

Lukas (school B)

"I do not feel that I get full when I eat peas and such, but when it comes to meat, it makes me feel full and does so for a longer time, compared to a cauliflower soup."

Sandra (school B)

This reluctant attitude toward plant-based food was also a topic at school A. The discussion revealed that they had experienced fellow students buying meat-based fast food for dinner when they discovered that the school had a meat-free day at the beginning of the school year. The opinion was divided when they discussed whether the students were worried about not feeling full during meat-free days. One opinion was that this was not an issue at all, while the other was that this was a common experience among the majority. The kitchen staff at school B also experienced a reluctant attitude toward plant-based food among the students at the school. He also confirmed that some students are afraid of not feeling full after being served plant-based food.

"Yes, a lot of skepticism towards vegan and vegetarian food. (...) There are two impressions: a vegetarian diet is regarded as "nonsense" and you do not get full. But when we prepare good vegetarian dishes, and they get full, they admit that it is possible."

Kitchen staff (school B)

5 Discussion

The objective of this master's thesis was to investigate the sustainable changes Norwegian Folk High Schools have implemented, how these were implemented, their motivations behind the changes, and what challenges they faced along the way. Another part of the study investigated the students' and the schools' thoughts on sustainable diets. The results indicate that a plant-based menu is not necessarily the main focus of all the existing sustainability measures and that it can be challenging to implement changes. Furthermore, the results indicate that feeling ownership to the project and setting goals is essential to successfully implement changes. The results also demonstrate that there is a lack of awareness of meat's impact on the environment, that some students have a strong attachment to meat, and that a plant-based diet is not necessarily considered as healthy. This chapter will discuss and interpret the findings, relate them to existing literature, and look at the method's limitations.

5.1 Lack of awareness of meat's impact among students

The students did not talk much about meat's impact on the environment when discussing sustainable diets. At school B, this was not mentioned during the discussion about sustainable food. When they were asked what they thought about climate change and the reduction of meat consumption, some said the solution was to eat more venison. The students' response is understandable as a study investigating the impacts of wild deer culling concludes that meat from wild deer appears to be more sustainable than conventional beef (Fiala et al., 2020). However, eating more venison is not a general solution to the meat consumption reduction problem. The fact that the students did not have much to say about meat reduction might indicate that they are not completely aware of livestock production's negative impact on the environment or that they value other sustainability measures more. One student at school B said that he was not entirely sure about the impacts of producing different kinds of food, although he did believe that local food was sustainable. This is in line with findings from previous studies, as consumers tend to not be aware of meat production's effect on the environment (Macdiarmid et al., 2016; Truelove & Parks, 2012; Vanhonacker et al., 2013); however, it has been a heavily debated topic, and recent research reveals a change happening, indicating that people have become more aware of our diets' impact on the environment (de Boer & Aiking, 2022).

One reason students did not mention meat reduction might be that even though they are aware of it, they do not do enough. It could be that the students tried to find reasons or strategies to reduce the cognitive dissonance by justifying their meat consumption (Mathur et al., 2021). Since meat is deeply embedded in western food culture, it might be hard to deal with the negative sides, and reference to culture can be used to rationalize meat consumption (Cheah et al., 2020). Furthermore, because it is a natural part of many people's daily lives, it is not something people think that much about, thus contributing to the lack of awareness (Cheah et al., 2020; Mullee et al., 2017).

Another reason for students not discussing meat's environmental impact could be because it is, as mentioned before, a delicate topic. At school B, several students engaged in hunting spoke freely about this and how important meat was, and this might have discouraged other students from expressing their opinion. One student said she had tried a vegetarian diet for a week without any problems. However, she did not talk much about this during the interview. The reason for this might be because she felt uncomfortable sharing her opinion since some of the other students had already expressed their pro-meat attitudes. The discussion might have been affected by this fact and, as a result, not presenting the true opinions.

5.2 Staff's take on sustainable diets

When discussing the topic of sustainable diets, the headmaster and kitchen staff from both schools focused on locally produced food. This was especially true for the staff from school B, where the reduction of meat was not emphasized to the same degree. It is not uncommon to think that locally produced food emits less GHG (Edwards-Jones, 2010), however, it does not necessarily have to be more environmentally friendly since long food chains use different types of transport that can be more energy-efficient, and therefore possibly cause less environmental harm per kg of a product when considering GHG emissions and pollution (Majewski et al., 2020). Furthermore, most of the emissions derive from the production of the food and not the transport, which is why it generally is important to eat food types that result in low emissions, such as plant-based food, rather than locally produced food (Poore & Nemecek, 2018). Apart from choosing local food over non-local food for environmental reasons, there can be other reasons for this choice, for example, wanting to support local food producers and local employment (Seyfang, 2006; Weatherell, Tregear, & Allinson, 2003).

At school A, the main goal was changing to organic food. Because this led to increased costs, they had to reduce their meat consumption. The headmaster and kitchen chef nevertheless recognized the importance of reducing meat as a sustainability measure, regardless of increased costs or not. However, the students said they experienced the meat-serving as excessive at times. As the school has a green profile, the students might have had higher expectations of the food served. The school's green profile might also have attracted more environmentally conscious students, who are more aware of meat's negative impact on the environment. These students might react stronger if they feel the food served does not match their definition of sustainable food. Some students admitted that the school's focus on the environment was one of the reasons they chose to apply, and because of this focus, they expected that plant-based food serving was taken seriously.

The headmaster at school A said that the school had had some challenges related to a lack of continuity with the kitchen staff, as they had been through a period with a lot of replacements. If the new personnel were not familiar with the school's profile or were used to other practices like serving a lot of meat, they might have continued with what they were used to. Their lack of experience might have led to changes not being properly implemented, which could be why students experienced the meat serving as excessive. The students from school B did not comment on there being too much meat served at the school. This may be because they are used to eating meat and because the school offers hunting courses; thus meat-eating is regarded as normal. Furthermore, the school did not advertise itself as environmentally friendly and, because of that, did not attract students who see themselves as environmentally conscious.

5.3 Plant-based and vegan food is not necessarily healthy

The focus group interviews revealed that there existed some concerns and negative attitudes towards a vegan diet, and it was believed to be a diet leading to nutritional deficiencies. This vegan stigma is in line with previous findings (Markowski & Roxburgh, 2019), as this diet has been associated with being difficult to follow, expensive, and not enjoyable (Bryant, 2019). The reasons for these negative attitudes might derive from not having enough knowledge about a vegan diet or from the polarized nature of the debate in the media between vegans on one side and omnivores on the other (Michielsen & van der Horst, 2022; Sievert, Lawrence, Parker, Russell, & Baker, 2022). However, the findings that the students perceived a vegan diet as less healthy differs from

Bryant (2019) as the meat-eaters in the study thought vegan diets were healthy. The protein content in meat-less diets was also discussed, and it was thought that such a diet provided a lower amount of proteins. This assumption has been reported before, as soldiers in the Norwegian army strongly emphasized animal-based food as the principal protein source (Kildal & Syse, 2017).

A similar attitude regarding a vegan diet was seen from the headmaster (school B). He justified the choice of not training kitchen employees in vegan cooking with the diet being too extreme from a nutritional point of view and not something the school wanted to be responsible for. The reason for this attitude might be influenced by a wish to prioritize other sustainability measures, the school's financial situation, or there might be few or no students following a vegan diet or wanting to follow a vegan diet; thus, they want to focus on changes that involve more students.

5.4 Implementation of changes – experiences

At school A they had managed to implement several sustainable changes successfully. This can be explained by the fact that they set clear goals within a timeframe and that the kitchen staff was involved in the process and felt ownership to the changes. This is backed up by previous studies, which find that clear political goals, strong leadership, commitment, and collaboration between participating parties are emphasized as success factors for change implementation (Smith et al., 2016). At school B the results indicated that the implementation of a vegetarian day once per week had been challenging and not systematically done, and this might be explained by a change process that lacked the factors acknowledged by Smith et al. (2016). Another reason could be that the kitchen staff was afraid of the potential negative feedback they could get from the students, which previously has been experienced when Meat-Free Monday was implemented in the Norwegian Armed Forces (Kildal, 2015). The kitchen staff's impression was that the students had negative associations with vegetarian food, as he had experienced them thinking it was “nonsense” and not making them feel full after meals. The students at school B confirmed this by saying that they sometimes did not feel full after eating a vegetarian meal. Dissatisfaction with not feeling full after eating a plant-based meal has been reported before (Jalil et al., 2020).

The school (B) said that they had tried to implement too many changes in the food offer simultaneously, and this could possibly explain why the implementation of the vegetarian day has been challenging. When implementing too many things at once it can be hard to implement each of them properly and make sure that everything goes according to plan. Changing too much at the same time can cause negative reactions from the ones affected, and the headmaster confirmed that both staff and students reacted negatively to all the changes. However, the data did not indicate if one of these changes was the implementation of the vegetarian day.

Another reason why the implementation did not go through could be a top-down approach. If the kitchen staff were not involved in the process and not provided information about the changes, previous studies show that it is difficult to make them happen (Milford & Kildal, 2019; Smith et al., 2016). As reported in Milford and Kildal (2019), when a Meat-free Monday initiative was tried implemented in the mess halls at the Norwegian Armed Forces, the policymakers did not properly communicate the reason behind doing it and the implementation approach was top-down, with no information or involvement of the kitchen staff. This study highlights the importance of avoiding a top-down approach and this was also confirmed by school A, as shown in paragraph 4.3.

5.5 Why is it difficult to eat more plant-based foods?

The students gave different reasons why they thought it was hard to eat more plant-based food and less meat: culture, lack of willpower, taste, texture, habits, lack of nutrients, and fullness after a meal. These reasons align with what has previously been found (Amiot et al., 2018; de Boer & Aiking, 2021b; de Mestral et al., 2017; Macdiarmid et al., 2016; Mullee et al., 2017; Reipurth et al., 2019). This shows that changing your diet towards a more sustainable one is challenging and contains many barriers. To overcome these barriers, studies point to different measures, such as providing information about the positive sides of eating less meat, setting clear goals and follow-ups when changing behavior, and reducing the size of meat portions (Amiot et al., 2018; Bianchi et al., 2018). Recent studies have demonstrated that meat-reduction interventions have to some degree led to increased consumer awareness and altered consumption patterns (Jalil et al., 2020; Lacroix & Gifford, 2020; Morren, Mol, Blasch, & Malek, 2021). The kitchen staff at school B experienced something similar when students admitted to feeling full after a vegetarian meal

despite having a negative attitude toward meatless meals, which might indicate that exposure can help overcome preexisting presumptions.

5.6 Methodological discussion

A qualitative method with personal interviews and focus group interviews was chosen for this thesis because there has previously not been much research conducted on implementing sustainable meals at schools. However, one can question if the focus group interviews were appropriate to get the answers to the research questions. Plant-based diets and reduction of meat consumption are delicate topics and have often been subject to polarized debates in the media (Michielsen & van der Horst, 2022; Sievert et al., 2022). Sievert et al. (2022) discuss how the topic of red and processed meat reduction is portrayed in the media and how it has led to a conflict with pro-meat on one side and anti-meat on the other. Actors from the meat industry often labeled those in favor of meat reduction as an elite or a “Vegan Agenda”, while many articles from the anti-meat side often used strong and extreme measures when addressing meat consumption reduction (Sievert et al., 2022). This divisive climate of discussion may have impacted the students during the interviews, and based on this, a focus group interview may not be entirely appropriate when the topics being discussed are perceived as sensitive. The participants might not feel comfortable discussing the issues as they might feel insecure.

For example, one student said that she often felt judged when it was revealed that she was a vegetarian. She often had to defend herself and her choice, and it made her feel uncomfortable. These experiences might have contributed to her not fully sharing her opinions. The fact that the students did know each other beforehand could have influenced the discussion of the delicate topics. Knowing someone might make it easier to speak up and share your opinion. However, as they studied different courses at the school, there might have been some students who did not know each other that well. If they felt a bit insecure, these students might not have felt comfortable sharing their opinion in the group as they were afraid to be judged or labeled. Another factor that might have influenced the participants by sharing their views was recording the interviews. Some might feel uncomfortable and worried about being recorded and, consequently, not sharing their genuine opinion (Al-Yateem, 2012).

Other methods that could have managed to get the students' opinions if they were afraid to speak the truth could have been a one-to-one interview or a questionnaire. However, due to time constraints, one-to-one interviews with all the students would have been too time-consuming, and a questionnaire would not give this thesis in-depth knowledge. Also, it would have meant missing out on the advantages of focus group interviews (spontaneity, collecting unexpected insights, etc.).

Only two schools were investigated out of the 86 Folk High Schools in Norway, and they are not representative as other interviews done in the project reveal that there exist large differences. Additionally, as only two focus group interviews were conducted with only 6 students in each, one cannot draw any general conclusions from the findings. How many focus group interviews are required depends on the project, and the literature does not completely agree, as the number ranges from as little as 3 to 5 and up to 12 and 15 (Johannessen et al., 2016). However, it is thought that when you reach the point where the focus groups do not provide anything new, the information saturation is reached (Johannessen et al., 2016). The low number of interviews is a limitation of the study, and further work is recommended to combine these interviews with additional ones for more substantial findings. In the case of this master thesis, it is a part of a larger project where more interviews will be conducted and analyzed, and a quantitative study performed.

When moderating a focus group, it is important to make sure that everyone feels included and comfortable sharing their opinion. This can be a challenging task, and as it was my first interview experience, this could have influenced the data collected. The focus groups had some students that were more dominating than others. It was at times challenging to deal with the dominant students while simultaneously including the students who did not speak so often, in addition to making sure that all the topics were covered. The fact that some students had less to say or just nodded and agreed to what their fellow students said could have potentially given less variation in the insights. However, for the second focus group interview, I felt more comfortable and managed to a greater extent to include those who did not say much.

For the one-to-one interviews, it was important that the staff interviewed had worked at the school for some time and had experienced implementing the changes. For both schools, this was a challenge. The headmaster at school A worked in a different position when the implementation started, and therefore, he could not contribute much to the change process. The kitchen chef had recently started in this position at school B, so he did not have much to say about the change

process. The fact that these employees did not work at the school when changes were implemented might have provided the thesis with poorer insight into the change process. Before the schools were selected, they were asked if the kitchen staff had worked at the school for a long time. In retrospect, this question should have been more precise and asked specifically if the kitchen chief had worked at the school during the implementation.

When analyzing qualitative data, triangulation is recommended to increase the credibility of the research (Johannessen et al., 2016). Different researchers interpret and see things differently, and because of this, it is important to involve more people. This is to ensure that the findings are not influenced by bias or that some points in the analysis process are overlooked. Every researcher will enter a research process with his or her values, expectations, and a given preconception (Johannessen et al., 2016). As long as you are aware of this and try to control it, you will be able to avoid that your acquired knowledge and perception of reality will affect the research negatively by altering the findings (Saunders, 2007). For the analysis and coding of this thesis, I discussed my choice of codes with my supervisor, but with more people involved in this process, a higher degree of credibility could have been reached (Tracy, 2019).

6 Conclusion

The thesis aimed to answer *what are the barriers and opportunities for more sustainable meal servings at Norwegian Folk High Schools*. Based on the qualitative interviews, this thesis reveals that implementing sustainable menu changes can be challenging, but nevertheless possible, as long as the staff performing the changes feels ownership to and are well-informed about the project. Investigation of the challenges related to the implementation of changes reveals that implementing too many changes in the food offer simultaneously, applying a top-down approach, and unawareness regarding meat production's environmental impact among both staff and students are factors that potentially prevent a successful implementation. This research illustrates that students' attitudes regarding food to some extent are influenced by the exposure to sustainable meal servings at Folk High Schools, although research must investigate this matter further to be able to make such a conclusion.

Other Norwegian Folk High Schools that are considering making sustainable diet changes in the future should consider setting clear goals and making sure that the kitchen staff is motivated and feels ownership to the project, in addition to providing the students with a wide range of plant-based meal options.

Potential future research should also investigate effective methods to provide both staff and students with information about the environmental effects of meat production to increase the awareness and potentially change food-related behavior, as the results indicate that other sustainable measures were emphasized to a bigger extent by the schools and students.

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Appendices

Appendix A

Interview guide I, II & III

I. Students

Diskusjonsguide – fokusgrupper mars 2022

Total tid for hver gruppe: 1,0 – 1,5 timer

<p>INTRODUKSJON</p> <p>10 minutter</p> <p>Introduksjon fra moderator</p> <ul style="list-style-type: none">• Velkommen til fokusgruppe-intervju• Takke for deltakelse• Hvorfor elevene er valgt ut og presentasjon av tema for intervjuet• Informasjon om opptak og beskyttelse av data• Skrive under på infoskriv• Tidsbruk <p>Deltagerne presenterer seg selv (skrive navn på navnelapp)</p>	<ul style="list-style-type: none">✓ Presentere meg selv✓ Dere har erfaringer som er relevante for oppgaven - er en del av prosjektet <i>Sustainable Eaters</i> ved Nofima.✓ Hensikten: bedre innsikt i hvordan omlegging til et bærekraftig kosthold foregår og da blant annet hvordan dere elever opplever dette. <p>Spilleregler:</p> <ul style="list-style-type: none">✓ Husk at det ikke er noen feil eller riktige svar✓ Jeg vil gjerne høre alle sin mening✓ Det er lov å være uenige med hverandre, ikke meningen at dere skal komme til enighet✓ Bare still oppfølgingsspørsmål til hverandre
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<p>Moderator starter med personen på sin venstre og går rundt bordet. Spør om fornavn, alder, hvilken linje de går, og hvilken favoritt-rett på skolen de har.</p>	<ul style="list-style-type: none"> ✓ Siden vi ikke har så mye tid kan det hende at jeg må bryte inn hvis samtalen sporer av i forhold til tema ✓ Husk å si ifra om mobil ✓ Det er lov å trekke seg når som helst hvis en skulle ønske det ✓ Sjekker lydopptak og starte opptaket
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Husk navnelapper

Penner/Tusjer

<p>Måltider – skolen og hjemme 10 min</p> <p>Maten dere får servert her på skolen sammenlignet med den hjemmefra</p> <p>Kan dere fortelle meg hva de største forskjellene mellom maten dere spiser her på skolen og det dere er vant med hjemmefra</p>	<p><i>Start med personen som ønsker å svare først, spør så videre de andre deltagerne om hvordan de gjør det.</i></p> <ul style="list-style-type: none"> • Største forskjeller • Oppvekst • Skolens kosthold endret synet på mat – i så fall hva? • Take-away? Matbutikk? Restaurant?
<p>Bærekraftig kosthold 20-25 min</p> <p>Tanker rundt et bærekraftig kosthold – hva man forbinder med det</p> <p>Kan dere nevne eksempler på noen bærekraftige retter (som dere liker)?</p>	<ul style="list-style-type: none"> • Plantebasert/Lokalt/Økologisk/Redusere matsvinn osv. • Tema som opptar dere? • Tenker/reflekterer på dette når dere (velger hva dere) spiser?

<p>Fellestrekk mellom sunt og bærekraftig kosthold</p> <p>Tanker om skolen og servering av bærekraftig mat</p> <p>Har skolens fokus på bærekraftig kosthold hatt innflytelse på valg av denne skolen?</p>	<ul style="list-style-type: none"> • Sunt = bærekraftig? • Opptatt av å få i seg nok næringsstoffer? • Dette mulig med et bærekraftig kosthold? Må noe gå på bekostning av noe annet? à Nok proteiner? • Skolen og bærekraft • Hva skolen gjør bra • Skolens forbedringspotensial? • Hvorfor/hvorfor ikke? I hvilken grad?
<p>Plantebasert/vegetar vs. kjøtt</p> <p>20-25 min</p> <p>Deres forhold til å spise kjøtt? Plantebasert?</p> <p>Hvis dere kan velge mellom et kjøttalt. med et plantebasert alt. – hva velger dere og hvorfor?</p> <p>Hva er vanskelig med å kutte kjøtt?</p> <p>Henter informasjon fra hvor med tanke på å kutte kjøtt?</p>	<ul style="list-style-type: none"> • Forhold til kjøttspising • Forhold til vegetar/plantebasert mat • Noe som mangler uten kjøtt? • Smaksopplevelse? • Like fornøyd? • Like mett? • Nok næringsstoffer • Trening/aktivitet og kutte kjøtt • Sosialt/tradisjoner/identitet

	<ul style="list-style-type: none"> • Internett, SoMe, venner, familie etc.
<p>Kosthold og påvirkning</p> <p>15 min</p> <p>Når dere tenker på hva dere spiser – hvem eller hva påvirker dere?</p> <p>Hva skal til for å endre en vane – hvilke faktorer spiller inn</p>	<ul style="list-style-type: none"> • Familie, venner, influensere, reklame, SoMe • Tradisjoner, identitet, vaner • Økonomi • Miljø

<p>Kosthold i fremtiden</p> <p>10 min</p> <p>Se for dere dere selv om 1 års tid – kanskje dere har flyttet for å studere – hvordan tror dere kostholdet deres vil være?</p> <p>Holde på vaner fra skolen?</p>	<ul style="list-style-type: none"> • Hvilke vaner? • Holde på vaner – hva skal til? • Årsak til at man ikke klarer å endre vaner
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<p>Avslutning</p> <p>5 min</p> <p>Noe å legge til? Noe dere føler burde blitt nevnt?</p> <p>Takke igjen for deltakelse</p>	<p>Deres synspunkter er viktig for å forstå hvordan man kan overkomme evt. utfordringer i forbindelse med omlegging av kosten til mer sunn og bærekraftig. Håper dere også har fått noe ut av å være med – at det har vært nyttig og interessant.</p> <p>Tusen takk!</p>
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Intervjuguide – rektor mars 2022

Total tid: 1 time

<p>INTRODUKSJON</p> <p>10 minutter</p> <p>Introduksjon fra moderator</p> <ul style="list-style-type: none">• Velkommen til intervju• Takke for deltakelse• Hvorfor ansatt er valgt ut og presentasjon av tema for intervjuet• Informasjon om opptak og beskyttelse av data• Signere infoskriv• Tidsbruk <p>Bakgrunnsinformasjon:</p> <p>Vi gjennomfører denne diskusjonsgruppen fordi vi ønsker å få en bedre innsikt i hvordan omleggingen til et bærekraftig kosthold foregår og hvilke erfaringer dere har gjort dere</p> <p>Hvor lenge har du vært rektor? Gått på FHS selv?</p>	<p>✓ Sjekker lydopptak og starte opptaket</p> <p>✓ Presentere meg selv</p> <p>✓ Dere har erfaringer som er relevante for oppgaven - er en del av prosjektet <i>Sustainable Eaters</i> ved Nofima.</p> <p>✓ Hensikten: bedre innsikt i hvordan omlegging til et bærekraftig kosthold foregår og da blant annet hvordan dere elever opplever dette.</p>
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<p>Skolen, kosthold og bærekraft</p> <p>10 min</p>	
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<p>Tenkte at vi først kunne snakke om bærekraftig kosthold – et litt stort og bredt tema.</p> <p><i>Har allerede snakket litt om det på telefonen; endringer som skolen har gjort ifm bærekraftig kosthold – sammenligne med tidligere år</i></p>	<ul style="list-style-type: none"> • Sunt og bærekraftig kosthold – hva innebærer det? • Hva legger skolen vekt på? • Noe skolen har oppnådd? • Vegetar – hvor ofte, hva slags type og betaler elever mer for dette? • Gradvise endringer?
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<p>Endringsprosessen i mer dybde</p> <p>20 min</p> <p><i>Startet så vidt å snakke om hvilke endringer dere har gjort – tenkte vi kunne gå litt mer i dybden på hvordan denne prosessen foregikk.</i></p> <p>Fortelle om hvordan dere kom fram til endringene som har blitt gjort?</p> <p>Hvordan ble endringene iverksatt?</p> <p>Mottakelse av forslag til endringer blant ansatte og elever?</p> <p>Ble det gitt noen spesiell opplæring/kurs?</p>	<ul style="list-style-type: none"> • Motivasjon/årsak? • Initiativtaker? • Årsak til at man ikke klarer å endre vaner • Hvem var ansvarlig? • Gitt god nok informasjon til alle involverte? • Hvorfor mottatt slik? • Utbytte?
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<p>Gitt noen informasjon til de kjøkkenansatte om bakgrunnen for å gjøre denne typen endringer? Hvordan har endringene påvirket skolens økonomi?</p>	<ul style="list-style-type: none"> • Hvis ikke, hvordan gikk de kjøkkensatte fram når disse endringene skulle gjennomføres? • Hvor ble informasjonen hentet fra?
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<p>Erfaringer 15 min</p> <p><i>Har fått høre mer om hvordan omleggingen har foregått, lurer på hvilke erfaringer du/skolen sitter igjen med ifm omlegging av kosthold i mer bærekraftig retning.</i></p> <p>Samarbeid mellom kjøkkenet og admin? Respons fra elevene? Forskjell mellom årskull? Opplever du at de kjøkkenansatte er motivert til å servere mer bærekraftig mat?</p> <p>Hva har vært positivt med meny-endringene? Hva med negativt? Hvordan dra nytte av erfaringene i framtida?</p>	<ul style="list-style-type: none"> • Hva har fungert/ikke fungert? Konkrete eksempler. à Kostnader – innkjøp og økt arbeidsmengde? • Gjort noe annerledes? • Fornøyd med tilbudet som finnes? Hvorfor/hvorfor ikke? • Har de nok kompetanse? • Eventuelle utfordringer? • Evt. viktige motivasjonsfaktorer for at de gjennomfører disse endringene? • Hva har vært suksessfaktorer ved kjøkkenansatte for å få til endringene?
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<p>Hvilke utfordringer har skolen ifm. servering av bærekraftig mat?</p> <p>Har dere anbefalinger til andre FHS som har tenkt å gjøre det samme?</p>	<ul style="list-style-type: none"> • Økt bevissthet blant elever osv.?
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<p>Avslutning</p> <p>5 min</p> <p>Legge til noe? Noe viktig som du vil tilføye som vi ikke har vært innom?</p> <p>Takke igjen for deltakelse!</p> <p>Deres synspunkter er viktig for å forstå hvordan man kan overkomme evt. utfordringer i forbindelse med omlegging av kosten til mer sunn og bærekraftig. Håper dere også har fått noe ut av å være med – at det har vært nyttig og interessant.</p>	<ul style="list-style-type: none"> • Alt i alt, verdt innsatsen? • Anbefalt andre FHS å gjøre det samme? Hvorfor Ja eller Nei?
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III. Kitchen staff

Intervjuguide – kjøkkenansatt mars 2022

Total tid: 1 time

<p>INTRODUKSJON</p> <p>10 minutter</p> <p>Introduksjon fra moderator</p> <ul style="list-style-type: none">• Velkommen til intervju• Takke for deltakelse• Hvorfor ansatt er valgt ut og presentasjon av tema for intervjuet• Informasjon om opptak og beskyttelse av data• Signere infoskriv• Tidsbruk <p>Bakgrunnsinformasjon:</p> <p>Vi gjennomfører denne diskusjonsgruppen fordi vi ønsker å få en bedre innsikt i hvordan omleggingen til et bærekraftig kosthold foregår og hvilke erfaringer dere har gjort dere</p> <p>Hvor lenge har du jobbet her Gått på FHS selv?</p>	<p>✓ Sjekker lydopptak og starte opptaket</p> <p>✓ Presentere meg selv</p> <p>✓ Dere har erfaringer som er relevante for oppgaven - er en del av prosjektet <i>Sustainable Eaters</i> ved Nofima.</p> <p>✓ Hensikten: bedre innsikt i hvordan omlegging til et bærekraftig kosthold foregår og da blant annet hvordan dere elever opplever dette.</p>
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Skolen, kosthold og bærekraft

10 min

Tenkte at vi først kunne snakke om bærekraftig kosthold – et litt stort og bredt tema.

Endringer som skolen har gjort ifm bærekraftig kosthold – sammenligne med tidligere år

Det praktiske ved matserveringen

20-30 min

Har fått snakket litt om hvordan dere har forandret mattilbudet og litt om skolens syn på bærekraftig kosthold – tenkte vi kunne gå litt inn på hvordan dere jobber på kjøkkenet

Matsserveringen på skolen – hvordan den foregår?

Prosessen med å sette opp en uke-meny?

Hvordan presenteres maten?

- Sunt og bærekraftig kosthold – hva innebærer det?
- Hva legger skolen vekt på?
- Noe skolen har oppnådd?

- Vegetar – hvor ofte, hva slags type og betaler elever mer for dette?
- Gradvise endringer?

- Buffet?
- Porsjoner?
- Faste retter på faste dager?
- Noen retter mer populære? Noen mer upopulære?
- Hvorfor har skolen valgt å servere på denne måten?

- Hvem setter opp?
- Ansvarlig for innkjøp?
- Hva ligger til grunn for de ulike valgene som tas?
à Økonomi, sesongvarer, tradisjoner, restemat, ernæring, osv.?
- Plan for å tilby elever næringsrik mat?

<p>Elevene på kjøkkentjeneste - deltakelse</p>	<p>à Hvordan blir vegetarianere fulgt opp? à utfordringer?</p> <ul style="list-style-type: none"> • Annonseres f.eks. vegetar, økologisk, restemat etc.? • Hvorfor/hvorfor ikke annonseres det? • Elevens reaksjon? • Gitt opplæring/informasjon? Hvor delaktige? • Interesse for bærekraftig kosthold? • Plantebasert mat vs. kjøtt
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<p>Endringsprosessen i mer dybde</p> <p>10 min</p> <p><i>Startet så vidt å snakke om hvilke endringer dere har gjort – tenkte vi kunne gå litt mer i dybden på hvordan denne prosessen foregikk.</i></p> <p>Fortelle om hvordan dere kom fram til endringene som har blitt gjort?</p> <p>Hvordan ble endringene iverksatt?</p> <p>Mottakelse av forslag til endringer blant ansatte og elever?</p> <p>Ble dere gitt noen spesiell opplæring/kurs?</p>	<ul style="list-style-type: none"> • Motivasjon/årsak? • Initiativtaker? • Årsak til at man ikke klarer å endre vaner • Hvem var ansvarlig? • Gitt god nok informasjon til alle involverte? • Hvorfor mottatt slik?
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	<ul style="list-style-type: none"> • Fornøyd med opplæring? Hvorfor/hvorfor ikke? • Hvis ikke, hvordan gikk dere fram når disse endringene skulle gjennomføres? • Hvor ble informasjonen hentet fra?
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<p>Erfaringer</p> <p>15 min</p> <p><i>Har fått høre mer om hvordan omleggingen har foregått, lurer på hvilke erfaringer du/skolen sitter igjen med ifm omlegging av kosthold i mer bærekraftig retning.</i></p> <p>Samarbeid mellom kjøkkenet og admin? Respons fra elevene? Forskjell mellom årskull?</p> <p>Hva har vært positivt med meny-endringene? Hva med negativt? Hvordan dra nytte av erfaringene i framtida? Hvilke utfordringer har skolen ifm. servering av bærekraftig mat? Har dere anbefalinger til andre FHS som har tenkt å gjøre det samme?</p>	<ul style="list-style-type: none"> • Hva har fungert/ikke fungert? Konkrete eksempler. à Kostnader – innkjøp og økt arbeidsmengde? • Gjort annerledes? • Enkelt/vanskelig med leveranse av produkter? • Fornøyd med tilbudet som finnes? Hvorfor/hvorfor ikke? • Økt bevissthet blant elever osv.?
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Avslutning

5 min

Legge til noe? Noe viktig som du vil tilføye som vi ikke har vært innom?

Takke igjen for deltakelse!

Deres synspunkter er viktig for å forstå hvordan man kan overkomme evt.

utfordringer i forbindelse med omlegging av kosten til mer sunn og bærekraftig. Håper dere også har fått noe ut av å være med – at det har vært nyttig og interessant.

Appendix B

Approval from Norsk samfunnsvitenskaplig datatjeneste (NSD).

NSD NORSK SENTER FOR FORSKNINGSDATA

Vurdering

Referansenummer

114663

Prosjekttittel

Masteroppgave om bærekraftig kosthold ved folkehøyskoler

Behandlingsansvarlig institusjon

NIBIO – Norsk institutt for bioøkonomi / Divisjon for matproduksjon og samfunn

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Anna Birgitte Milford, anna.birgitte.milford@nibio.no, tlf: 99049836

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Lina Fjørkenstad Dypdal, lina.fjorckenstad.dypdal@nmbu.no, tlf: 46533567

Prosjektperiode

05.01.2022 - 01.04.2025

Vurdering (1) 20.01.2022 - Vurdert

Det er vår vurdering at behandlingen vil være i samsvar med personvernlovgivningen, så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet den 20.01.2022 med vedlegg. Behandlingen kan starte.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige personopplysninger frem til 01.04.2025.

LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 nr. 11 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse, som kan dokumenteres, og som den registrerte kan trekke tilbake.

For alminnelige personopplysninger vil lovlig grunnlag for behandlingen være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 a.

PERSONVERNPRINSIPPER

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

- om lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet

- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet.

DE REGISTRERTES RETTIGHETER

Vi vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

Vi legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må prosjektansvarlig følge interne retningslinjer/rådføre dere med behandlingsansvarlig institusjon.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til oss ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilken type endringer det er nødvendig å melde: <https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema>

Du må vente på svar fra Personverntjenester før endringen gjennomføres.

OPPFØLGING AV PROSJEKTET

Personverntjenester vil følge opp underveis (hvert annet år) og ved planlagt avslutning

for å avklare om behandlingen av personopplysningene er avsluttet/pågår i tråd med den behandlingen som er dokumentert.

Lykke til med prosjektet!

Appendix C

The letter of consent that was handed out to the students and staff before the interviews.

Vil du delta i forskningsprosjektet «Sunt og bærekraftig kosthold ved norske folkehøgskoler»?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å lære fra omlegginger av kosthold i en bærekraftig retning ved norske folkehøgskoler. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med masteroppgaven er å kartlegge hvilke muligheter og utfordringer norske folkehøgskoler har når de legger om til et mer bærekraftig kosthold. Oppgaven vil se nærmere på hvordan en slik menyendring gjennomføres, og hvilke erfaringer folkehøgskolene gjør underveis. Elevenes reaksjon og hvordan de mottar menyendringene vil også undersøkes. Det vil utføres kvalitative intervjuer ved utvalgte folkehøgskoler, og disse vil utgjøre hoveddelen av oppgaven. Masteroppgaven er en del av prosjektet «Sustainable Eaters» ved Nofima.

Hvem er ansvarlig for forskningsprosjektet?

NIBIO – Norsk institutt for bioøkonomi er ansvarlig for prosjektet. Masteroppgaven skrives ved Norges miljø- og biovitenskapelige universitet (NMBU).

Hvorfor får du spørsmål om å delta?

Du er vurdert til å være en person som har relevant kunnskap om omlegging av bærekraftig kosthold ved norske folkehøyskoler.

Hva innebærer det for deg å delta?

Datainnsamlingen vil foregå gjennom intervju for ansatte og fokusgruppeintervju for elever.

Det er frivillig å delta

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

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

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

- Data lagres elektronisk på NIBIOs filtjener for prosjektdata, i en arbeidsmappe med begrenset tilgang. Kun forskerne som deltar i dette delprosjektet har tilgang til mappen, i tillegg til it-teknisk personale med ansvar for systemforvaltningen.
- Prosjektansvarlig, student og interne medarbeidere vil kunne behandle og ha tilgang til opplysningene.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Prosjektet «Sustainable Eaters» skal etter planen avsluttes ved i mars 2025. Arbeidsmappen med begrenset tilgang nevnt ovenfor vil iht. NIBIOs rutiner flyttes til prosjektarkivet. Alle data som lagres vil være anonymiserte.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke. På oppdrag fra *NIBIO* har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

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

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

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

- *NIBIO – Norsk institutt for bioøkonomi* ved Anna Birgitte Milford, anna.birgitte.milford@nibio.no, 99049836 (mobil).
- Lina Fjørkenstad Dypdal, student ved NMBU, [lina.fjorkenstad.dypdal@nmbu](mailto:lina.fjorkenstad.dypdal@nmbu.no), 46533567 (mobil)
- NIBIOs personvernombud: Harald Lossius, Avdeling for dokumentforvaltning, harald.lossius@nibio.no.

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

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 53 21 15 00.

Med vennlig hilsen

Anna Birgitte Milford
(Forsker/veileder)

Lina Fjørkenstad Dypdal
(Student)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet «Sunt og bærekraftig kosthold ved folkehøyskoler», og har fått anledning til å stille spørsmål. Jeg samtykker til å delta i intervju, og til at mine opplysninger behandles frem til prosjektet avsluttes, 1.4.2025.

(Signert av prosjektdeltaker, dato)



Norges miljø- og biovitenskapelige universitet
Noregs miljø- og biovitenskapelige universitet
Norwegian University of Life Sciences

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