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# **The Role of Dairy and Dairy Alternatives in Food Preparation Practice: Insights from the Countryside of North Ostrobothnia**

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| <p>Tiivistelmä – Referat – Abstract</p> <p><b>Background:</b> Dairy has a culturally and economically quintessential role in European countries while significantly contributing to GHG emissions. However, flexitarian dairy consumers are scarcely researched, especially in Finland, one of the world's most dairy-intense countries. There is a rising need for comprehensive research on dairy consumption and the role of dairy in everyday life food consumption practices.</p> <p><b>Objectives:</b> With a social practice theoretical approach, this study aims to understand the role of dairy and dairy alternatives in the food preparation practice of Finns in North Ostrobothnia's countryside. Daily food preparation and its performances can be defined as routine-like behaviour that consists of several interconnected elements: bodily and mental activities, things and their use, and background knowledge such as understanding, know-how, emotions, and aspirations. The main research objective is divided into two sub-themes: a) <i>what kinds of competences, materials and meanings support the use of dairy in people's daily food preparation practice</i>, and b) <i>what kinds of competences, materials and meanings promote a change in food preparation practice regarding the use of dairy alternatives</i>.</p> <p><b>Methods:</b> The data consisted of semi-structured interviews (n=11) gathered through discretionary chain-referral sampling. The study's participants were required to be born after 1980, live in the countryside of North Ostrobothnia and consume dairy products regularly. The transcribed data was analysed by structuring and coding it into themes formed by elements of competences, materials, and meanings and their interconnections.</p> <p><b>Results and conclusions:</b> Dairy holds quintessential value in routinised food preparation. Dairy's role in food preparation was significant as interviewees had a vast amount of silent knowledge and skills on using dairy products to achieve fulfilling and tasty meals approved by others around the same table. Interviewees were accustomed to using particular ingredients provided at home, and dairy was often used in food preparation alongside those foodstuffs. Regularly used recipes often included some type of dairy product. The taste and texture of dairy were highly valued, having a strong cultural meaning: foods containing dairy were considered as 'proper' food. Meanings to use dairy alternatives instead of dairy were sustainable and ethical issues, health-related concerns, pure curiosity, and taste. Dairy alternatives were used as dairy products, which made them facile to use as new skills or know-how were not needed. In contrast, a lack of proven recipes and competences to prepare food from dairy alternatives also prevented interviewees from using them. Interviewees did not want to compromise the taste of everyday meals, and dairy alternatives were only used if they did not affect the taste or texture of the food. Preparing food from dairy was intertwined with other food consumption practices, such as eating and shopping for food, which could be concentrated on in future research. More comprehensive cultural change in food consumption practices is required to shift from dairy to plant-based alternatives.</p> |  |   |
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| Tiivistelmä – Referat – Abstract<br>Maitotuotteilla on kulttuurisesti ja taloudellisesti keskeinen asema Euroopan maissa. Samalla maidontuotanto aiheuttaa merkittävästi kasvihuonekaasupäästöjä. Kuitenkaan sekä maito- että niitä korvaavia tuotteita käyttäviä kuluttajia ei ole juuri tutkittu eritoten Suomessa, jossa maitotuotteiden kulutus on kansainvälisesti vertailtuna suurta. Kattavalle tutkimukselle maitotuotteiden käyttäjistä ja maitotuotteiden roolista arkipäivän ruoankulutuskäytännöissä on kasvava tarve.<br><br>Tämän tutkielman tavoitteena on ymmärtää maitotuotteiden ja kasviperäisten maitoa korvaavien tuotteiden roolia suomalaisten ruoanvalmistuksessa Pohjois-Pohjanmaan maaseudulla sosiaalisten käytäntöjen teorian kautta. Päivittäinen ruoanvalmistus ja sen käytänteet voidaan määritellä rutiininomaiseksi käyttäytymiseksi, joka koostuu useista toisiinsa kytkeytyvistä elementeistä: ruumiillisista ja henkisistä toiminnoista, materiaalisista elementeistä ja niiden käytöstä sekä taustalla vaikuttavista tekijöistä kuten ymmärryksestä, tietotaidosta, tunteista ja toiveista. Tutkimuksen päätavoite jakautuu kahteen tutkimuskysymykseen: a) <i>millaiset osaamiset, materiaalit ja merkitykset tukevat maidon käyttöä ihmisten päivittäisissä ruoanvalmistuskäytännöissä</i> ja b) <i>millaiset osaamiset, materiaalit ja merkitykset edistävät muutosta ruoanvalmistuskäytännössä kasviperäisten maitoa korvaavien tuotteiden käytön suhteen</i> .<br><br>Aineisto koostui puolistrukturoiduista haastatteluista (n=11), jotka kerättiin harkinnanvaraisella lumipallo-otannalla. Tutkimukseen osallistuvien tuli olla vuoden 1980 jälkeen syntyneitä, asua Pohjois-Pohjanmaan maaseudulla ja käyttää säännöllisesti maitotuotteita. Litteroitu aineisto analysoitiin jäsentämällä ja koodaamalla teemoihin, jotka muodostuivat osaamisten, materiaalien ja merkitysten elementeistä ja niiden keskinäisistä yhteyksistä.<br><br>Maitotuotteilla on keskeinen merkitys rutiininomaisessa ruoanvalmistuskäytännössä. Maitotuotteiden rooli ruoanvalmistuksessa oli merkittävä, sillä haastateltavilla oli valtava määrä hiljaista tietoutta siitä, miten maitotuotteita käyttämällä saatiin aikaan täyttäviä ja maukkaita aterioita niin itselle kuin muille kotitaloudessa asuville. Haastateltavien kotoa löytyi tiettyjä raaka-aineita, joita he olivat tottuneet käyttämään, ja maitotuotteita käytettiin ruoanvalmistuksessa usein näiden elintarvikkeiden rinnalla. Arjessa säännöllisesti käytetyt reseptit sisälsivät usein jotain maitotuotetta. Maitotuotteiden makua ja koostumusta arvostettiin suuresti, ja niillä oli vahva kulttuurinen merkitys: maitotuotteita sisältäviä ruokia pidettiin ”oikeana” ruokana. Maitotuotteita korvattiin ruoanvalmistuksessa kasviperäisillä tuotteilla ympäristöön ja eläinten hyvinvointiin liittyvien kysymysten sekä terveydellisten ongelmien vuoksi, mutta myös puhtaasta uteliaisuudesta ja maun vuoksi. Maitoa korvaavia tuotteita käytettiin ruoanvalmistuksessa kuten maitotuotteita, mikä teki niiden käytöstä helppoa, koska uutta osaamista ei tarvittu. Toisaalta toimivien reseptien ja osaamisen puute esti haastateltavia käyttämästä maitoa korvaavia tuotteita. Maitoa korvaavia tuotteita käytettiin vain, jos ne eivät vaikuttaneet ruoan makuun tai koostumukseen. Ruoan valmistaminen maitotuotteista kietoutui muihin ruoankulutuskäytäntöihin, kuten syömiseen ja ruokaostosten tekemiseen, joihin on mahdollista keskittyä tulevissa tutkimuksissa. Kattavampi kulttuurinen muutos ruoankulutuskäytännöissä on tarpeen, jotta siirtyä maitotuotteista kasviperäisiin tuotteisiin olisi mahdollinen. |  |   |
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## 1. Introduction

Over a decade ago, researcher Tim Lang addressed the major 21<sup>st</sup>-century food policy challenge in his keynote paper for the United Nations' proceedings of the international scientific symposium (FAO, 2012, p. 21). Lang presents his argument by raising the following questions to the reader:

*“Do I eat ever more meat and/or dairy (an indicator of rising income)? Or do I consume a diet primarily of plants? If I want to eat meat and dairy, what is the right amount, measured against what indicators? And is this the same everywhere?”*

People inhabiting the Western world are increasingly aware of the environmental impacts of food production, especially that of beef and dairy.<sup>1</sup> In 2015, the United Nations (UN) presented a list of sustainability goals, some directly linked to food production, food safety, and climate change (FAO, 2017). Interestingly, one of the goals also considered people's eating behaviours: *Ensure sustainable consumption and production patterns*.

It is widely agreed that many familiar ways of life and food consumption patterns related to them are fundamentally unsustainable, contributing significantly to the climate change challenges (Shove, 2010b, p. 1273). Despite the awareness of food and sustainability, eating habits in Western countries have not changed drastically toward more environmentally friendly diets. Several studies show a remarkable gap between caring for the environment and changing one's consumption patterns accordingly toward more sustainable behaviour (see Connolly & Prothero, 2008; Halkier, 1999, 2001; Macnaghten, 2003; Sargant, 2014, pp. 23–24). Thus, there is also a larger need for research that addresses the materiality of consumption rather than focuses on the meanings and aspirations of individuals (see Warde, 2014).

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<sup>1</sup> The environmental impact of diets is usually measured by the food system's greenhouse gas (GHG) emissions. The food system's impact on GHG emissions is widely recognised (Irz et al., 2019, p. 168). The production, transportation, processing, preparation, and storage account for 15-30% of all GHG emissions (Esnouf et al., 2013; Garnett, 2011), which makes the food system one of the most significant contributors to global warming. Internationally, the cattle industry is estimated to produce about 11% of all human-induced GHG emissions (Smith et al., 2013). In addition to the beef industry, dairy production significantly contributes to the total GHG emissions (Rotz, 2018, p. 6675).

The discrepancy may lie in the fact that despite the environmental aspects, food is also a cultural matter. Dairy – as well as many other animal-based foods – has a remarkable role in various food cultures of Western societies (see Laakso et al., 2021, p. 168). In Europe, the consumption and production of dairy is significant. According to the market overview by ProAgria (2020)<sup>2</sup>, dairy production in the European Union is currently higher than ever before. Hence, dairy consumption is also a quintessential economic factor in European countries. All this is exceedingly true in Finland, where dairy is of culinary, economic, and public health importance (see Mäkelä & Rautavirta, 2018; NNR, 2014).

When promoting sustainable forms of food consumption, one must address the challenge of transforming deep-rooted culinary habits into more sustainable practices. It is continuously more recognised that a shift towards more sustainable food consumption needs a substantial transformation of current societies and reconfiguration of social life. This requires not only governance and technocratic solutions but also fundamental changes in people's mindsets and everyday life practices, as conscious decision-making itself is not enough to change behavioural patterns (see Feola, 2015, pp. 380–382; Feltz et al., 2022; Head, 2019; Lang & Mason, 2017, pp. 1–3; Maller, 2015, p. 53; Mäkelä & Niva, 2016, pp. 176, 180; O'Brien et al., 2012, pp. 462–463; O'Brien & Sygna, 2013, pp. 3–4, 6–7; Owen et al., 2004; Shove, Pantzar & Watson, 2012, p. 19; Standal & Westkog, 2022, p. 7). Mäkelä and Niva (2016, p. 178) call for a *sustainable culinary culture* where food and eating are seen as a joint effort of production, distribution and everyday life patterns that requires collective action and mobilisation (see also Welch & Warde, 2015, p. 84).

The notion that everyday transformations at the individual and collective level might have effective transitions toward a sustainable future has led to an emerging interest in understanding the complex nature of everyday life food consumption practices<sup>3</sup>. To understand people's actions as food consumers, we need more information on 'why' and 'in what ways' people engage in food consumption activities (see Sahakian and Wilhite, 2014, p. 26). That is why the biophysical understanding of sustainable food consumption needs to include a view of food consumption as bound up with everyday social life in specific contexts (see Sahakian and Wilhite, 2014, p. 26).

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<sup>2</sup> ProAgria is a Finnish national organisation in the agricultural sector that offers development and consulting services.

To understand dairy consumption and the role of dairy in Finnish food culture, one must acknowledge the role of mundane actions in building and shaping culture rather than focus solely on the meanings behind dairy use (see Warde, 2005; 2014). Hence, I use a practice theoretical approach in this study that allows us to shift the analytical focus away from individuals toward collective everyday life practices (see Hargreaves, 2011; Sahakian & Wilhite, 2014; Warde, 2014; 2016). As I see it, food culture is produced through various daily practices such as acquiring, preparing, and eating food. Furthermore, the changes in food culture and food behaviour can be understood by exploring the development of cooking and eating practices (see Warde, 2005, p. 140). I argue that in discussions of sustainable dairy consumption, it is necessary to describe and analyse how processes of using dairy in food preparation actually take place in peoples' everyday lives (see Wendler & Halkier, 2023, p. 1).

In this thesis, I focus the practice theoretical lense on the role of dairy in Finnish food culture and explore the use of dairy in food preparation and its performances of people living in the countryside of North Ostrobothnia, where most Finnish dairy farms are located, but its inhabitants are not often studied in the food-related behaviour research field. The research is a part of a project *SmartDairy*<sup>4</sup> that assesses challenges, explores innovations and creates novel solutions to achieve a more sustainable dairy system in Europe. Contributing to the project's objective of analysing the current and potential future position of dairy and alternative products in Finnish food culture, I tackle the multisided and controversial topic of sustainable dairy consumption from the viewpoint of everyday life food preparation practice. The study provides valuable information about food consumption practices of millennials inhabiting the countryside of North Ostrobothnia. Ultimately, this thesis aims to study the underlying factors in food preparation practice and provide signposts for policymakers, food producers, and future food consumption research.<sup>5</sup>

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4 The following four European countries take part in the SmartDairy Project, studying dairy system from their country-specific viewpoints: UK, Ireland, Italy and Finland.

5 In his keynote, Tim Lang (FAO, 2012, p. 21, 25) encourages researching consumer behaviour and the underlying factors in behaviour change as the challenge of sustainable diets requires cultural signposts, too.

## 2. Sustainable dairy consumption

Contemporary discussions about milk and dairy in politics and on media platforms across the Western world have highlighted dairy's socio-environmental intricacies (see Clay & Yurco, 2020). The seemingly polarising issues emerging from the debate have also gained scholarly attention. Clay and Yurco (2020) describe the political narratives framing the issues regarding dairy as black and white with clashing themes like animal welfare and rural livelihoods or sustainability and economic growth. Clay, Garnett and Lorimer (2020) also find such framings too simplified, perplexing the complex political ecologies of food production and consumption and stagnating the development of the issues in the dairy sector.

Although dairy consumption has lately been increasingly problematised and acknowledged by food consumption scholars, the main emphasis on sustainable food consumption research has been on meat and plant-based alternative products (Autio et al., 2023). Clay, Garnett, and Lorimer (2020) argue that the complexity of the multiple elements of the change in the dairy system must be acknowledged when finding just and sustainable pathways of change in the dairy system. Thus, it is essential to have more comprehensive research that addresses and assesses the outcomes that emerge at the interface of structural change in dairy systems and heterogeneous local socio-environmental contexts (Clay, Garnett & Lorimer, 2020, p. 45).

The scarcity of comprehensive sustainable dairy consumption research on Finnish consumers has also been addressed. Autio et al. (2023, p. 2) point out that compared to the scholarly attention in other Western dairy-intensive countries, there is a lack of studies on the use and perceptions of milk and milk alternatives among Finnish consumers. They further argue that this already scarce consumer research has been focusing mainly on consumers who avoid consuming dairy, such as vegetarians and vegans (e.g., Jallinoja et al., 2019; Salmivaara et al., 2022; Twine, 2018), which has led to viewing reducing the use of dairy products and replacing them with plant-based alternative products as a part of a vegetarian and vegan diet (see also Cardello et al., 2022; McCarthy et al., 2017; Schiano et al., 2020). Thus, consumers who are reducing their dairy consumption but not entirely abandoning it have received less attention in food consumption research (Autio et al., 2023). It is essential for sustainable food consumption research to study these so-

called flexitarians (see e.g. Dagevos, 2021) as several studies have suggested that flexitarianism can lead to more sustainable diets at the population level because it is more readily adopted than eliminating meat consumption altogether (e.g. Dakin et al., 2021; Rosenfeld, 2018; Spencer et al., 2018).

To grasp the complexity of dairy's socio-environmental issues in Finland and realise the need for more comprehensive research on dairy consumption, one can look at the role of dairy in Finnish society and food culture. Dairy has a long history as one of the food staples in Finnish food culture and cuisine. According to Mäkelä & Rautavirta (2018, p. 134), dairy slowly became a fundamental part of the Finnish diet after the Famine of 1866–68 when people started shifting from crop production to animal husbandry.

Dairy has since the late 19<sup>th</sup> century achieved a significant role in Finnish people's diets. Nowadays, almost all Finns consume dairy products, and dairy consumption in Finland is higher than anywhere else in the world. While milk consumption has decreased in Finland over the last 25 years, eating other dairy products such as cheese and different types of soured milk products like yoghurts, quarks, and curds has increased (Chart 1). (Aalto, 2018, pp. 16–22; Kaartinen et al., 2018, p. 50; Mäkelä & Rautavirta, 2018, p. 131; Piipponen, Rinta-Kiikka & Arovuori, 2018, pp. 16–22.) The same development can be seen also in other Western countries (see Wolf et al., 2020; Zingone et al., 2017). Autio et al. (2023) address the need to problematise and conceptualise these parallel but opposite consumption trends. In their study on Finnish dairy and plant-based dairy alternative consumers, Autio et al. (2023) found that reducing dairy products tends to start with cutting down liquid milk, which results in estranging oneself from the taste of cow's milk over time. Taste is also important when choosing plant-based milk alternatives (Autio et al., 2023; see also McCarthy, 2017). Contradictory, the taste of cheese was so highly valued among study participants that it outweighed dairy's sustainability issues and hindered them from choosing plant-based cheese alternatives over 'real' cheese (see Autio et al., 2023). In this study, I aim to further conceptualise and understand these consumption trends.

Dairy is also significant for the Finnish economy. Finland is self-sufficient in liquid milk products, and dairy consumption is so significant that almost all regional beef production is a by-product of milk production (Mäkelä & Rautavirta, 2018, pp. 129–130, 134). After

Finland joined the European Union in 1995, the number of farms has slowly decreased as their size has increased. However, dairy farming is still a cornerstone of Finnish agriculture, with most dairy farms located in northern Finland (Mäkelä & Rautavirta, 2018; Irz & Kuosmanen, 2013, p. 47). Mäkelä and Rautavirta (2018, pp. 134–135) discuss the remarkable domestic supply of dairy on the Finnish market and the impact dairy has had on food production and development. Nowadays, there is a considerable number of different dairy products in Finnish supermarkets, such as a wide variety of flavoured dairy products, dairy products designed for particular use, such as for coffee or cooking, and dairy products with protein enrichment. In addition to various other dairy products, milk has been fortified with nutrients like calcium and vitamins in Finland for decades (Mäkelä & Rautavirta, 2018, p. 134). Furthermore, Finns started to develop low-lactose milk in the 1970s and milk with lactic acid bacteria in the 1990s. Completely lactose-free milk was launched at the beginning of the 21<sup>st</sup> century. (Mäkelä & Rautavirta, 2018, pp. 134–135.)

In recent years, most milk is consumed by single men, and the least amount is consumed by single women aged 25–44. Consumption of yoghurt and soured dairy products has decreased drastically among young single women who previously consumed those products the most. Flavoured yoghurts are purchased more than natural ones. Cottage cheese and quark consumption have increased, with quark consumed the most among single women aged 25–44. Finally, cheese consumption has increased noticeably, reflecting the findings in the study of Autio et al. (2023). (Aalto, 2018, pp. 27–29; Piipponen, Rintakikka & Arovuori, 2018, pp. 16–22.)

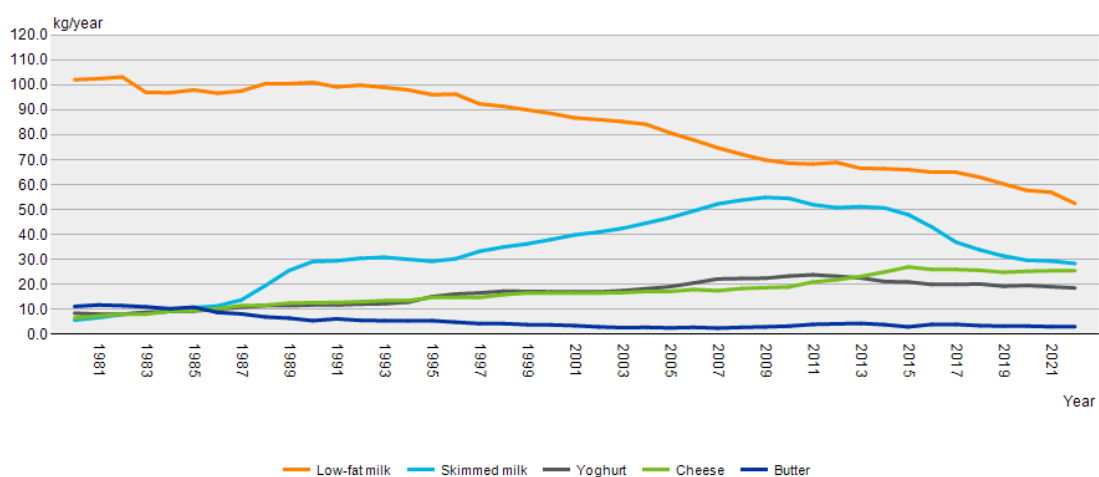


Chart 1. Consumption of dairy products per capita by commodity from 1980 to 2022, according to Natural Resources Institute Finland.

Although in the Finnish agriculture and food system the production of milk is closely entwined with meat production (see Mäkelä & Rautavirta, 2018, pp. 129–130, 134), Autio et al. (2023) argue that milk consumption and reducing the use of milk has not been politicised in Finland in the way meat consumption has. For instance, dairy has kept its quintessential role in Finnish nutrition policies over the years, while the environmental impact of red meat has been acknowledged and addressed by the latest Finnish nutrition recommendations (see NNR, 2014, p. 12)<sup>6</sup>. Dairy products are widely represented in the Finnish nutrition recommendations, which are based on the Nordic nutrition recommendations (see NNR, 2014; NNR, 2023). Both recommendations include specific considerations about known habitual dietary patterns and the composition of foods available in the region. By considering regional food habits, nutrition recommendations can be feasible for the general population. (see NNR, 2014, p. 52.)

One reason for dairy's standing could be that dairy has a long history and, therefore, high cultural value in Finland and other northern European countries (see Mäkelä & Rautavirta, 2018; Wiley, 2014, pp. 1–23). Furthermore, dairy has been a part of nutrition promotion in Western countries since the early 1900s (Wiley, 2014, pp. 117–119). Still to this day, low-fat dairy products are promoted as an essential part of a healthy, balanced diet in Finnish nutrition promotion. Dairy is represented in both the food pyramid and the plate model. The nutritional benefits of dairy are also highlighted in the curated recommendations for guardians. Finnish nutrition recommendations for families with children (FFA, 2019, p. 24) state that scientific evidence shows that high consumption of low-fat and fat-free dairy products has been associated with better weight control and reduced risk of developing type 2 diabetes. Nutrition promotion of dairy to families with children has a long history in Western countries, and milk has already been part of school health programs in the early Twentieth century US (Wiley, 2014, pp. 123–127).

In contemporary Finland, dairy is also an inseparable part of school lunches for all children from kindergarten to upper secondary school. The free meal is based on the nutrition recommendations, and low-fat liquid dairy products are offered as meal accompaniments

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<sup>6</sup> The latest Nordic nutrition recommendations released in 2023 further address the negative environmental impact of red meat and milk and dairy and recommends reducing the amount of red meat and eating dairy products moderately for lower environmental impact (see NNR, 2023, p. 95). This study refers to the Nordic nutrition recommendations released in 2014 as they are the base of the current Finnish nutrition recommendations.

(see FFA, 2017, pp. 19–20, 54). This milk consumption is supported financially by the European Union. Finland has been part of the EU School Milk Scheme since joining the European Union in 1995 (Mäkelä & Rautavirta, 2018, p. 135). Based on the oral inquiry from the Agency for Rural Affairs by Mäkelä & Rautavirta (2018, p. 135), almost all children and adolescents from daycare to upper secondary education (1- to 18-year-olds) participated in the programme in 2017 (see also FFA, 2017, p. 54).

The objectives of the EU School Milk Scheme are similar to the Finnish nutrition recommendations on school lunches (see FFA, 2017). The programme aims to improve children's awareness and knowledge about food products, sustainability, agriculture, and the social and cultural significance of food and gastronomy, as well as to give a positive image of food production and agriculture in Europe. Fundamentally, the programme aims to influence children's dietary habits and encourage healthy eating habits among children and adolescents. Regarding dairy consumption, this means maintaining the level of consumption of low-fat dairy products. (see European Commission, 2017.) In Finland, the Finnish Food Authority has an educational program dedicated to this cause called RuokaTutka. Together, the EU School Milk Scheme and RuokaTutka aim to improve food education in line with the objectives of the curriculum devised by the Finnish National Board of Education (see European Commission, 2017; FFA, 2017).

To conclude, the reasons for dairy's significant role among Finnish consumers can be found in its historical and cultural value, the long traditions of nutritional policies supporting the use of dairy, and dairy's domestic economic importance. However, an increasing number of people do not see dairy as perfect food and question its role in a balanced diet. According to Autio et al. (2023), the reasons consumers avoid dairy products seem similar to those avoiding meat: health-related, environmental, and animal ethical concerns. Studies show that dairy is not consumed because of health issues regarding milk protein or lactose (see Chollet et al., 2014; Morelli & Vitale, 2020). In addition, health concerns regarding the saturated fat and cholesterol in diet have made consumers avoid dairy (see Chollet et al., 2014). Also, environmental protection and animal welfare are reasons not to consume dairy products. In the study by Schiano et al. (2020), consumers who used both milk and plant-based milk alternatives put a stronger emphasis on sustainability than the ones consuming only dairy products (see also Haas et al., 2019). The concerns regarding animal welfare are strong, especially among non-dairy consumers

(see Haas et al., 2019; McCarthy et al., 2017). To highlight the complexity of dairy consumption compared to that of meat, Autio et al. (2023) highlight an interesting finding in a study by Alae-Carew et al. (2022) on British consumers: the ones reducing meat consumption reported higher consumption of dairy than high-meat eaters.

Also, interestingly, even though Finnish consumers view plant-based foods as ecological and healthy (see Lundén et al., 2020), based on the findings of the report by the Ministry of Agriculture and Forestry (2008), Finnish dairy consumers highlight environmental aspects, animal welfare and healthiness when choosing their dairy products. Finnish consumers expect dairy products to be natural, fresh and pure, which reflects the strong and historical impact of dairy in Finnish food culture (see Autio et al., 2023; Mäkelä & Rautavirta, 2018).

In this study, I focus on people with flexitarian diets, consuming both dairy and plant-based dairy alternative products. By doing so, the study contributes to conceptualising the current dairy consumption in Finland and provides information about Finnish dairy consumers (see Autio et al., 2023). Based on the notions in this chapter, I argue that the reasons for dairy's prominent role in Finnish people's diets are complex and eating practices regarding dairy are intertwined with customs, traditions, desires, nutrition policies and infrastructures supplying dairy and dairy alternative products. My interest and focus lie in ordinary everyday life settings where people make their food choices, which are often routinised and subconscious practices. I aim to capture the underlying factors that make people use dairy products and dairy alternatives in their daily food preparation, which is often studied using a practice theoretical approach. The next chapter concentrates on the social practice theory used in this study.

### **3. A social practice approach to sustainable dairy consumption**

#### **3.1 Social practice theory – key concepts**

Social practice theory is a theoretical approach that roots back to the mid-20th century. It is mainly constructed by the work of Bourdieu (1977; 1984; 1990), Giddens (1984), and more recent work of Schatzki (1996; 2002), Reckwitz (2002) and Warde (2005; 2016) (Halkier, Katz-Gerro & Martens, 2011; Hargreaves, 2011; Koponen, 2023, pp. 27–30; Sahakian & Wilhite, 2014; Shove, Pantzar & Watson, 2012). This thesis is also influenced by practice theoretical studies on sustainable consumption, especially the research of Shove (2003; 2010a; 2010b) and Halkier (e.g. 1999; 2001; 2009a; 2009b) that have concentrated on routinised everyday life practices in private household settings.

Instead of being a distinct and coherent theory, practice theory can be seen as a collection of contributions from philosophers, social and cultural theorists, and theorists of science and technology that have all sought a middle-level between agency and structure that has been found in the everyday performance of social practices (Schatzki, 1996; see also Hargreaves, 2011; Sargant, 2014, p. 25). Bourdieu and Giddens, the relevant theorists behind the social practice theory and consumption research, concentrated on practical consciousness, routines, and the structure of time and space. The social practice theory was later developed by Schatzki's conceptualisation of social practice as a core analytical unit, followed by Reckwitz's further contribution and definitions of the complex nature of social practices. (see Koponen, 2023, pp. 27–28.)

Before diving into social practice theory, I briefly enlighten the main theoretical concepts of Bourdieu and Giddens that have influenced second-generation practice theorists (see Koponen, 2023, p. 28).

##### **3.1.1 Habitus and locale**

Bourdieu's concept of *habitus* highlights the social aspect of routinised practices and sees individuals engaging in practices in the context of their social situation. Habitus is the

internal representations of external structures embedded in an individual's mind or people's collective consciousness and consists of thoughts, beliefs, tastes and interests. (see Bourdieu, 1984.) Habitus has substantial cultural aspects grounded in people's everyday life practices; in other words, people and practices are products of their history and environment, such as class, family or education (Evans & Jackson, p. 9; see also Sargant, 2014, p. 26). The routinised and habitual nature of practice is essential to address as it gives historical and contextual dimension to social practices; one's habitus provides the skills needed to carry out certain practices in different fields of life (see Sargant, 2014, p. 26). Thus, according to Reckwitz (2002, p. 246), social practice theory highlights how significant shared or collective symbolic structures of knowledge are to understanding both human action and social order.

For Giddens (1984), social practices always happen in a specific time and space. Giddens understood that in largely routinised social life, human activities are enabled and shaped by social structures of rules and meanings, which are simultaneously reproduced in the flow of human action. Thus, cultural structures both influence and shape human action. (see Giddens, 1984.) The concept of *locale*, originating from the work of Giddens (1984; 1991), gives practices a setting of interaction which can contextualise the practice and influence the action itself (Sargant, 2014, p. 26; Schatzki, 1996). Sargant (2014, p. 26) addresses that practices cannot be separated from the time and place where they happen. Also, as Reckwitz (2003, pp. 249–250) points out, changes in social practices imply transitions in both spatial structures and social relationships. Schatzki (2017, p. 30) notes that bundles of practices and material arrangements form a basic reality, meaning that they are already there when people start to participate in them and carry them on. People accommodate themselves to those practices in which their desires, knowledge, and personalities are moulded. Conversely, the bundles of practices are also altered and transformed through that process. (Schatzki, 2017, p. 32.)

### **3.1.2 Practice as an entity and as a performance**

When conceptualising social practice theory and its core concepts, it is relevant to emphasise the distinction between practice(s) and its performance(s). Schatzki (1996) conceptualises practice as a *coordinated entity* and as *performance*. The first notion is of practice as a “temporally unfolding and spatially dispersed nexus of doings and sayings”

(Schatzki, 1996, p. 89). Schatzki further explains this nexus by differentiating three primary ways of how doings and sayings can be linked: “(1) through understandings, for example, of what to say and do; (2) through explicit rules, principles, precepts and instructions; and (3) through what I will call ‘teleoaffective’ structures embracing ends, projects, tasks, purposes, beliefs, emotions and moods” (Schatzki, 1996, p. 89). For Schatzki (2002, p. 80), teleoaffective structure means the tendency to reach particular ends and goals enjoined by emotions and motivational engagements.

From a practice theoretical approach, a *practice*, such as food preparation, is a more or less routinised or habitual way in which people move, handle objects, treat subjects, describe things, and understand the world. In the words of Reckwitz (2002, p. 249), practice is a “routinised type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge”. For example, when preparing breakfast, one engages in various physical and mental activities and uses different ingredients and kitchen tools in a specific locale. All of these doings and sayings require a certain amount of understanding and know-how from the individual to carry them out and are affected by the practitioner’s emotions and motivational engagements.

This core conception of practice as a coordinated entity and its linkage through components, also called elements, has circulated in recent research on consumption (see Koponen, 2022, p. 29). Reckwitz’s (2002) widely noted differentiation of practice to *body*, *mind* and *things* has been developed further by several social practice theory scholars. Warde (2005, p. 134) refers to these components as *understandings*, *procedures*, and *engagements*. Furthermore, Shove, Pantzar and Watson (2012, p. 14) categorise the elements of practice as *materials*, *competences*, and *meanings*, where materials refer to things, technologies, physical entities, and the materials of which objects are made; competences to skill, know-how and technique; and meanings to symbolic meanings, ideas and aspirations. A practice – such as cooking, eating, or consuming – exists when it is interconnected with all the components (see Reckwitz, 2002, p. 150; Shove, Pantzar & Watson, 2012). In this study, I use the latter categorisation by Shove, Pantzar and Watson (2012) as it offers a conceptual framework to understand and analyse the stability and change between the elements of practice.

Schatzki's (1996) second notion of practices as *performances* refers to the moment of doing: how practices are carried out. Performing of practices – doings and sayings – actualises and sustains practices in the sense of linkages through materials, competences and meanings (see Schatzki, 1996, p. 90). Performances not only uphold the practices but, as tending to vary, they also potentially alter practices or lead to their appearance or disappearance (Koponen, 2022, p. 29; Shove et al., 2012). Welch and Warde (2015, p. 86) argue that identifying understandings, procedures, and engagements of practices, as well as their histories and dynamics and how they coordinate, is the core task for analysing practices in the field of sustainable consumption. This can be seen as studying processes of transformation and stagnation within social practices and between them (see Shove, Pantzar & Watson, 2012, p. 2). According to Shove, Pantzar and Watson (2012, pp. 14–15), in conceptualising practices' stability and change – how practices emerge, exist and disappear – one must recognise when connections between materials, competences and meanings are made, sustained or broken.

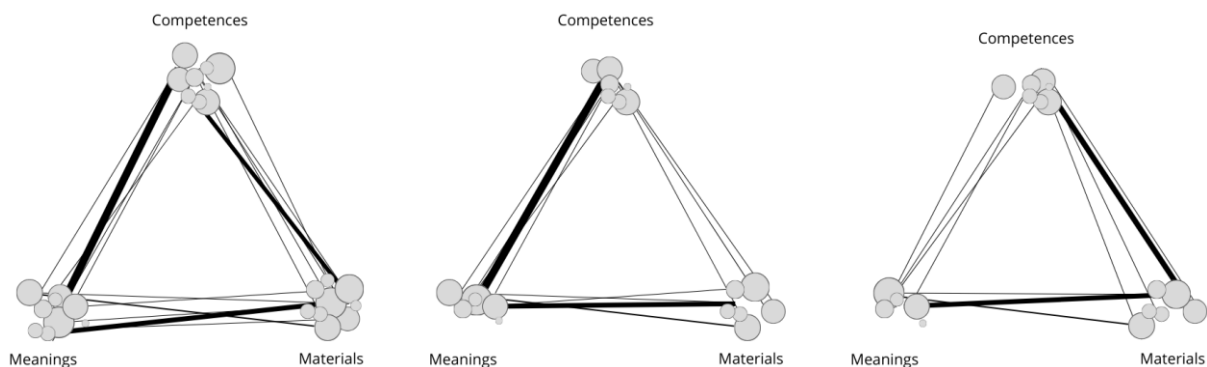


Figure 1. The practice-as-entity (left) includes all elements and the links between them. Two individual performances are shown in the centre and on the right. In general, more than two performances are needed to make up an entity. (Higginson, Hargreaves & Mckenna, 2015, p. 954; see also Kuijer, 2014, pp. 52–53.)

I look at food preparation as a coordinated practice linked together through body, things and mind: competences, materials and meanings (figure 1) (see Reckwitz, 2002; Schatzki, 1996; Shove, Pantzar & Watson, 2012). I aim to capture the materials, competences and meanings of such practice and the links between them; how doings and sayings of the food preparation are carried out, understood, prompted and responded to; when and where the practice takes place; and what kinds of ends are pursued and emotions possessed when engaging in the practice. To conceptualise the elements of food preparation practice, and

more specifically, a food preparation practice in which dairy and dairy alternative products are used, I look at the individual performances within the practice: how food preparation is carried out and what kind of links are made through meanings, competences and materials.

### **3.1.3 People as practitioners**

Practices are performed by individuals. A practice theoretical approach sees individuals as *practitioners* or agents who have the capacity to act and engage in the doings and sayings of practices by having practice-specific understandings, desires, ideas, know-how and knowledge, all linked to each other within a practice (see also Reckwitz, 2002, pp. 153, 250; Sargant, 2014, p. 27).

Reckwitz (2002) sees practitioners as the *carriers of practice*, both bodily and mental agents, as they are carriers of certain routinised ways of desiring, understanding and knowing how. Moreover, a practice is not only understandable to the carriers but also to the potential observers who share the same understanding of a particular practice. Thus, practices have a strong social aspect as they are types of behaviour and understanding that appear at various locations at various times and are performed by different bodies and minds. (Reckwitz, 2002, p. 250.)

Individuals are interconnected to internal and external structures of practices, which both determine the practices and are reproduced in and through them (see Giddens, 1984, p. 118; Sargant, 2014, p. 26). Warde (2005, p. 134) notes that the analysis of practices must look at both the activity itself and the representation of the activity; doings and sayings ultimately constitute the characteristics of a particular practice. According to Sargant (2014, p. 27), individuals can recognise practices and identify with them when described by specific characteristics.

### **3.1.4 Changes in practice**

While considering the routinised nature of everyday life food preparation, it is important to note that practices always have a path of development (see Warde, 2005, p. 139). By understanding the history of a specific practice, one can also differentiate whether the practice changes and when that change might occur. As Warde (2005, p. 141) points out,

studying the development of practices themselves can unfold the factors of changed behaviour. According to Warde (p. 139–140), such history can be differentiated, for the substantive forms that practices take will always be conditional upon the institutional arrangements, characteristics of time, space and social context, dominant modes of economic exchange and cultural traditions. That is why the answers to the sociological questions ‘why do people eat what they eat?’ and ‘how do they eat in the way they eat?’ will most likely be historical and institutional (see Warde, 2005, p. 140).

Shove, Watson and Pantzar (2012) provide a formulation model (Figure 2) to study the dynamics of social practices. Practices emerge, persist and disappear when links, or *connections*, between their defining elements are made and broken. This useful formulation model provides a means of conceptualising stability and change and allows recognising the relation between practices and performances (see Higginson, Hargreaves & Mckenna, 2015). Concentrating on the trajectories of elements and the links between them enables describing and analysing stability and change in practice without prioritising agency or structure. (Shove, Watson and Pantzar, 2012, p. 8.)

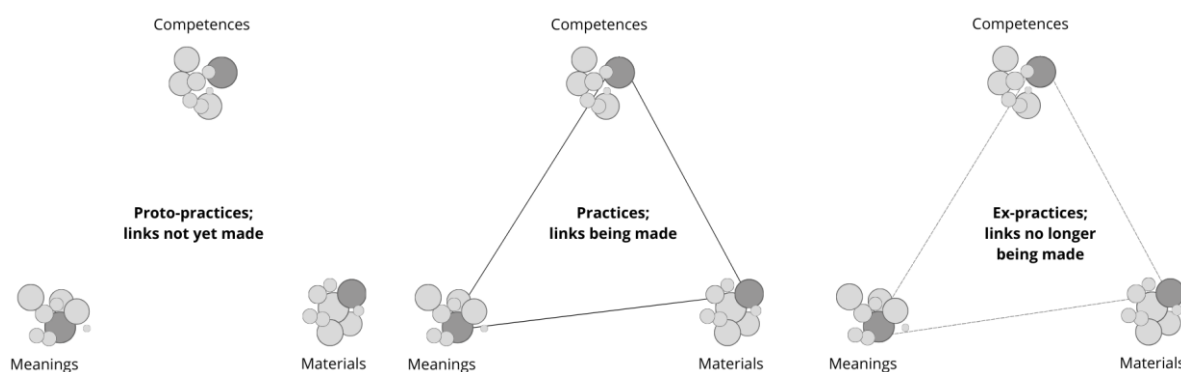


Figure 2. Proto-practices, practices and ex-practices (see Shove, Watson and Pantzar, 2013, p. 25).

As practices are composed of materials, meanings and competences, the conjunction of all three elements must be taken into consideration. In other words, those three elements shape each other. Thus, when new performances emerge within the practice, they involve novel combinations of new or existing elements. Such integrations can be seen as transformative since the elements are interdependent and mutually shaping. (see Shove, Watson & Pantzar, 2012, pp. 29–31.) In addition, when performances disappear or die, the connections between them break. According to Shove, Watson and Pantzar (2012, p. 35), when the links are broken, materials, meanings and competences disappear in different

ways: they vanish with little or no trace, remain inactive or take a new life within and as part of other practices. Changes in practice seem to emerge both from inside when practitioners contest and resist routines and conventions as they create novel doings and sayings in new situations and from the outside when different practices come into contact with each other (Hargreaves, 2011; Warde, 2005). In this study, my focus is not only on the practice's routinised nature but also on the possibility of its performances to transform and change the practice when novel meanings, competences and materials arise and new links are formed.

In the next chapter, I conceptualise food preparation using the practice theoretical approach and present the social practice approach as a conceptual framework for studying the use of dairy and dairy alternative products in everyday food preparation practice and its performances.

### **3.2 Food preparation as a routinised everyday life practice**

When discussing food consumption, it is important to conceptualise the term from the practice theoretical viewpoint (see Halkier, 2009a). Warde (2005, p. 137) sees consumption as an aspect of almost every type of practice rather than a practice in itself since it is the clusters of practices that generate consumption activities, and not vice versa (see also Halkier, 2009a). In this sense, everyday life practices, such as planning meals, cooking and eating, contribute to food consumption practices, and they exist when interconnected with all the elements of practice (see Reckwitz, 2002, p. 150; Shove, Pantzar & Watson, 2012).

The practice theoretical approach, with a focus on sustainability, tries to conceptualise the variability and stability of daily food consumption practices: how they capture their carriers, how they circulate and travel and social differences in relation to that, and how they intersect to form clusters connected to each other in time and space (see Shove, 2010a, p. 283). Using this approach to study the role of dairy and dairy alternative products in food preparation, I contribute to researching a broad spectrum of food consumption practices (see Halkier, 2009a; Warde, 2005). For instance, preparing a dinner for

oneself or one's family at home with a certain amount of food provisioning<sup>7</sup> and using different ingredients and kitchen tools is a performance that can be commonly recognised within the realm of 'food preparation practice'.

Food preparation can be described as a mundane, routinised and habitual everyday food consumption practice that is also social, involving socio-material systems and ways of 'doings' and 'sayings' (see Sargant, 2014, p. 30; Warde, 2005). Often in these cases, the practice is familiar to the practitioner. The routinised performances usually occur when competences, materials and meanings govern conduct within the food preparation practice without much reflection or conscious awareness on the part of the individual. That is why practice theories emphasise processes like habituation, routine, practical consciousness, tacit knowledge and tradition. (see Warde, 2005, p. 141.) Through attention to its habitual nature – routine, social conventions and practical competences – daily food preparation and its routinised performances become the focal point of this study (see Standal & Westskog, 2022, p. 10).

According to Halkier (2009b, p. 362), social practice theory has the ability to embrace the normativity of everyday practices. Halkier has done so herself by studying food consumption practices using a practice-theoretical perspective (e.g. Halkier, 2009a; 2009b; 2020; 2021; see also Wendler & Halkier, 2023). When the elements of practice are put into the context of daily food preparation, competences are often seen as silent know-how and skills learned unconsciously by doing. However, skills and know-how can also be learned through hours, weeks or years of dedicated training. Regarding material elements of practice, it is essential to recognize that the forms of transportation, location and, most importantly, access are important for the diffusion of material elements. (Halkier, 2009b; Shove, Watson & Pantzar, 2012, pp. 47–48.) When considering meanings, knowing whether anything is obvious or distinctive about how meanings circulate and move is important. According to Shove, Watson and Pantzar (2012, p. 54), circulation and mutation of meanings depend on various consecutive processes of de- and re-classification. For instance, this can happen when the concept of 'proper' or 'good' becomes of great worth for the food prepared. Halkier (2009b, pp. 362–363) notes that when putting the

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<sup>7</sup> Food provisioning: the physical, mental and emotional labor involved in providing food.

performances in cooking practices in the foreground, the analysis is able to look at the acceptability and those normative expectations in the making of suitable cooking conduct.

To give an example, the practice of cooking dinner includes doings and sayings which many may find in common. In addition to ingredients, it often involves utensils and technological devices and knowing how to handle and use them, the facilities where the cooking takes place and the provision of materials needed, knowing how to cook and the ability to read and follow instructions. Furthermore, meanings such as a desire to eat healthily can drive a practitioner to perform the practice differently, for instance, using particular ingredients or cooking methods. To conclude, all these elements form a specific type of food preparation practice that can be re-performed when the linkages between competences, materials and meanings persist. (see Shove, Watson & Pantzar, 2012.)

It is important to note that performances in food preparation practice always vary depending on the practitioner's context and situation. In her study on cooking performances, Halkier (2009b) distinguishes different patterns in how domestic cooking is performed and concludes that individual practitioners can enact various cooking styles in ever-changing contextual and situational conditions at home. Spaargaren and van Vliet (2014, pp. 61, 65) note that the collective socio-material systems around practitioners present, to a significant extent, the 'sustenance base' of their daily domestic routines and thus help or hinder changing one's food consumption patterns. There are two main issues concerning household organisation: the time-space structure of domestic routines and accompanying cultural standards (Spaargaren & van Vliet, 2014, p. 65).

The time-space structure of domestic food preparation practice can be studied through the concept of locale, namely, *where* the food preparation takes place, *when* it happens, and *with whom* it is carried. According to Sargant (2014, p. 33), the locale represents a piece of 'food culture' in the sense that it offers a network of systems, physical and social infrastructure, access, use, and meaning, which constitute essential characteristics of food consumption practices. As locales tell something about the experiences individuals have in the 'doings' of practice, they explain to some extent the understanding of the behaviour of practitioners (see Sargant, 2014, p. 33). For instance, in this study, I concentrate on food preparation in a small-scale locale of a household, which can provide information about how the ones preparing food and those eating it interact with each other. I also study

people living in the countryside of North Ostrobothnia, and that locale can also offer information when analysing the competences, materials and meanings in food preparation. Furthermore, the locale showcases the materials and technologies inside the home, such as ingredients, recipes and utensils, that contribute to the nature of food preparation performances. The relevant questions lay on the social context, the time frame in which the performances occur, and the strategies used by the individuals as practitioners.

According to Torkkeli, Janhonen and Mäkelä (2021, p. 376), in a private home setting, individuals are more likely to engage in familiarity and easiness when it comes to cooking – as long as their doings are free of criticism or notable problems. Easy and familiar ways of cooking often lean on familiar materials, routinised procedures, rooted understandings and embodied competences (Torkkeli, Janhonen & Mäkelä, 2021, p. 379). Sargant (2014, p. 27) notes that for some individuals, a certain practice may be more routinised than for others as they may be more familiar with the practice and, thus, more capable of doing it (see also Halkier, 2009b). For example, cooking a particular dish may be a more routinised practice for practitioners who have repeatedly performed that practice, gaining more practical skills to do so again (see Halkier, 2009b).

Cultural standards in food preparation can be explored through Shove's (2003) conceptualisation of the cultural aspects of domestic consumption practices, which she specifies with the domains of comfort, cleanliness, *and convenience* while using washing laundry as an example. Shove (2003, pp. 395–396) sees routinised domestic consumption practices as reproducing peoples' ordinary ways of life in which the systems of provision are often taken for granted. When studying food consumption practices, the analysis should consider the routines that make people meet the standards they find 'normal' or 'common' or at least the 'minimal-required' (see Shove, 2003, pp. 395–396). Regarding food consumption, the standard of cleanliness can be interpreted with a certain commonly agreed standard of 'normal' or 'proper' food (see Shove, 2003; see also Torkkeli, Janhonen & Mäkelä, 2021, pp. 379, 381). For instance, in domestic cooking practices, practitioners tend to reflect on the appropriateness of cooking and evaluate whether the meal is worthy of making when planning their everyday meals (see Torkkeli, Janhonen & Mäkelä, 2021, p. 381). Those cultural aspects add meaning to performing domestic practices in a way that materials are usually chosen by the level of comfort, cleanliness and convenience they promise to bring to domestic life. The cultural aspects are both individual matters

and shared with others, thus highly influenced by social life and absorbed over time. (Spaargaren & van Vliet, 2014, pp. 68–69.) This can also be seen in Torkkeli's (2022) research: when cooking, individuals conducted socially shared normative performances – for instance, recognisable procedures of familiar dishes – which further formed socially governed structures for the future meal-planning. Especially inherited ways of preparing food tended to be highly routinised performances using familiar ingredients stated as 'basic' or 'proper' (Torkkeli, Janhonen & Mäkelä, 2021, pp. 379, 381).

Sahakian and Wilhite (2014, p. 28) note that dispositions for action are deeply embedded in routines and habits. Shove (2012, p. 103) defines habits as practices that suitably committed practitioners recurrently and consistently reproduce. The stubbornness of habits depends on how deeply they are anchored with the main components of practice (Sahakian & Wilhite, 2014, p. 28). Sahakian and Wilhite (2014, p. 28) note that many routinised domestic practices are often performed without much need for engagement of the cognitive self and are therefore reluctant to change. In the context of food consumption, easiness and familiarity support the continuity of food preparation and restrict the possibility of evaluating and changing its performances (see Torkkeli, Janhonen & Mäkelä, 2021, p. 379). Wendler and Halkier (2023, pp. 14–15) conclude in their study on Danish food consumers that the transition toward less meat consumption is a gradual and non-linear process and requires a lot of time and effort from practitioners. It involves development in a nexus of various practices such as shopping and cooking and demands individuals to adapt, negotiate, or proact social coordination of food activities as their new performances differ from the food consumption performances of other people in their social network (Wendler & Halkier, 2023, p. 15). The critical question to sustainable consumption studies and policies is how to reshape dispositions and change those routinised practices to be more sustainable and environmentally friendly (Sahakian and Wilhite, 2014, p. 28).

## 4. Research aims and research questions

This study analyses the role of dairy and dairy alternatives in the domestic food preparation of Finnish people living in North Ostrobothnia. The study sees domestic food preparation as a relatively routinised practice and its performances lean on familiarity and easiness (see, e.g. Halkier 2009b; Sargant, 2014; Sahakian & Wilhite, 2014; Shove, 2003; 2012; Spaargaren & van Vliet, 2014; Standal & Westskog, 2022; Torkkeli, Janhonen & Mäkelä, 2021; Warde, 2005). Although these types of domestic consumption practices are often reluctant to change, the study acknowledges that a practice can always transform and develop. Hence, the study also aims to understand the underlying factors for changes in the performances of food preparation practice when replacing dairy with plant-based dairy alternatives.

The main research question is the following:

*What is the role of dairy products and dairy alternatives in domestic everyday food preparation of Finns living in North Ostrobothnia?*

Two sub-questions were formed based on the social practice framework to answer the main research question:

- a. *What kinds of competences, materials and meanings support the use of dairy in people's daily food preparation practice?*
- b. *What kinds of competences, materials and meanings promote a change in food preparation practice regarding the use of dairy alternatives?*

## 5. Data and methods

### 5.1 Gathering the data

Considering the SmartDairy project and this study, my area of interest was North Ostrobothnia for a couple of reasons. First, compared to all regions in Finland, the Natural Resources Institute Finland statistics show that dairy production is the highest in North Ostrobothnia according with 371 million litres of milk produced in 2022. North Finland is also the area where most small dairy farms are located (Mäkelä & Rautavirta, 2018, p. 129). Second, people living in the countryside of North Ostrobothnia are seldom studied in food-related behaviour research, especially regarding sustainable food consumption. In this study, I focus on Millennials born between the early 1980s and the late 1990s. I did not actively seek participants with offspring but acknowledged that people in their 30s and late 20s could have small children, which eventually was the case with most of the interviewees who participated in this study.

I collected the study data between May and September 2023. The study's participants (N=11) were recruited through discretionary chain-referral sampling, also known as snowball sampling (see Braun & Clarke, 2013, p. 57; Patton, 2015, pp. 298–299). This particular sampling method is often used in cases where the potential data source is difficult to find (Patton, 2015, p. 298). I recruited the first interviewees via two pilot interviews with one male and one female from North Ostrobothnia. These interviewees provided referrals, which provided me with more data for referrals, as I asked them if they knew anyone else who would like to participate in the study (see Patton, 2015, p. 298). The participants were required to be born after 1980, live in the countryside of North Ostrobothnia and consume dairy products regularly. The subjects were sent an interview invitation letter with information about the SmartDairy project and the study's objectives (Appendix 2).

The study participants lived in the following municipalities: Haapavesi, Haapajärvi, Reisjärvi and Pyhäjärvi. Nine of the study participants were in a relationship, eight of whom had children. Two participants lived in a single household. The age of the participants varied from 29 to 43 years. Three participants were male, the rest of them being female.

The educational background varied from vocational upper secondary qualification to a licentiate degree.

Table 1. Interview descriptives.

| Participant's number | Length of the interview in minutes | Gender | Age | Marital status and possible children |
|----------------------|------------------------------------|--------|-----|--------------------------------------|
| p1                   | 51:32                              | Female | 32  | Married with children                |
| p2                   | 23:42                              | Male   | 34  | Married with children                |
| p3                   | 47:39                              | Female | 43  | Married with children                |
| p4                   | 38:07                              | Female | 30  | Single with no children              |
| p5                   | 52:45                              | Female | 33  | Married with children                |
| p6                   | 67:14                              | Female | 29  | Married with children                |
| p7                   | 47:07                              | Female | 29  | In a relationship with no children   |
| p8                   | 45:34                              | Male   | 29  | Married with children                |
| p9                   | 89:03                              | Female | 38  | Single with no children              |
| p10                  | 64:47                              | Male   | 32  | Married with children                |
| p11                  | 56:59                              | Female | 33  | Married with children                |

The interviews were semi-structured and guided by curated questions (Appendix 1) based on the chosen theoretical approach. I did ten interviews online via Google Meets and one face-to-face. To prepare myself for gathering the data, I read academic literature about qualitative research, especially that of conducting research interviews (e.g. Braun & Clarke, 2013; Patton, 2015; Sclavi, 2017).

The questions in the semi-structured interviews were based on the competences, materials and meanings of food preparation practice. They included themes related to the routinised nature of everyday food preparation, dairy and dairy alternative products and their use, and social aspects of food preparation at home. The meaning of dairy products in terms of inducement came up in both pilot interviews and was thus added to the semi-structured interview form.

The formulation of the interview questions was inspired by Sargant's (2014, pp. 27–29) four points to note when applying practice theory to food consumption research. Firstly,

I considered daily food preparation in the social and physical context of social practices both when forming the questionnaire and during the interviews when asking more detailed questions. Secondly, I acknowledged that people's choices, habits, preferences, and tastes regarding food are generated and put into practice in the performances in food preparation. Thirdly, in theories of practice, actors in the food system are practitioners; thus, I expected them to have some skills and knowledge in the realm of food preparation. Lastly, I saw practice as the site of or generator of meanings surrounding food and, especially considering this study, meanings regarding dairy and dairy alternatives.

The interview questionnaire was formed openly without knowing whether or not the participants used dairy alternatives. Thus, the questionnaire also included questions about why dairy alternatives were not regularly used in food preparation practice. Since all participants used dairy alternatives at times, plant-based dairy alternatives became a stronger focus of the study, offering another viewpoint on the role of dairy in everyday life use. However, while some study participants used plant-based dairy alternatives regularly, the use was only occasional for some.

All interviews were recorded and later transcribed with the help of the voice-to-text software Transkriptor. To ensure high-quality data, I transcribed the interviews to an appropriate level of detail, leaving out, for instance, descriptions of facial expressions and pauses between sentences as they were not considered to give extra value to the chosen theoretical approach and study design. I paid equal attention to all data, even though some interviews provided more fruitful descriptions of the performances in food preparation than others. Because of the differences in the depth of the data, I paid close attention to ensuring the coding process was comprehensive and inclusive. (see Braun & Clarke, 2013, p. 287.)

## **5.2 Qualitative data analysis**

In the analysis, I sought answers to the main research question through two sub-questions, one concentrating on the use of dairy and the other on the use of dairy alternatives in the performances in food preparation practice. The unit of analysis was the interviewees'

verbal descriptions of their performances in everyday life food preparation practice and the competences, materials and meanings of food preparation.

As in qualitative research in general, the analysis in this study went hand in hand with the data collection process (see Braun & Clarke, 2013, p. 204). This was evident, especially when analysing the use of dairy alternatives in food preparation practice. During the interviews, it became apparent that some of the study participants' desire to use dairy alternatives more frequently was not implemented in their daily food preparation. Also, some interviewees did not use dairy alternatives to prepare food for themselves or their families but rather when preparing food for guests or special occasions. Hence, the research question considering plant-based dairy alternatives tackled not only what promoted the change but also what was *needed* in terms of competences, materials and meaning for dairy alternatives to become a part of daily food preparation practice.

The data analysis was a two-month process where I first structured and coded the transcribed data into themes formed by elements of meaning, competences and materials (see Braun & Clarke, 2013, pp. 206 – 213; Patton, 2015, pp. 553–559). The found themes and their interactions validated the theoretical approach. As Koponen (2022, p. 35) explained the analysis process of his practice theoretical research, it was also essential in my analysis to get first a comprehensive overview of the food preparation practice as a phenomenon before focusing on the specific elements. This was highly useful as the elements concerning the use of dairy and the use of dairy alternatives were intertwined, forming a nexus of practices closely linked to one another. Separate coding to themes was done for both sub-questions, and the analysis consisted of two phases: first, analysing the competences, materials and meanings that supported the use of dairy products and second, the analysis of what kinds of competences, materials and meaning helped dairy alternatives become a part of food preparation practice.

Firstly, I coded the routinised use of dairy products in food preparation practice into three main themes: competences that foster the use of dairy products, material elements enhancing the routinised daily use of dairy, and meanings behind the use of dairy products in food preparation.

I used a similar process of coding the data into three main themes based on the elements of practice to the second research sub-question: the use of dairy alternative products in food preparation. As some interviewees did not use dairy alternatives regularly, I coded themes regarding why using dairy alternatives was not a part of everyday food preparation. Those reasons were often embedded in the reasons for preferring dairy. Thus, by coding the findings for the second sub-question into themes based on competences, materials and meanings, I was able to tackle the question of what is needed for the performances in food preparation practice to change, which tied up the reasons behind the use of dairy.

After coding the data into the main themes, I further analysed and coded the main themes by identifying distinctive patterns within each element of practice. For example, the meanings of using dairy in food preparation were further identified and coded into themes associated with the meanings (see Braun & Clarke, 2013, pp. 224–245).

I ensured that all relevant extracts for each theme in the main study questions and the following sub-questions were collated in the analysis. I read the transcription and the coded data several times to ensure the themes were coherent, consistent and distinctive. I enriched the analytic narrative with illustrative extracts from the data. The coding process took around two months to complete, which ensured the depth of the analysis as there was no rush to come to conclusions. (see Braun & Clarke, 2013, p. 287.)

## 6. The use of dairy and dairy alternatives in food preparation

I present the findings to the research questions a and b in three sub-chapters. In the first chapter, I present the findings regarding *competences* supporting the use of dairy products and fostering a change in food preparation practice. The competences in performances of using dairy and dairy alternatives were closely intertwined with other competences used in food preparation. Therefore, I first give a more comprehensive outlook on the competences in everyday food preparation as they reflect the competences in using dairy and dairy alternative products. The second chapter concentrates on the *material elements* that strengthen or change the routinised use of dairy in food preparation. In the third chapter, I look at the *meanings* behind the use of dairy and dairy alternative products. The conclusions of the findings are illustrated at the end of the results chapter.

### 6.1 Competences

Food preparation was a common practice in the interviewees' everyday lives; all prepared food daily, approximately three to five meals per day. The time used in food preparation varied, but, in general, the interviewees spent an hour preparing food. Although nine interviewees prepared food also for their family members, all interviewees occasionally prepared food for other people, such as guests. Therefore, food preparation was often a particularly social practice as other people affected the performances in various ways (see Spaargaren & van Vliet, 2014; Warde, 2005).

The majority described their food preparation competences as silent know-how and skills. The performances in food preparation resembled Halkier's (2009b, p. 366) notion of cooking as craft: the know-how and skills in food preparation were developed through lifelong practice and were therefore natural and seldomly reflected competences. It was often difficult for the interviewees to elaborate on the knowledge and skills they used in food preparation. Most study participants prepared familiar meals without written instructions, while some checked recipes for instructions or correct amounts of ingredients (see Halkier, 2009b, p. 366). For instance, the interviewees came up with new dishes themselves by combining available ingredients without instructions or applying some elements

from a recipe while improvising the rest. They had much implicit knowledge about which ingredients complimented each other and how to achieve the 'right' and desired consistency. At times, the performances in food preparation were improvisations over pleasure (see Halkier, 2009b, p. 365): the interviewees did not engage in food preparation with a rigid plan but instead wanted to prepare food that they and their family members enjoyed from the ingredients they already had.

When enquired about where they had learned their cooking skills, the interviewees described learning most food preparation methods through practice. Most of the know-how and skills regarding food preparation had been learned in childhood (see Halkier, 2009b, p. 366). In addition to the influence of parents and relatives, home economic lessons in secondary school were mentioned as a basis of many essential food preparation skills. For instance, the interviewees had learned to prepare several dishes that included dairy products such as rice porridge, macaroni casserole and mashed potatoes when they were children and had been doing them ever since. Like Halkier (2009b, p. 366) also noted in her study, the interviewees took their know-how, skills and procedures of food preparation as granted, producing pleasurable eating experiences and providing nutritious and fulfilling food to themselves and their families. For instance, when inquiring about what kinds of know-how and skills one should have to prepare dishes they had mentioned, the interviewees often could not pinpoint any specific skills needed in the food preparation performances. As one of the interviewees described:

Literacy. Nothing more special than that. And then, of course, the ability to use either hands or feet to use some utensils for mixing or cutting. (p10)

Dairy products had a significant role in the routinised daily food preparation performances as all interviewees were used to handling it. The dishes that included dairy were uniformly agreed to be easy to prepare, and the easiness of cooking was essential to all. Interviewees knew how the dishes would taste, how to achieve the desired consistency with dairy, and how to use dairy products correctly to succeed (for instance, how to prevent milk from burning). When asked what skills were needed to prepare the dishes using dairy products, most interviewees described their food preparation performances as uncomplicated and effortless. One interviewee elaborated on what know-how was needed to prepare such dishes in more detail:

I guess that I have gotten to know the products. Then, on the one hand, I also have knowledge of different types of meat and vegetables, for instance. Then you have learned

how to combine these like... for example, Koskenlaskija<sup>8</sup> goes well with these particular vegetables when pureed, giving them a great texture and so forth. It has quite a lot to do with experience and also through trying and failing enough times. So then you know what is worth doing and so on. (p11)

Another interviewee considered dairy convenient and facile in food preparation because of its consistency and texture:

I find them pretty easy. So, as an example, like these cheeses make cooking much easier because it is so easy to get a good consistency with them, for instance. (p11)

Later in life, friends and partners enhanced their know-how and skills by introducing new dishes or novel food preparation methods. A couple of interviewees – who also regularly prepared dishes from different dairy alternatives – had taken cooking courses to enhance their food preparation skills. In addition, some interviewees mentioned actively reading cookbooks and food magazines to learn new cooking methods, for instance, to gain knowledge about which ingredients complement each other. A couple of interviewees enhanced their food preparation skills by challenging themselves to prepare fish or game meat from start to finish. Some interviewees were more enthusiastic and experimental in food preparation than others in a way that they challenged themselves to try new cooking methods, ingredients and recipes. However, all interviewees sometimes evolved their knowledge of food preparation methods by seeking inspiration by scrolling down social media or reading recipes from magazines. All of this shows that the interviewees competently prepared food in various ways. They had basic food preparation skills they then applied to daily cooking and learning dishes from novel recipes.

Well, on one hand, I have a very strong base myself, so I kind of apply the knowledge I have. But I do like to try recipes, and I seek a lot of...I apply different sources of information from all kinds of magazines and blogs and such, so I easily adapt recipes. (p4)

I often come up with them [dishes] in my own head. But oftentimes, I may look online for some recipes, even though I have not nearly ever slavishly followed any recipe. I almost always “compose”. (p2)

There was one thing considering food preparation that held great value among every interviewee: everyday life food preparation needed to be as convenient as possible. Hence, significant competences in food preparation performances were the know-how and skills

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<sup>8</sup> Koskenlaskija is a brand name of a processed cheese produced by a Finnish dairy manufacturer Valio. This specific cheese was mentioned several times in the data by various interviewees. The Koskenlaskija cheese was first released in 1933, which makes it 90-year-old product.

of basic cooking methods and the ability to minimize the time and effort needed to provide food for themselves and their families. In this sense, food preparation was seen as a mundane but necessary household chore, and know-how and skills were used to make that chore as suitable as possible for busy everyday life. Halkier (2009b, p. 369) describes these kinds of food preparation performances as cooking as necessity where food preparation must be feasible and fit in with all the other activities of a busy daily life.

Thus, everyday food preparation had to be as ‘cost-effective’ as possible: convenient, facile and fast. These standards reflect Shove’s (2003, pp. 395–396) cultural aspects of domestic consumption practices: provisioning of comforting, fulfilling and ‘normal’ food with the least amount of time and effort needed in preparation (see also Halkier, 2009b, p. 369; Torkkeli, Janhonen & Mäkelä, 2021, pp. 379, 381). For instance, preparing breakfast was a highly routinised practice: it took only a few minutes to complete, and the same foodstuffs, such as cheese, yoghurt, and milk, were repeatedly used in its performances. Preparing lunch and dinner was considered the most time-consuming, yet it was also described as a routinised practice; interviewees usually used familiar food preparation methods and cooked dishes they knew well.

Dishes containing dairy products were usually prepared repeatedly in the interviewees’ households, and thus, using dairy in food preparation was a highly routinised practice (see Halkier, 2009b; Shove, 2003). Interviewees generally described their everyday life as hectic, and they did not want to spend too much time cooking after coming home from work. Most interviewees were not keen on giving up dairy products because they were so easy to use in food preparation (see Torkkeli, Janhonen & Mäkelä, 2021, p. 379). Interviewees with children repeated the same dishes in their daily routines, as changing them would have needed too many adjustments; the children did not always appreciate novel dishes and tastes, and the parents wanted to provide them with foods they were willing to eat. Likewise, when preparing food for themselves, interviewees wanted it to taste good with considerably low input (see Halkier, 2009b, pp. 365–370). In other words, learning new dishes required more time, which the interviewees avoided during busy weekdays.

Dairy alternatives were consumed to some extent by all interviewees. Three interviewees did not consume dairy alternatives at home regularly but used them at times out of curi-

osity or when preparing food for guests who did not consume dairy. The other eight interviewees used dairy alternatives regularly in addition to dairy products, some daily or weekly, others a couple of times a month.

The interviewees used dairy alternatives in food preparation as if they had used dairy products. In general, interviewees did not see a significant difference in the usage of dairy and dairy alternatives. The most common way to use dairy alternatives in food preparation was to replace the original dairy product with a similar plant-based alternative, which ensured the facileness of the food preparation practice and the same know-how and skills used in preparing food from dairy. One interviewee who used dairy alternatives on a weekly basis described the way of using them in everyday food preparation:

Oat cream and oat milk are pretty standard. Well, just putting oat milk in oat porridge, for instance. And then if I eat some Weetabix or something like that, I always put oat milk in it. And oat cream goes pretty well in casseroles and such. (p1)

In fact, the most commonly used dairy alternative product was a plant-based cream used as a food cream in familiar sauces and casseroles, which did not require learning new recipes or food preparation methods. Milk was mainly replaced with plant-based – mostly oat-based – drinks in porridges, smoothies and baking. Also, butter and dairy-based spreads were replaced with vegetable oil spreads when preparing sandwiches for breakfast or snacks. Those interviewees who had used dairy alternatives regularly for years and thus gained know-how on using different plant-based products also used a significantly more extensive selection of dairy alternatives in various food preparation performances (see Wendler & Halkier, 2023). Interestingly, they also described themselves as food enthusiasts and regularly tried new recipes and food preparation methods (see Wendler & Halkier, 2023, p. 7).

As the easiness of daily food preparation was highly valued, one issue that hindered the interviewees from regularly using dairy alternatives was the lack of competences to execute tasty and facile meals in their busy everyday lives. Most interviewees initially agreed when asked whether familiar and frequently done dishes could be prepared without dairy products. However, replacing dairy with dairy alternatives was not a regular practice in most interviewees' households, even though it sounded easy to do in theory. This lines with Wendler and Halkier's (2023, p. 15) notion that although the intention to change

food consumption practices was widespread among the study participants, it was not enough to change a food practice that would have resulted in reduced meat consumption.

Although most interviewees said they used dairy alternatives to replace dairy while performing the practice like they were used to, some interviewees felt a lack of knowledge and skills to use dairy alternatives, which hindered their use in food preparation. Familiar dishes where dairy products were replaced with dairy alternatives needed to be learned to do differently: for instance, dairy alternative products reacted differently to heat, resulting in an undesirable texture. At times, achieving the desired consistency and taste was challenging, which was one of the most common reasons interviewees did not use dairy alternatives in everyday food preparation and stuck with dairy instead. As one interviewer described when asking about why she found it challenging to replace dairy products with dairy alternatives:

Indeed, the fact that you do not want to break routines at this stage of life. When you have a lot of small children, then... and then the fact that you lack the perseverance to accustom yourself. (p3)

As described in one interview, sometimes just replacing dairy with an alternative product was insufficient. Instead, competences regarding dairy alternative products and their use were essential to use them successfully in food preparation, which included learning new cooking methods and recipes (see Wendler & Halkier, 2023):

Well, when you do not try to replace the usual milk product but instead think a little about what could be suitable to make from this specific oat product, those kinds of [dishes] usually succeed. But then, when you kind of seek a substitute for a usual dairy product, it is always a little bit like... well, maybe the taste usually remains a little different. Or perhaps I am just too rigid. (p11)

If the outcome was not satisfying with dairy alternatives, the dishes were continued to be prepared from dairy products. Also, interviewees described how they enjoyed naturally vegan foods and foods made from dairy alternatives when eaten elsewhere. However, those dishes were not part of their everyday food preparation practice, as the interviewees often felt they did not have the time and resources to learn entirely new dishes and food preparation methods.

Well, when you have been to a vegan restaurant or someone else has made something scrumptious, you are like, well, these are actually delicious – basically really tasty from vegetables. But then, when you do it yourself... at that point, I'm not always ready to give up [on dairy] in all recipes. (p1)

The results align with Wendler and Halkier's (2023) study on the change in practices among meat reducers: novel competences, such as knowing how to use unknown ingredients in new ways, were needed to change a practice successfully and further create a new routine. Thus, the interviewees' theoretical notion of using dairy alternatives in food preparation did not transform the practice as new cooking methods were not successfully learned in practice.

In general, the interviewees did not actively seek to learn to prepare completely new dishes where dairy alternatives were used. They stuck to their old routines, preferring to prepare familiar dishes with a set of skills and know-how they already had and using ingredients they already knew (see Wendler & Halkier, 2023, p. 7). New dishes were discovered and learned at times, but dairy alternatives were seldom a part of the learning process. As Wendler and Halkier (2023, p. 25) note, the transition of food practices is not a linear or fast process but rather a long and gradual one that requires much time and effort from the practitioner to gather know-how and learn novel skills. However, some interviewees had also successfully learned to prepare dishes with dairy alternatives that had become staples in their daily food preparation. This finding shows that the change toward more sustainable food consumption is possible when flexitarians are able to successfully include dairy alternatives in their routinised daily food preparation performances (see Dakin et al., 2021).

## **6.2 Materials**

The accessibility of familiar ingredients made performances in food preparation practice easier in multiple ways, as many interviewees created dishes on the go from scratch rather than planning them in detail beforehand (see Chapter 6.1). One significant material element that bolstered the use of dairy products in food preparation performances was all the other foodstuff the interviewees already had in their kitchen storage. In this sense, food preparation was interconnected with practices such as purchasing food and avoiding food waste (see Reckwitz, 2002, p. 150; Shove, Pantzar & Watson, 2012; Wendler & Halkier, 2023). Sometimes, interviewees planned their meals in detail before grocery shopping, but in most cases, using dairy in daily food preparation was an organic and improvised practice using the already available ingredients at hand (see Halkier, 2009b, pp. 365–366), as described by one interviewee:

In meatballs or something like that, I might add a splash of milk into the batter or some cheese or something like that. - - And then I might put Koskenlaskija on top of salmon - - I have even made macaroni casserole with Koskenlaskija many times. It is really tasty. (p6)

The facileness of food preparation often required familiar food items (see Halkier 2009b). Thus, the foodstuffs bought from the store were often familiar staples. Semi-convenient foods like frozen potato strips or ready-to-eat foods like vegetable soups were also used to make food preparation easier and less time-consuming as they, for instance, cut down the time used to prepare raw vegetables. The link between the elements of routinised and familiar food preparation methods and familiar ingredients was prominent.

Well, yes, it (food preparation) goes relatively smoothly, and there is somehow a larger selection of recipes to choose from so that...there is no...maybe there is more thinking involved about what foods to purchase when going to the store. It is pretty easy to come up with what to do when the ingredients are already in the fridge. (p5)

I find it (food preparation) quite uncomplicated, probably because of routines. It is easy as we eat familiar foods a lot, and nowadays you can...maybe we are able to anticipate the days that may be tougher, then we make foods that are easier to prepare, for example, some convenience foods or something that can be done really quickly. (p8)

In addition to familiar ingredients, a repertoire of workable and attainable recipes that everyone around the same table enjoyed made cooking meals like lunch and dinner much more elementary. Thus, interviewees often leaned toward a set of familiar and reliable dishes in their daily lives, and the same recipes and ingredients tended to circulate in their routinised food preparation performances. Although the interviewees also prepared food without dairy, their daily meals often contained some dairy products. Thus, replacing dairy with a plant-based alternative in familiar meals seemed an inconvenience the interviewees did not want to bother doing as it disturbed the routine.

I have to say that, of course, there are some dishes where no dairy products are used, but indeed, dairy products are very often used at lunch and dinner. If someone who you knew could not consume dairy were coming to visit, you would really need time to think about foods that would not include it. That is because many... many foods automatically contain them. (p5)

Well, I guess it is because you have been making some dishes that include dairy with a particular recipe since you were little, so I haven't had any need to find substitutes for those dairy products. Maybe it comes down to laziness more than anything else. (p2)

One factor highlighting the routinised use of dairy was that most of the frequently prepared meals that included dairy products originated from interviewees' childhood. In addition, some dishes had become a staple after being introduced by their spouses, friends or relatives. Even though a couple of them were trying new recipes from time to time –

the most common answer being a couple of times per month – all interviewees described their daily meals as ‘basic’ and ‘routinised’. The interviewees often had a hard time answering and dictating the origin of their commonly used recipes:

Some of them [dishes] may have been inherited in blood and so on, and then again, some of them may be something like there have been some ingredients in a cupboard that I have then thought might work well together: I have added rest of spinach and fish – cold smoked salmon or gravlax – in a Béchamel-type sauce and found that to be a good combo. (p4)

Obviously, I have been aware of many of these foods, or these basic everyday dishes, probably my entire life. Then there are those recipes that... you are craving chicken soup and can google "chicken soup" and so forth, but I do not have any more specific answers for those. (p10)

Although everyday dishes were considered basic, the food preparation behind them was often a flexible practice where ingredients were easily modified (see Chapter 6.1). Dairy products made food preparation performances particularly flexible as they complemented other ingredients in various ways and were described as uncomplicated to add to different foods. In this sense, the elements of competences and materials were closely intertwined. Dairy products such as cream, cooking cream, cream cheese and processed cheese were often mentioned as being used when preparing food from scratch. Dairy products were quite freely added to all sorts of dishes:

Well, cream, for instance, can be added to these kinds of potato strip-minced meat, potato strip-ham or potato strip-fava beans casseroles. And where would I put sour cream... maybe it could be in something like beef gravy. Then... and also crème fraîche. - - And processed cheese and cream may sometimes just go in foods like chicken soup or soups as such. (r10)

In some cases, when making food like lunch or dinner, I have noticed that, for example, in a fish soup, a certain kind of processed cheese fits really well, so I always remember to put it there and maybe apply it to other dishes as well, chicken soups and so on. (r5)

Dairy products were a staple especially in dishes like breakfast and snacks. Often, these meals consisted of yoghurt or quark with added fibre, such as muesli, porridge, berries, and fruits. Such dishes were typical in almost every household and eaten at breakfast or as a snack in the evening or during the day. Another typical snack was bread with spread and cheese. These meals were also described as the most routinised, easiest and fastest meals of the day. Furthermore, when discussing favourite and most typical dishes and the importance of dairy products in interviewees’ lives, these types of meals were mentioned in several instances:

And then the fact that they [dairy products] are oftentimes the snack or something like that. So it has a tremendous meaning indeed. (r11)

Mainly, it is the cheese sandwich for breakfast; cheese and butter sandwich with coffee and some fruit... they play an essential part, and especially cheese goes along with many of them [dishes]. (r4)

The dishes that involved dairy products were highly convenient in the interviewees' lives. In households with children, as the meals were planned and prepared with the offspring in mind, there was a fundamental social aspect of convenience: avoiding food waste and ensuring the children had appetite. All in all, food preparation was considered more convenient when everyone enjoyed the food. In a hectic family or work life – or at times those two combined – interviewees preferred familiar and simple foods that were quick to do without compromising taste. In Wendler and Halkier's (2023, p. 8) words, that kind of food preparation did not require much *social coordination* to be successful. Tiredness, lack of time, and situations where children interrupted food preparation challenged food preparation the most. Thus, the availability of required ingredients and utensils and an organised kitchen were key factors in the routinised performances of food preparation. In hectic everyday life, interviewees prepared familiar dishes with reliable ingredients they were used to purchasing and having at home:

Right now, the situation is maybe a bit like when you need to cook so much for the kids who are quite picky, you want to stick to the familiar and reliable. (p11)

It is probably like... there are the same dishes that circulate. Of course, they always change from season to season, so... when I had a really hard time at work, I think I lived on nothing but oven feta pasta for a month or so. (p4)

As with dairy products, the availability of dairy alternatives at home was a significant factor in using them regularly in food preparation, which also meant consciously purchasing them from a grocery store (see Wandler & Halkier, 2023). For instance, one interviewee who used dairy alternatives on a regular basis mentioned having different kinds of dairy alternative products available at her home:

Well, I just looked in the fridge; there was an expired soy product, a soy-based food thingy, and then there was also some coconut cream. So, I use soy stuff just every now and then. Maybe I bought it just for a change because it has expired. Perhaps the oat-based ones are the most common. Coconut is there maybe because of its taste in some chicken-based dishes. (p9)

Another interviewee described a staple casserole dish she usually prepared from scratch using ingredients available in kitchen storage, such as dairy alternative products:

Well, for instance, the one with rice, chicken, vegetables... you can put cooking cream or coconut milk or liquids as such... it depends on what you have in the cupboard. (p7)

Thus, when dairy alternatives were easily accessible in the kitchen storage, they were also more likely to be used when preparing food, as coconut cream was a staple product in the previous interviewee's food preparation practice.

The third example of the accessibility and provision of dairy alternatives comes from an interviewee who switched houses with her relatives for a while. Dairy alternatives were used regularly in the other household, and thus, there were different kinds of dairy alternative products in the kitchen storage. The interviewee used those products in food preparation while living in her relative's home. She explained that she used dairy alternatives as she would use dairy products. However, dairy alternatives did not become a part of the daily food preparation practice back home after the house share was over. A significant contribution to this de-transition was the provision of dairy alternatives at home and not being familiar with buying them from the store:

Maybe it should start already at the stage when you go to the grocery store so that then those oat products would end up in the fridge, but well, no... sometimes you try some [dairy alternatives] if you are visiting someone, so it is not like you are not able to eat those oat things. Still, I have not thought about it in such a way that well, like leaving those dairy products out and having more of that oat stuff instead. (p5)

In addition to the accessibility of the ingredients, some interviewees also mentioned that a collection of suitable recipes with dairy alternatives could help transform routinised food preparation performances. In fact, the limited access to proven recipes was sometimes the factor hindering the use of dairy alternatives in food preparation, as one of the interviewees described:

I believe that I would hardly miss Turkish yoghurt if someone put a new recipe in front of me, saying to follow that, or if stores stopped selling it. (p10)

As discussed earlier in this chapter, the intention to use dairy alternatives was not enough to transform performances in food preparation. Interestingly, some interviewees who knew about different dairy alternative products and had been using them regularly at some point in their lives currently used dairy products instead. In other words, a practice can transform and change back to how it was. This result differs from Wendler and Halkier's (2023, pp. 7–8) finding that plant-based meat alternatives ultimately become a part of a routinised practice through a higher level of practical understandings and developing a new repertoire of usable dishes. However, Wendler and Halkier (2023) studied people who consciously aimed to reduce meat consumption. Thus, reasons for the unwillingness

to use dairy alternatives in this study can also be found in the meanings of food preparation practice.

### 6.3 Meanings

When asked about the meanings dairy products had and why they were used in food preparation, one answer came up repeatedly: all interviewees explained their use of dairy products by being so used to consuming them in their everyday lives.

As explained in previous chapters, many interviewees described how they had been using dairy for their whole life. Thus, they also got used to the taste of dairy early in childhood. The taste and texture of dairy hold significant meanings in the use of dairy products in food preparation. Taste was essential not only when indulging in foods such as desserts and festive foods but also when describing everyday life dishes. Interviewees had many positive meanings attached to meals made from dairy, from mundane daily meals such as mashed potatoes to cream cakes on special occasions. (see Fiddes 1991, pp. 30–37; Laakso et al., 2021, p. 268; Niva et al., 2014; Piazza et al., 2015, pp. 124–126). In addition to finding dishes with dairy palatable, they were often described as hearty and filling. When making the same dish without dairy or replacing it with plant-based dairy alternatives, the dish seemed to lose some of its delectability:

Often, perhaps, dairy products make the food... like they bring a sense of celebration to everyday life: if there is something like good cheese, or when we take some pudding or something like that as dessert - - they are often a snack or something like that. (p11)

Well, I do not know what happens in that food, but it will happen, for instance, when... creamy chicken soup feels more filling and somehow tastier than clear chicken soup, for example. (p10)

One typical example of taste was rice porridge, traditionally made in milk, which many interviewees found offputting when done with dairy alternatives. Oat porridge, on the other hand, was often also done using oat drinks.

Taste was such a crucial aspect that it was often valued over money. Taste of food as the most important influence on food choices has already been reported over two decades ago in a study on American food consumers (Glanz et al., 1998), and that evidence has been widely cited ever since. In this study, if the interviewees valued a specific product or

brand or wanted to indulge in something particular containing dairy, money was a secondary factor, even if the cost of dairy affected consumer behaviour at some other level. Furthermore, almost all interviewees were ready to pay more for dairy in exchange for being able to use dairy products as usual in the future. In addition to their appreciation for the taste of dairy, interviewees often used dairy products because of their offspring's appetite for dairy, especially in meals where the taste of dairy was distinctive.

Taste was also a significantly more important factor than the nutritional aspects of dairy, even though nutrition also played a part in the interviewees' reasons for using dairy in food preparation. For instance, the interviewees chose full-fat dairy products such as heavy cream over low-fat ones because of the preferred taste. When preparing food for children, dairy was considered a nutritious addition to the diet, and the most crucial nutrients mentioned were calcium and protein. When food preparation was seen as necessity (see Halkier, 2009b), dairy was considered an effective energy source: a great package of essential nutrients, fat and protein with little carbohydrates. Controversially, when talking about their own health, many interviewees were critical of dairy's nutritional value and questioned the importance of dairy, especially milk as a drink, for adults. Some interviewees had stopped drinking milk altogether, which aligns with the statistics that show reduced milk consumption in Finland (see Chart 1). Milk as a drink was offered mainly to the children.

It has been a bit of a contradiction not really knowing if they [dairy products] are truly healthy, as I have bad skin problems myself. Many people cut out milk and so forth, and then I have just been thinking about whether cow's milk is really meant for humans. Everything has crossed my mind, but for now, it is still a staple product. (p3)

In many interviewees' families, the children were used to and therefore appreciated the taste and texture of dairy, which often determined the use of dairy products in food preparation. Also, some interviewees mentioned that their partners' preferences led them to use dairy products. For instance, the interviewees used butter spreads, cream, and other dairy products because their partners preferred them over their plant-based counterparts. This result further highlights Wandler and Halkier's (2023, pp. 8–9) argument that maintaining social coordination, such as adapting performances and negotiating common procedures, plays a significant part in food performances. As Halkier (2020) notes, routinised performing of food activities is always done in relation to other people in some way or another. For instance, other people can help or hinder practitioner's aspirations. One interviewee mentioned how her partner affected her use of dairy when I asked whether she

could completely give up dairy products. She could desist from dairy due to environmental reasons but found it challenging when living with someone who did not want to do so:

If I lived alone, maybe it would be easier. I do not know why; I decide what I put in my mouth, but somehow, it affects that you are living with someone else. (p7)

For some interviewees, dairy was considered proper, natural and authentic food (see Shove, 2003; Torkkeli, Janhonen & Mäkelä, 2021). In this argument, the particular locale – living in North Ostrobothnia – seemed significant. One interviewee had grown up on a dairy farm, and four interviewees had worked or studied in a dairy field. In addition, living in the countryside near dairy farms affected interviewees' perspectives on dairy as a natural aspect of their everyday life food preparation practice. As one of the interviewees described:

Then maybe the fact that when living here in the countryside and you can see cows and so forth from our backyard, so I think that well, that is how it is supposed to be; to get milk from them cows and using it as it has always been used. (p5)

In contrast to dairy products, some interviewees described dairy alternatives as artificial and unnatural. Even though all had a generally positive attitude toward plant-based dairy alternatives when considering their personal use, concerns about the amount of additives, how processed the dairy alternative foods were, and whether they would be bad for health were raised.

Furthermore, the social atmosphere in the countryside of North Ostrobothnia seemed to support dairy use. Three interviewees who had been studying and working in bigger cities or abroad noted that they used to have a more plant-based diet and consume more dairy alternative products while living away from the countryside. As this interviewee elaborated:

Indeed, in my case, it is related to where I live and with whom I spend my everyday life. I feel that it [the social environment and location] affects these choices to some extent because I have lived in southern Finland and central Finland, and now I live here in the very countryside; that is probably the reason why my fridge nowadays does not perhaps contain as many dairy-free options that it used to when I lived in further south. (p9)

The change in food preparation performances was sometimes habitual (see Bourdieu, 1984). According to three interviewees, they used dairy alternatives more when they lived abroad or in bigger cities and were socialising with people who criticised dairy consumption and promoted more plant-based diets. In this sense, the use of dairy alternatives in food preparation reflected the practitioners' social environment (see Evans & Jackson, p.

9; Sargant, 2014, p. 26). Interviewees noticed how their old food consumption habits regarding dairy came after moving back to the countryside. One interviewee explained that she usually served foods made out of dairy alternatives to her acquaintances visiting from bigger cities even though she did not use them that extensively anymore. Another interviewee explained the juxtaposition of the routinised habit of consuming dairy and the desire to use more dairy alternatives:

There may be fewer people here in the countryside who think that a vegetarian diet is essential and recommended. Perhaps the surroundings might have some influence. And yes, in a way, I also have this kind of internal conflict with this issue. (p12)

According to the interviewees, plant-based lunches at students' cafeterias, the vast number of dairy alternatives accessible in stores, and social acquaintances also inspired them to prepare more plant-based dishes and use dairy alternatives at home. After moving back to North Ostrobothnia, they started to embrace their old eating habits and consume more dairy, often unable to explain why. Some mentioned that a busy family and work life further helped them to flip into old routinised food preparation habits. Some felt less judged by others and ate dairy products more freely in the countryside than in bigger cities. As one of the interviewees pondered:

I do not know, I have been thinking about whether the values have changed more like... kind of... like personal values that you unconsciously would eat more animal products while living here in the countryside. I cannot answer this, but I have been pondering it and find it quite mysterious. (p10)

One meaning of using dairy in food preparation was to support local and domestic dairy farmers. The interviewees expressed concerns about the livelihoods of dairy farmers, which was a significant reason to use dairy products and often took precedence over sustainability and climate issues. For instance, the interviewees were willing to pay more for dairy products but stressed that they would prefer to pay if they knew the money went directly to the producers. According to some interviewees, dairy farmers were already doing a lot for the environment and were concerned that environmental targets were making it harder for dairy farmers to make a living.

Interestingly, just as the taste of dairy was a significant factor in using dairy products, the distinctive taste of certain dairy alternative products was also a reason to replace dairy with them in food preparation (see Autio et al., 2023; McCarthy, 2017). The most prominent example of that is that oat drinks were mainly used in coffee instead of milk, and

the reason for that was that they were superior in taste and texture. For instance, the same interviewee who addressed the importance of supporting local dairy farmers used oat milk in her coffee because the taste was better than when using milk. In addition, certain dairy alternative products, such as coconut cream and almond milk, were consumed instead of dairy because of the taste.

The most commonly mentioned reason to replace dairy products with plant-based alternatives in food preparation was health-related issues (see Autio et al., 2023; Chollet et al., 2014; Morelli & Vitale, 2020). Many interviewees transformed their food preparation performances to maintain social cooperation: they changed dairy to dairy alternatives because of their other family members' dairy allergies or when preparing food for friends or extended family members who could not consume dairy products (see Wendler & Halkier, 2023). Also, several interviewees had cut dairy from their diet and replaced it with plant-based alternatives for an extended period because of skin-related issues. However, when acknowledging that dairy was not the reason behind such skin conditions, they all started reusing dairy products.

Some interviewees struggled with the consumption of dairy products because of the environmental, animal ethical and sustainability issues regarding dairy, which are common meanings to avoid animal-based foods in food consumption research (see e.g. Haas et al., 2019; McCarthy et al., 2017; Schiano et al., 2020). In these answers, taste and habits emerged as the main reasons for using dairy. One interviewee felt that he needed an external force to give up on dairy as he could not do it himself:

In fact, I kind of wish that... I am like that I need orders, prohibitions, and restrictions. So, if there were to be legislation that banned the use of dairy products, I would be fine with it. (p10)

For two interviewees, the frequent use of dairy alternatives in food preparation had an environmental reasoning behind it. However, despite the concerns, dairy was still used in cases where the taste mattered. For instance, dairy products were used when interviewees could not perform food preparation with dairy alternatives successfully with the desired outcome regarding taste or texture. The interviewees expected dairy alternatives to be similar to dairy in terms of taste and texture, which was also always an indicator of a great dairy alternative product.

This juxtaposition of using dairy while worrying about the environmental and animal welfare issues highlights the social practice theory's notion that the change in practice is not likely to happen by a mere change in meanings but requires a more comprehensive change in competences, meanings and the material elements (see Warde, 2005; 2014; 2016).

## 6.4 Conclusions

To conclude the results of this study, I present the following figures (Figure 3; Figure 4) showing the findings for the two research sub-questions in a simplified form. The illustrations show food preparation practice as a coordinated entity linked through competences, materials and meanings that includes multiple performances of using dairy and dairy alternative products in food preparation (see Higginson, Hargreaves & Mckenna, 2015; Kuijer, 2014; Reckwitz, 2002; Schatzki, 1996; Shove, Pantzar & Watson, 2012). For instance, within the food preparation practice, links can be made between the performance of preparing fulfilling and delicious (meaning) dinner from scratch (competences) using available ingredients (materials) at home. The latter figure shows how the links between meanings, competences and materials can support a food preparation practice where dairy products are replaced with plant-based dairy alternatives. The social aspects of food preparation practice are further discussed in Chapter 8.

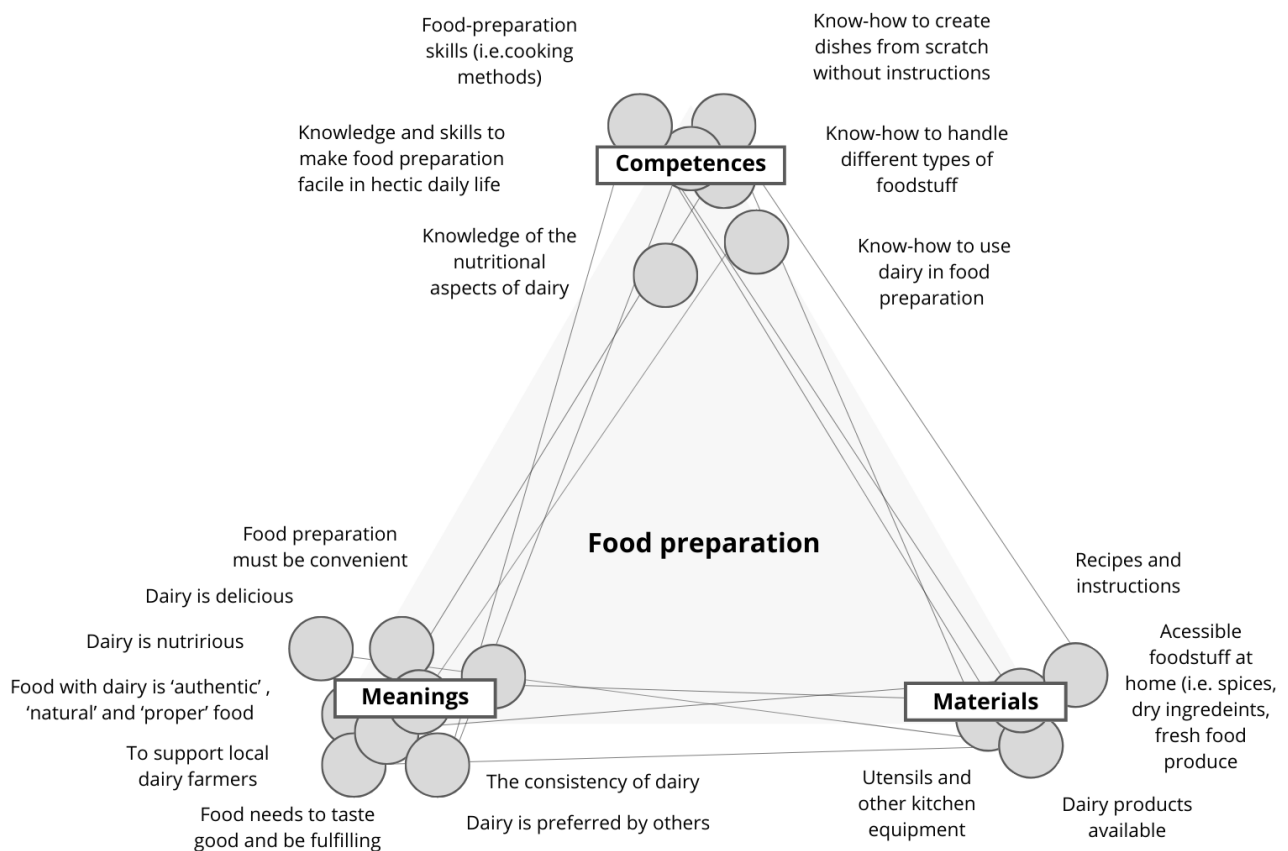


Figure 3. Competences, materials and meanings of the use of dairy products in performances in food preparation practice.

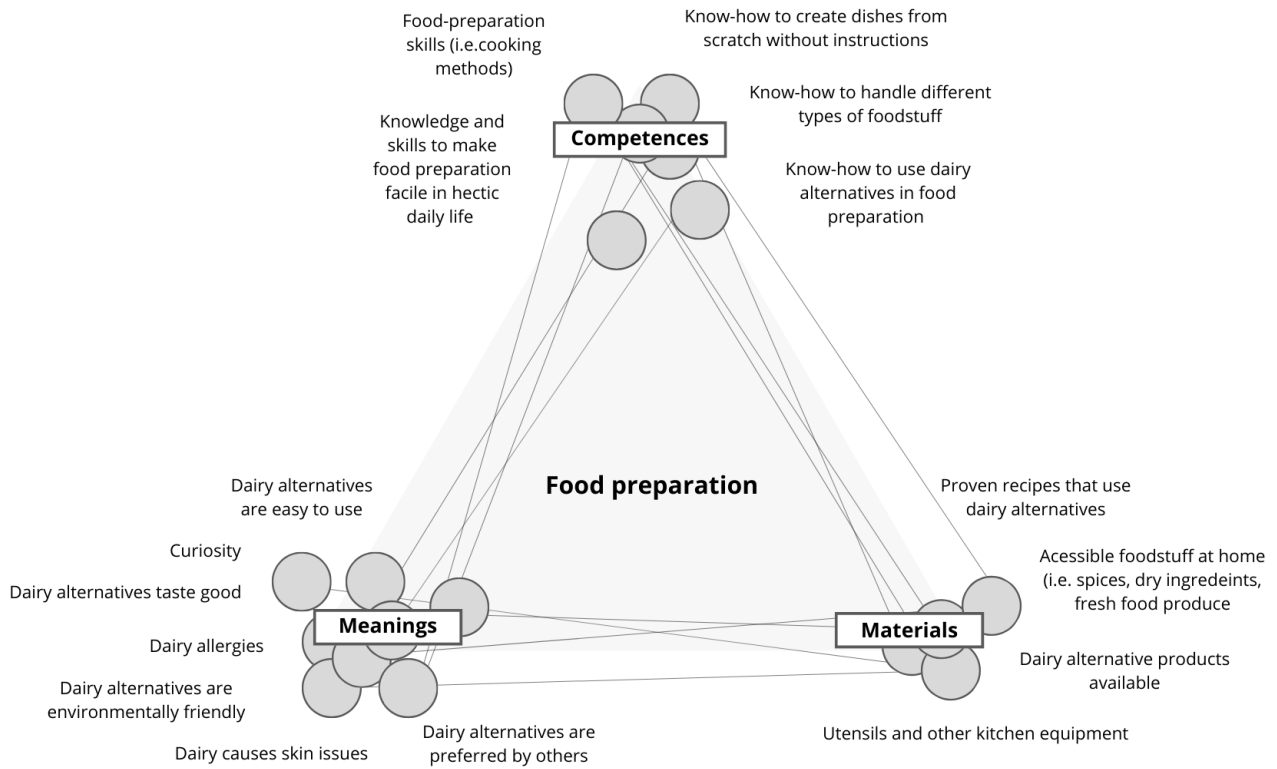


Figure 4. Competences, materials and meanings that promote the use of dairy alternative products in performances in daily food preparation practice.

## 7. Validity

This qualitative research – as all research – comes with a bundle of limitations, a significant one being the researcher herself as a conductor of qualitative interviews. Another challenge is the transparency of the qualitative analysis process, which determines a qualitative study's credibility and trustworthiness. Thus, I must address and validate these aspects in my research.

One risk factor of conducting the interviews that I acknowledged at the beginning was the possible strong attitudes and justifications for consuming dairy and dairy alternatives, especially in the context of sustainability. In the study done in the United States by Feltz et al. (2022, pp. 172–173), researchers noticed that some participants reported having stronger attitudes and justifications for their animal consumption when introduced to the topic of animals used as food. According to Feltz et al. (2002, p. 173), this phenomenon is consistent with the cognitive dissonance hypotheses concerning eating meat (see Rothgerber, 2014). Hence, it was of paramount importance that the research topic was introduced to the study participants with discretion, and the interviews were done so that the interviewees felt free and safe to express their thoughts and opinions. When conducting the study interviews, I tried to distance myself from the ongoing discussion about dairy consumption and climate change to ensure my personal thoughts and opinions would not influence the interviewees and affect how they answered my questions. Furthermore, I made sure that the interviewees remained completely anonymous, which was also explicitly stated before starting each interview. The recordings were deleted after transcribing the data, and all personal information, such as names of other family members, were transcribed with code names.

Some interviewees seemed apprehensive about sharing their opinions on dairy and dairy alternatives at the beginning, especially when discussing the environmental aspects of dairy. Furthermore, the contrast in discourses regarding dairy in the Finnish media and among people living in the countryside of North Ostrobothnia became evident during the interviews as the interviewees brought that up themselves. As a researcher from the University of Helsinki, this put me in a delicate spot as some interviewees had assumptions about my personal views on the matter. I acknowledged this dimension in the interview dynamics and encouraged the interviewees to express their opinions and thoughts freely.

Also, being born and raised in the study region myself, I noted that my northern dialect put the interviewees at ease, and thus, I also mentioned my place of origin to the interviewees to balance the power dynamics between interviewer and participant. A similar kind of openness with the interviewer's personal stance resulted in participants' openness and comfort with answering questions in a study on vegetarian and vegan men explaining their plant-based diets (see Mycek, 2018, p. 230).

I sought to make the interviewees feel comfortable and their thoughts appreciated by showing my interest through reciprocating in kind, using silence, and asking follow-up questions (see Braun & Clarke, 2013, pp. 95–96; Sclavi, 2007). However, sometimes the interviewer and participant dynamic felt rigid, resulting in short answers and, thus, more scarce data (see Braun & Clarke, 2013, p. 95). In those cases, the blame is first and foremost on the interviewer, who, hopefully, becomes more skilled in her craft. However, this academic growth comes at the expense of the ongoing research. (see Patton, 2015, p. 504.)

To validate the analysis process and the trustworthiness of the study, I look at the criteria of credibility, transferability, reliability and objectivity (see Lincoln & Guba, 1985, pp. 301–327; Lincoln, 1995). To be credible, the researcher must think theoretically through and with the data (Silverman & Marvasti, 2008, p. 295). The research problem and the analysis were based on the theoretical framework explained in the study, and the qualitative interviews gave appropriate data to the research questions. The study findings align with other practice theory research on food consumption practices. Thus, the findings can be assessed as reliable, valid, and empirically sound. (see Silverman & Marvasti, 2008, p. 295.) I also demonstrated the qualitative analysis process of coding the data to improve the transferability and reliability of the study design (see Lincoln & Guba, 1985, pp. 317–318; Silverman & Marvasti, 2008). As a qualitative researcher, I also needed to ensure that the interviews were conducted objectively and that the interpretations and findings were confirmed and supported by the collected data (see Lincoln & Guba, 1985, pp. 318–327). This was done by reading and examining the data multiple times and comparing the findings to other practice theory research on food consumption practices. However, I must note that the interviewees of this study might disagree with my interpretations: I did not show them my study findings, and thus, they could not offer their views regarding my interpretations. By doing so, I could have increased the credibility of the findings and improved the ethical aspects of qualitative research (see Lincoln & Guba, 1985, p. 315).

One noteworthy limitation of the study is the imbalance regarding the gender and educational background of the study participants. Only three out of eleven participants were men. Furthermore, there were one bachelor's and one licentiate's degree, four master's degrees, three degrees from the University of Applied Sciences, and two vocational school degrees. Even though there were no noticeable differences in the data regarding educational background or gender, one must note that the data was gathered mainly from females and people with relatively high educational backgrounds. This imbalance might be due to snowball sampling as a data-collecting method. Furthermore, study participants with vocational school degrees did not provide any referrals. This limitation also offers further study designs regarding the possible differences in the use of dairy and dairy alternatives in terms of gender and educational background.

Although having a practice theoretical approach, this study could have offered more multidimensional data for the practice theoretical analysis. As Koponen (2022, pp. 33–34) addresses, in practice theoretical research, it is essential to pay attention to both doings and sayings of practices. Observing what people actually do in practice and what kinds of materials are present will provide more information about the practices, especially when the practitioners find it challenging to articulate the general understandings or know-how behind the practices (Koponen, 2022, p. 34; see also Warde, 2016; Welch & Warde, 2015). For instance, this was done in the study by Torkkeli (2022), where the study participants and their doings were analysed via video material in addition to studying interviews. Also, Plessz, Dubuisson-Quellier, Gojard and Barrey (2014) used the practice theoretical approach and involved various methods to study food consumers in the French countryside. Two sets of interviews were conducted on participants' food practices, the first being a biographical one and the second focusing on current food practices. In addition to the interviews, the researchers accompanied ten participants to shop for groceries.

There were several incidents in this study where the interviewees had difficulty explaining the knowledge and skills behind the performances in food preparation practice. Thus, this study would have benefitted from ethnographic and observational research methods in addition to the conducted interviews (i.e., Koponen, 2022; Plessz, Dubuisson-Quellier, Gojard & Barrey, 2014; Torkkeli, 2022). This limitation offers implications for further

practice theoretical research on dairy consumption practices, such as biographical interviews to understand the dairy consumption practices throughout the study participants' histories and ethnographic observational data to further study the links between the elements of dairy consumption practices.

## 8. Discussion

This study offers insights into the role of dairy in Finnish food culture from a practice theoretical viewpoint. By looking at food preparation practice as an entity and how the elements of practice make or break links in its performances, we can discuss dairy's current and possible future role in people's everyday lives. Furthermore, this study helps to understand how people as practitioners adopt dairy alternatives as a part of their daily food preparation and what might hinder that change.

I see food preparation as a recursive everyday practice reproduced within designated fields of social life by capable and knowledgeable individual agents who rely on rules of resources constitutive for such practice (see Liu, Oosterveer & Spaargaren, 2015, p. 16; Spaargaren, 2011, p. 815). Even though my analysis emphasised the practice itself rather than individuals, it acknowledged that individual humans have a constitutive role as the only real agents within social practices (Spaargaren, 2011, p. 815; Spaargaren & Oosterveer, 2010, p. 1899). In other words, in this study, the food preparation practice was the core unit of analysis, not the individuals who perform them or the social structures surrounding them (see Hargreaves, 2011; Sahakian & Wilhite, 2014; Warde, 2016).

This study further addresses the routinised and habitational nature of domestic consumption practices (see Halkier, 2009b; Shove, 2012; Torkkeli, 2022; Torkkeli, Janhonen & Mäkelä, 2021; Wilhite, 2014). All in all, the interviewees engaged in familiarity and easiness when using dairy products in food preparation, leaning on routinised food preparation methods, embedded know-how and silent and embodied skills (see Halkier, 2009b; Torkkeli, Janhonen & Mäkelä, 2021, pp. 376, 379). When asked how routinised they felt their daily food preparation was; all interviewees described their everyday life food preparation as pretty or highly routinised, even though some of them felt that better cooking skills could result in even more routinised daily life (see Sargant, 2014, p. 27).

Routinised performances in food preparation practice were often learned over an extensive time period; some of the dishes had been a part of the study participants' lives since childhood. Food preparation practice was closely related to other food consumption practices, such as eating, purchasing, and avoiding food waste. The teleoaffective structures shaping food preparation performances could be cut down to a common aim to provide

oneself and one's family with 'normal' and convenient meals that everyone enjoyed but did not take too much time and effort to prepare (see Shove, 2003, p. 396; Wandler & Halkier, 2023, pp. 7–8). This can also enlighten the finding that dairy alternatives were mainly used in food preparation to replace the usual dairy products. However, it is worth noting that since the previous research findings on food consumption practices highlighted the routinised nature of cooking practices, the easiness and convenience of food preparation was a part of the interview questionnaire and thus could have affected the emphasis it had on the gathered data.

Through its practice theoretical lens, this study captures a representation of the food culture of people inhabiting the countryside of North Ostrobothnia (see Sargant, 2014, p. 33). One way to look at the local food culture is through the concept of system of provision, which originates from Fine & Leopold's (1993) work and Giddens' (1984) idea of locale (Spaargaren & van Vliet, 2014; Sargant, 2014). System of provision represents the social and physical factors that make up the means through which foods eventually reach the individuals; it refers to the infrastructures supplying products, services and settings that are an inseparable part of everyday food consumption practices (see Spaargaren & van Vliet, 2014, pp. 61–63).

One way to study social factors that affect the use of dairy and dairy alternatives is by looking at the use of dairy in food preparation from the perspective of Bourdieu's habitus. Dairy products had a significant role in the interviewees' daily lives. Thus, the use of dairy in food preparation formed a basic reality for the study participants, who then accommodated themselves to those practices (see Schatzki, 2017, p. 32). Individuals are shaped by and help shape the behaviour that comes with performing food preparation practice. They also have prior experiences and know-how from past performances in food preparation. In addition, they hold certain standards, concerns, and values specific to the 'dinner preparation context' (e.g., the type of food prepared or the possible expectations of others). (Sargant, 2014, p. 30.) These known dishes and food preparation methods in which dairy is present can be seen as collective structures of knowledge that shape human action (see Reckwitz, 2002, p. 246). Furthermore, those practices are then passed to the next generation as they get accustomed to the practices of eating and food preparation, which mould their understanding of the world (see Evans & Jackson, 2007, p. 9; Sargant, 2014, p. 26; Schatzki, 2017, p. 32).

In this study, the countryside of North Ostrobothnia can be seen as a social environment that supports the use of dairy products. This was especially noticeable among interviewees who had previously lived abroad and in bigger cities. They described how living in the countryside made consuming dairy products easier as everybody else found it normal, and people were generally less judgmental about animal-based diets. Controversially, the social environment also pushed the interviewees to consume dairy alternatives; for instance, when they had guests who did not consume dairy. In addition, the social atmosphere in social and mass media influenced people's thoughts on dairy alternatives. One interviewee also mentioned how oat drink was promoted at the local primary school, which made her ponder about the nutritional aspects of dairy alternatives. Some interviewees discussed the promotion of dairy alternatives and 'the ideologies behind it'. Many interviewees felt that dairy had not only economic but also great cultural significance. A couple of interviewees also had strong views on dairy production's environmental and ethical aspects, underlining the sustainable improvements done in the Finnish dairy industry in recent years.<sup>9</sup> The contemporary and often polarising discussions regarding milk and dairy in politics and media (see Clay & Yurco, 2020) are also present in the countryside of North Ostrobothnia, where they affect and influence individuals' food consumption practices.

I argue that the use of dairy has a habitual and cultural aspect that is grounded in food preparation practice and its performances as the practitioners are products of their environment and history, such as their family and social environment surrounding them (see

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<sup>9</sup> To give context to the matter, the main concerns in Finnish food production are eutrophication, carbon footprint, biodiversity loss, and dependence on unrenowable resources (Silvenius & Bar, 2018, p. 212). In Finland, there is an increasing amount of research tackling food production's environmental issues and finding sustainable food solutions (Silvenius & Bar, 2018, p. 212–213). Lehtonen et al. (2020, p. 10) note that despite having a significant carbon footprint, Finnish agriculture is considered highly sustainable on the other factors such as low use of antibiotics, strict food safety standards, and low usage of underground water in irrigation (see also Silvenius & Bar, 2018, p. 212). Even though the greenhouse gas emissions from Finnish food production have been the same the last two decades (Silvenius & Bar, 2018, p. 214), the carbon footprint from Finnish dairy husbandry is relatively low when compared globally (see Lehtonen et al., 2020, p. 10).

Evans & Jackson, p. 9; Sargant, 2014, p. 26). Further research on sustainable dairy consumption practices could use this Bourdieusian lense to study how the social environment around practitioners helps or hinders the use of dairy and dairy alternative products.

When looking at the food provisioning at the societal level and infrastructures regarding dairy supply in Finland, the abundance of dairy products in Finnish grocery stores can be seen in the study participants' food preparation performances; the number of different types of dairy products used in food preparation was significant. However, the ample supply of dairy alternatives available in local grocery stores did not increase their use in food preparation. This finding could be further studied by studying how the system of provision affects food consumption practices at home (see Spaargaren & van Vliet, 2014).

Thus, by structuring the locale, the concept offers technologies and materials, narratives, images, opportunities and settings for different performances in food preparation practice (see Sargant, 2014, p. 33). For instance, as many interviewees used well-known media platforms to find recipes and food inspiration, supporting the presence of dairy alternatives in recipes on such platforms could increase their use in food preparation. Furthermore, policies that lowered the price of dairy alternatives in supermarkets could increase their use in food preparation, especially among those who already used them alongside dairy products.

One significant finding from the research data was the importance of taste in preparing food and how strongly the meaning of taste was linked to other elements of practice. The taste of food held great significance to the interviewees, not only in festive foods on special occasions but also – and perhaps more importantly – in ordinary everyday life. Interviewees usually consumed dairy products familiar to them, the most common ones being milk, cream, food cream, butter, cheeses, and sour milk products such as quark and yoghurt. These results align with the current statistics on Finns' dairy consumption (see Aalto, 2018; Kaartinen et al., 2018; Mäkelä & Rautavirta, 2018; Piipponen, Rinta-Kiikka & Arovuori, 2018).

The meals that included dairy products were often dishes of Finnish and European food traditions. According to several food sociologists and researchers, dairy products are con-

sumed both in everyday life and during festivities, with positive cultural meanings attached to the meals made from them. Also, culturally significant dishes are often considered ‘proper food’. (Fiddes 1991, pp. 30–37; Laakso et al., 2021, p. 268; Niva et al., 2014; Piazza et al., 2015; p. 124–126.) The cultural meanings of dairy were prominent in the research data. Dairy was often described as ‘natural’, ‘real’ and ‘proper’, whereas many interviewees raised their concerns about the ‘processed’ and ‘industrial’ nature of dairy alternative products (see Shove, 2003; see also Torkkeli, Janhonen & Mäkelä, 2021, pp. 379, 381). In addition, the taste of dairy alternatives was always compared to dairy, and dairy alternatives were more likely to be used only when the taste was superior. Furthermore, many interviewees considered dairy nutritional and sustainable food and valued animal welfare when choosing dairy products, aligning with the Ministry of Agriculture and Forestry’s (2008) report findings.

One factor explaining the meanings behind the use of dairy products in food preparation and seeing them as a natural and self-explanatory part of a diet could be the number of dairy farms in the study region and the interviewees’ close social relations with the dairy industry. Dairy farms and cows can be seen everywhere in the countryside of North Ostrobothnia, which was also mentioned in the interviews. For instance, as one interviewee mentioned after the interview, there are almost three times more cows than people living in Reisjärvi.<sup>10</sup> Six interviewees had close connections with dairy production; they either had studied dairy farming, worked in dairy production, or had parents or a partner who worked in the dairy field. Most interviewees mentioned someone they knew who worked as a dairy farmer, which could explain the fact that supporting the livelihood of dairy farmers was meaningful to most interviewees. This further highlights practices’ social nature and how cultural structures and specific locale can influence and shape how individuals act in their daily lives (see Giddens, 1984; Sargant, 2014, p. 26; Schatzki, 1996).

Thus, the taste of food is also a social matter. According to Mason and Lang (2017), food sends signals, and people express identity through tastes in food when they accept certain foods as having ‘good taste’. Thus, different ideas of good taste can become a means of social orientation and a sense of place in society, leading to taste being a driving force for consumerism. (Mason & Lang, 2017, pp. 206, 210; see also Fiddes, 1991, pp. 33–45.)

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<sup>10</sup> According to Natural Resources Institute Finland, there were 7308 cows and 2636 inhabitants in Reisjärvi in 2022.

Laakso et al. (2021) claim that the difficulties in reducing dairy consumption lie in the fact that people are required not only to change their routinised ways of purchasing, cooking, eating and socialising around food but also the social norms of what is considered 'proper' or 'good taste' need to be challenged (see also Mason & Lang, 2017). Hence, the shift toward sustainable food culture in relation to dairy consumption requires collectively challenging dairy-based diets and their position in current eating practices (Laakso et al., 2021, p. 268). Among interviewees, coffee with oat drink was generally considered 'good taste'. Oat drink was also used in coffee because the surrounding social environment supported its use, highlighting the social aspect of practices (see Bourdieu, 1984).

Attributes of culturally acceptable foods can change when the socially constructed requirements for good taste fluctuate, which can eventually lead to a change of eating practices on a larger scale (see Mason & Lang, 2017, p. 210; Sahakian & Wilhite, 2014, pp. 29–30). In this study, especially oat drinks and plant-based sweet treats such as ice cream were accepted and even preferred over milk and other dairy products. The measure for good taste usually was how well the alternative product mimics their dairy counterpart. Oat-based dairy alternatives were preferred over soy-based because of the taste and because they were often produced in Finland and thus considered more environmentally friendly. One explanation for the interviewees' broad acceptance of oat-based products might be that Finland has a long tradition of using oats in various foods (see Salmenkallio-Marttila et al., 2011, p. 333). As oats are already stable in Finnish food culture, products made from them might be more readily accepted culturally.

The interviewees also appreciated the taste of dairy alternatives when they were used in foods from other cuisines and when they were not used to replace dairy products per se. However, despite the delicious taste, most study participants often did not prepare such meals at home due to insufficient competences and materials. The interviewees explained that they did not know how to make those dishes themselves because they lacked know-how and skills or did not know proven recipes. Also, they often did not have the required ingredients at home, nor were they able to buy them from the grocery store. In other words, they would have liked to prepare those meals, but the taste alone was not enough to change the food preparation practice (see Wendler & Halkier, 2023). In addition, the change in food preparation would have required changes in the nexus of other practices, such as planning meals or shopping for food. Some interviewees mentioned their lack of

knowledge of dairy alternatives and how to make delicious food from them. Some also raised the issue of a lack of tasty recipes that did not include dairy in the first place.

To conclude, competences and materials such as new recipes were required to prepare novel dishes and dishes with unknown ingredients. Furthermore, this study further addresses Wendler and Halkier's (2023) notion that open-mindedness is often not enough to change a practice: transforming performances in food preparation practice requires tremendous time and effort from the practitioners. Further studies on sustainable food consumption could concentrate on food consumption practices mentioned above that affect the material elements of food preparation, such as attainable recipes or the availability of dairy alternatives at home.

The often-mentioned limited resources to learn new cooking methods and accustom oneself to novel dishes is an interesting finding when looking at some of the know-how and skills interviewees used in food preparation. Skills and know-how of different food preparation methods among some interviewees were noteworthy. The general dismissive talk about convenience foods also indicated that most interviewees considered 'proper' cooking a practice in which food was prepared from raw ingredients from start to finish. Halkier (2009b, pp. 370–371) notes how everyday cooking from scratch can represent something unquestioned and normatively expected. In this study, the vast knowledge and skills did not often prompt changing food preparation performances towards using dairy alternatives. In addition, those preparing food from dairy alternatives regularly were still sturdy dairy product users, products such as cheese and yoghurt holding great value in the interviewees' answers. This food consumption trend aligns with the findings by Autio et al. (2023); the taste of 'real' cheese is highly valued and preferred over its plant-based counterparts.

With this study, I contribute to the SmartDairy project by providing information on the current and future position of dairy and alternative products in Finnish food culture. The appeal of this study is in the detailed look into everyday food preparation and its performances, which further explains the current and future position of dairy and alternative products in Finnish food culture. In addition, inspired by the practical challenges of climate change, this study contributes to the social practice research on sustainable food consumption by providing information about flexitarians and their use of dairy and dairy

alternatives in changing performances of food preparation practice (see Shove, 2010a, p. 283). This study provides perceptions to the academic discussion about dairy use, sustainability and climate change that could also help in future policymaking. Also, it offers insights into the use of dairy and dairy alternatives in food preparation that could be useful to the dairy and dairy alternative industry.

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## Appendices

### APPENDIX 1

#### **Semi-structured interview questionnaire based on the social practice framework.**

Background information:

- Age
- Sex
- Educational background
- Location
- Marital status
- People living in the household

Before the interview:

This interview is recorded and transcribed. The transcription might be used in further studies within the same SmartDairy project. The recordings will be destroyed after the transcription. The research will be published at the University of Helsinki with unrestricted access. Your identity (name, detailed location) cannot be traced. You may withdraw from the research if needed. Do you give your consent to this interview?

#### **Interview Questions**

##### **Food preparation practice and its performances:**

- How often do you prepare food for yourself or your family?
- How routinised do you find the preparation of your daily meals?
  - Do you always cook food the same way, or do you try new flavour combinations/recipes/ways of cooking?
  - Do you plan your meals carefully in advance, or do you usually freestyle using ingredients that are already available at home?
- How long does it usually take you to prepare different meals?
  - Which meals take more time than others?
  - Which meal(s) are the quickest to prepare?
- What kinds of skills and know-how do you use in food preparation?
  - Do you use novel recipes or cook from memory?
  - Where do you get inspiration for cooking?
  - Do you gather "food knowledge" by watching TV programmes, reading magazines, cookbooks, eating out, browsing food magazines, etc.?
- What do you find easy/difficult about cooking?
- How important do you find the easiness of food preparation?

- How easy do you think your current everyday cooking is? Do you spend time learning cooking methods or recipes?

**Using dairy in food preparation:**

- Do you eat dairy products as they are?
  - If yes, what and when/during what meals?
- What kinds of dairy products do you use in your cooking?
- How did you learn to prepare these dishes?
  - What skills do you think are required to prepare dishes using dairy products?
  - Do you find these dishes easy/difficult to make?
- Do you indulge in dairy products?
- Have you ever learned new dishes where you would use dairy products?
  - If yes, how often? Why do you think that is?
  - If not, what do you think is the reason?
- Do you bake regularly?
  - If yes, do you use dairy products in your baking?
- Have you tried any new dairy products recently? If so, what kinds?
- Why do you use dairy products when preparing food for yourself/your family?
  - Does the taste of dairy products impact your choices?
  - Does nutrition guide your choices?
  - Do your traditions/habits influence your choices?
  - Does price guide your choices?
  - Do the preferences of family members impact your choices?
- Do you/your family have certain standard meals or favourite meals?
  - Do these meals include dairy products?
  - Could those meals be made without these dairy products?
- What do you consider to be the criteria for a good/quality dairy product?
- What do you consider to be the criteria for a good/quality dairy alternative?
- What role do the meals in which you use dairy products play in your life?
  - Do your family members have any particular meals where dairy products play a specific role?

**Changes in food preparation practice:**

- Have you learned to prepare dishes where you try to replace dairy products with other foods?
  - If yes, why?
  - If not, why do you think that is?
- Have you tried/do you use plant-based dairy alternatives?
  - If yes, what kind? What do you like about the products you use? How often do you use them?
  - If not, would you be interested in trying?
- What do you think about plant-based dairy alternatives?

- Do you have a different attitude towards milk and milk substitutes than your family members?
  - If different, how?
- Do you think the use/purpose of plant-based products is different from traditional dairy products?
  - If yes, how?
  - If not, why do you think that is?
- Would you be prepared to give up dairy products?
  - If yes, why and under what circumstances?
  - If not, what do you think is the reason?
- Have you ever consciously reduced your consumption of dairy products?
  - If yes, which products, why and under what circumstances?
  - If not, what do you think is the reason for this?
- Would you be prepared to pay more to have the same dairy products in the future as you do now?
- Would you be prepared to pay more for more environmentally sustainable dairy products?
- Is there anything else you would like to say/discuss about this topic?

## APPENDIX 2

### Interview request form

Hello you, who use dairy products in everyday life,

Would you like to share your thoughts on their importance in your life?

I am currently working on a master's thesis on people's experiences of the role of dairy products in everyday meals and cooking. The research is part of the European Union's SmartDairy project, and it studies the significance of dairy in Finnish food culture. I would be very interested to hear your thoughts on everyday food preparation routines and the role of dairy products in your daily life.

The interview would last about an hour and would be conducted remotely online (i.e., via Zoom or Google Meet). Any information about your experiences is precious for research. The only thing required is that you were born after 1980.

Identifying individuals from the study will not be possible. Hence, you will remain completely anonymous.

If you would be willing to be interviewed, please contact me by email or message.

Best wishes,

Saraleena Järvinen

The original:

Hei sinä, joka käytät maitotuotteita arjessasi,

Olisitko kiinnostunut jakamaan ajatuksiasi niiden merkityksestä elämässäsi?

Teen parhaillaan pro gradu -tutkielmaa ihmisten kokemuksista maitotuotteiden roolista arkipäivän aterioissa ja ruoanvalmistuksessa. Tutkimus on osa Euroopan Unionin SmartDairy-hanketta, ja se pohjimmiltaan käsittelee maidon merkitystä suomalaisessa ruokakulttuurissa. Olisin todella kiinnostunut kuulemaan ajatuksiasi liittyen arkipäivän ruoanvalmistusrutiineihin ja siihen, millainen merkitys maitotuotteilla on jokapäiväisessä elämässäsi.

Haastattelu olisi noin tunnin pituinen ja se toteutettaisiin etänä Zoomin tai Google Meetin kaltaisen palvelun välityksellä. Kaikenlainen kokemustieto on tutkimuksen kannalta erittäin arvokasta. Riittää, että olet syntynyt vuoden 1980 jälkeen.

Tutkimusraportista ei ole mahdollista tunnistaa yksittäisiä henkilöitä, joten säilyt täysin anonyyminä.

Jos olisit valmis haastateltavaksi, ota yhteyttä sähköpostilla tai viestillä.

Aurinkoisin terveisin,

Saraleena Järvinen