UNIVERSITY OF TURKU
Turku School of Economics

Sustainable Food Consumption and Future: A Parenting Perspective

The Futures Consciousness of parents with preschool children

Master's thesis
Futures studies

Author:
Veronica Moscuzza

Supervisor:
Prof. Petri Tapio

1.6.2026
Turku

Student's statement regarding the use of Artificial Intelligence (AI) for preparing and/or writing this thesis:

☐ **I have not used any AI-based tools.**

☒ **I have used AI-based tools**. Their use is documented in the Appendix. The AI tools were used in a way that complies with academic integrity guidelines.

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin Originality Check service.

Master's thesis

Subject: Futures Studies
Author: Veronica Moscuzza
Title: Sustainable food consumption and future: a parenting perspective. The Futures Consciousness of parents with preschool children
Supervisor: Prof. Petri Tapio
Number of pages: 87 pages + appendices 15 pages
Date: 1.6.2026

Abstract

Food consumption is closely connected to both human well-being and broader sustainability challenges, as everyday food choices can have long-term environmental, social and health related impacts. Family life represents an important context in which food habits, routines and values are shaped through everyday interactions and practices. Whitin this context, parents with young children play an important and significant role in influencing food-related habits, routines and decisions during a particularly important stage of children's development. At the same time, many food choices are embedded in everyday life: where routines, responsibilities and available resources influence decision-making. Understanding how parents make decisions around these everyday food practices can provide valuable insights into the relationship between family life, sustainability and future-oriented thinking.

This master's thesis examines how parents with young children relate sustainable food consumption to future-oriented thinking within everyday family life. It explores how parents' food related views, values and practices can be understood through the five dimensions of Futures Consciousness: Time Perspective, Agency Beliefs, Openness to Alternatives, Systems Perception, and Concern for Others. It further explores the tensions between ideals and practice, as well as parents' orientations toward sustainability, healthy eating and the future which may relate to the potential transmission of both values and food-related habits within the family context. The study is explorative and adopts a qualitative research approach based on semi-structured interviews with parents of pre-school children. The collected data were analysed using qualitative content analysis, with the five-dimensional model of Futures Consciousness serving as the conceptual framework and qualitative tool.

The analysis suggests that Futures Consciousness operates as a dynamic and context-dependent framework in everyday family life, where different dimensions interact in varying configurations. While future-oriented values and concern are present across participants' reflections, their expression in daily practices is shaped by both individual orientations and situational conditions.

The study suggests also that future research could expand the empirical scope beyond qualitative interviews by including longitudinal studies, observational methods, or comparative samples across different cultural and socioeconomic contexts. Overall, the thesis explores the potential of Futures Consciousness as a framework for examining everyday sustainability-related practices in family contexts. It offers insights into how future-oriented thinking and sustainability are embedded, negotiated and sometimes constrained within everyday family life.

Keywords: Sustainable food consumption, Futures Consciousness, parents with young children, qualitative analysis

Master's thesis (Equivalente alla Tesi di Laurea Magistrale)

Corso di studi: Futures Studies
Autore: Veronica Moscuzza
Titolo: Consumo alimentare sostenibile e futuro: una prospettiva genitoriale. La Futures Consciousness dei genitori con figli in età prescolare
Relatore: Prof. Petri Tapio
Numero di pagine: 87 pagine + appendici 15 pagine
Data: 1.6.2026

Abstract

Il consumo alimentare è strettamente connesso sia alla salute e al benessere delle persone sia alle ampie sfide della sostenibilità, poiché le scelte alimentari quotidiane possono avere impatti a lungo termine di natura ambientale, sociale e sanitaria. La vita familiare rappresenta un contesto importante in cui abitudini, routine e valori legati al cibo vengono plasmati attraverso interazioni e pratiche quotidiane. All'interno di questo contesto, i genitori con figli piccoli svolgono un ruolo importante e significativo nell'influenzare abitudini quotidiane e decisioni legate al cibo durante una fase particolarmente importante dello sviluppo dei bambini. Allo stesso tempo, molte scelte alimentari sono inserite nella vita quotidiana, in cui routine, responsabilità e risorse disponibili influenzano il processo decisionale. Comprendere come i genitori prendano decisioni riguardo alle abitudini alimentari quotidiane può quindi offrire preziose prospettive sulla relazione tra vita familiare, sostenibilità e pensiero orientato al futuro.

Questa tesi di master analizza come i genitori con figli in età prescolare colleghino l'alimentazione sostenibile al pensiero orientato al futuro nella vita familiare quotidiana. Esplora come le opinioni, i valori e le pratiche alimentari dei genitori possano essere compresi attraverso le cinque dimensioni del modello della Futures Consciousness: Time Perspective, Agency Beliefs, Openness to Alternatives, Systems Perception e Concern for Others. Inoltre, approfondisce le tensioni tra ideali e pratiche concrete, nonché il modo in cui gli orientamenti dei genitori verso la sostenibilità, l'alimentazione sana e il futuro possano essere associati alla trasmissione, all'interno del contesto familiare, sia di valori sia di abitudini alimentari. Lo studio ha carattere esplorativo e adotta un approccio qualitativo basato su interviste semi-strutturate con genitori di bambini in età prescolare. I dati raccolti sono stati analizzati attraverso l'analisi qualitativa del contenuto, utilizzando il modello a cinque dimensioni della Futures Consciousness come quadro concettuale e strumento qualitativo.

L'analisi suggerisce che la Futures Consciousness operi come un quadro dinamico e dipendente dal contesto nella vita familiare quotidiana, in cui differenti dimensioni interagiscono in diverse configurazioni. Sebbene valori e preoccupazioni orientati al futuro siano presenti nelle riflessioni dei partecipanti, la loro messa in pratica nella quotidianità è influenzata sia da orientamenti individuali sia da condizioni situazionali.

Lo studio suggerisce che la ricerca futura potrebbe ampliare il campo empirico oltre le interviste qualitative, includendo studi logitudinali, metodi osservazionali o campioni comparative in diversi contesti culturali e socioeconomici. Nel complesso, la tesi esplora il potenziale della Futures Consciousness come cornice teorica per analizzare le pratiche quotidiane legate alla sostenibilità nei contesti familiari. Offre spunti su come il pensiero orientato al futuro e la sostenibilità vengano integrati, negoziati e talvolta limitati nella vita quotidiana delle famiglie.

Parole chiavi: consumo alimentare sostenibile, Futures Consciousness, genitori con figli piccoli, analisi qualitativa del contenuto

TABLE OF CONTENTS

1 Introduction 9

1.1 Why (healthy) sustainable food consumption matters 9

1.2 Why parents with young children? 10

1.3 Future thinking and Futures Consciousness 12

1.4 Research questions and structure of the thesis 12

1.5 The scope of the study 13

2 Literature review on sustainable food consumption and parenting influences 15

2.1 Food consumption as a sustainability aspect 15

2.1.1 The contribution of food 15

2.1.2 Definitions and dimensions 17

2.1.3 Drivers and obstacles 19

2.1.4 Sustainable diets and healthy diets 22

2.2 Parenting and family (sustainable) food practices: how parents influence children's food habits 24

2.2.1 Becoming parent as a life transition 24

2.2.2 Briefly: the context of intergenerational influences 25

2.2.3 Modelling healthy and sustainable behaviours 26

2.2.4 A few words about daily routines 28

2.3 Why a Futures Consciousness conceptual framework is needed 29

3 Conceptual framework 31

3.1 Future Consciousness: a brief overview 31

3.2 Anticipation Theory in Futures Studies 32

3.3 Futures Consciousness: the five-dimensional model 33

3.3.1 Five dimensions in general and at individual level 35

3.3.2 The model applied in qualitative analysis and its application in this thesis 37

4 Research material and method 39

4.1 Methods and data gathering 39

4.2 Ethical considerations 41

4.3 Methods of data analysis: qualitative content analysis 42

5 RESULTS 48

5.1 General results: participants' information and food habits 48

5.2 Results per dimensions 49

5.2.1 Time Perspective 49

5.2.2 Agency Beliefs 52

5.2.3 Openness to Alternatives 57

5.2.4 Systems Perception 59

5.2.5 Concern for Others 62

6 Discussion 66

6.1 RQ1: How are parents' views and practices of (sustainable) food consumption related to the five dimensions of Futures Consciousness? 67

6.1.1 Futures Consciousness as a dynamic framework 67

6.1.2 Daily realities and structural barriers 70

6.2 RQ2: What tensions or contradictions arise between parents' ideals and their actual practices? 71

6.3 RQ3: How do parents transmit values related to sustainability and future-oriented thinking to their children? 72

6.4 Multi-theoretical reflections 73

6.5 Practical implications and (policy) suggestions 74

6.6 Limitations and directions for future research 76

7 Conclusion 78

References 79

Appendices 88

APPENDIX 1. The structure of the interview questions in English 88

APPENDIX 2. The structure of the interview questions in Italian 90

APPENDIX 3. The invitation letter to the interview in English 92

APPENDIX 4. The invitation letter to the interview in Italian 93

APPENDIX 5. The consent form in English 95

APPENDIX 6. The consent form in Italian 96

APPENDIX 7. The Data Protection Statement in English 97

APPENDIX 8. The Data Protection Statement in Italian 98

APPENDIX 9. Transparency in the use of Artificial Intelligence in this thesis 99

APPENDIX 10. Detailed explanation and structure of the codes in qualitative content analysis **100**

FIGURES

Figure 1. Overview of the qualitative content analysis process in this thesis 44
Figure 2. Futures Consciousness in parents' everyday food practices 67

1 Introduction

This chapter introduces the context of the thesis by outlining the key challenges related to food consumption and highlighting the growing importance of healthy and sustainable diets in today's society. It also considers parents with young children as a relevant and significant group for this study. A Futures Studies perspective of the thesis is also included, drawing on the concept of Futures Consciousness (Ahvenharju et al. 2018). Finally, the research questions are presented, along with a definition of the scope of the study.

1.1 Why (healthy) sustainable food consumption matters

Food connects our health with the health of the planet, and the way food is produced and consumed creates major challenges. A lot of the food that is widely available today is high in sugar, salt and unhealthy fats. At the same time, access to sufficient and nutrition food is still not guaranteed for everyone. A complete and healthy diet supports growth and development and prevent malnutrition. (WHO & FAO 2019,17.) Yet, studies estimated that approximately one out of eight people worldwide experience chronic hunger (Alsaffar 2016, 108). However, in the global policy sector nowadays the term 'malnutrition' does not only mean undernutrition: it also encompasses all forms of malnutrition. This includes overweight and obesity and diet-related risk factors that contribute to diseases such as stroke, diabetes, certain types of cancer and heart disease. (WHO & FAO 2019, 17.) For example, childhood overweight and obesity are associated with significant health and social consequences (Nazarro et al. 2018) and are influenced by environmental factors. In this view, ensuring access to nutritious diet remains a major challenge.

In addition to health impacts, the food system has significant environmental consequences. Considering that agriculture is responsible for approximately one-quarter of global greenhouse gas emissions and drives around 70% of global freshwater use in agriculture and utilise 50% of the global habitable land area, it contributes to major biodiversity loss through the destruction natural habitats (Ritchie et al. 2022).

These negative impacts on the environment affect also social, economic and cultural contexts. Furthermore, the food system is estimated to generate 12 trillion U.S. dollars in hidden social, economic and environmental costs generated by food loss and waste (FAO 2024). Global resource depletion and greenhouse gas emissions related to food systems occur differently across countries depending on the types of greenhouse gas emissions they generate (Davis & Caldeira 2010). In terms of household consumption, Western countries still remain the biggest contributor per person

(high consumption based on CO_2 footprints), whereas developing countries contribute less per person, but have a high total impact due to the scale and industrial growth, high in CH_4 (methane) and N_20 (nitrous oxide) footprints (Shershunovich & Mirzabaev 2024). Due to this situation, it is more and more evident that food systems need a transformation. Such transformation requires changes across the food system – from production and distribution to consumption and related sustainability practices (Hoek et al. 2021). However, the change to a more sustainable food system is complex and needs to consider multiple and interconnected challenges.

Moreover, the environmental footprint of households is a central topic. Household consumption alone is responsible of "more than 60% of global GHG emissions and between 50 and 80% of total resources use" (Ivanova et al. 2016, 532). From the consumption point of view, a significant role is covered by focusing on shifts toward more sustainable diets, such as plant-based diets, which use less land, energy, water and can reduce emissions while improving individual health (European Public Health Association 2017). Also, reducing food waste from both consumption and production would help to tackle the problem. Therefore, it is important to understand that our dietary choices have an impact on our health, on our local ecosystem and also on our planet. Practices such as reducing food waste, buying organic, local and seasonal food, eating more vegan or vegetarian diets and consuming less meat, can all help make people's approach to food more sustainable (Randall et al. 2024). When discussing consumption of meat, it is important to understand that dairy and beef industries are deeply interconnected. Since cows need to give birth to calves in order to produce milk, and roughly half of the calves are male, high consumption of dairy products also supports high level of bovine meat production.

This master's thesis explores the Futures Consciousness of parents with young children in the context of family food consumption. It examines how parents "understand, anticipate and prepare for the future" (Ahvenharju et al. 2018) and how this capacity can form the foundation that is assimilated and transferred to children, including the transmission of sustainable values. Parents of children between 0-7 years old are interviewed and the analysis illustrates how Futures Consciousness manifests in participants' food-related practices and views.

1.2 Why parents with young children?

Individual actions and choices that everyone can take on an individual and households' level in daily basis have a significant impact in building a more sustainable world for the present and especially for the future (e.g., through consumption habits and lifestyles). Why focus on parents of young children? Becoming a parent and the closer years next to this event can be considered as a

life transition, since there are holistic changes in lives. Research suggests that life transitions, like becoming a parent, are period of changes, and women in particular show relevant positive changes in their food habits, such as increasing vegetable consumption (Hartmann et al. 2014). This may indirectly reflect an increased interest in the long-term future, including considerations of intergenerational impacts and motivations to build a better world for the children. Thus, they are important part of the population to investigate to know how this life-stage transition affects future thinking.

Parents with young children are a relevant group to study for several reasons, but this thesis focuses mainly on the following aspects: children are the future generation in this world and parenting lays the foundation of future behaviours. Especially, early childhood is a period when family factors can shape children's early lifestyles, which may influence their later health behaviours and future development. (Mollborn & Lawrence 2018.) Moreover, e.g., for the age of 5-7 years, the values transmitted by the parents will be carried and may influence their behaviours long time after the children have left their family of origin (Maccoby 2000). Also, concerning the food context, early childhood (specifically the first five years) is a period of rapid growth and change where taste preferences are formed, and food habits and routines are shaped. Thus, eating behaviours at this age can influence the development of children long-term dietary habits. (Savage et al. 2007,1.) In the light of this strong influence, parents have a big responsibility in how to educate their children to sustainable lifestyles, and so by also including more sustainable food consumption practices. They are the first who need to act. Parents make daily food choices not only for them, but their decisions can also have high impacts: by establishing lifelong dietary patterns, influencing their children health trajectories and by shaping future consumer behaviours and values about sustainability. Thus, it is very important to understand the relation that parents have with future and sustainability of food consumption. Exploring parents' futures consciousness can help clarify how parents consider future consequences in everyday decision-making and how future-oriented thinking relates to real-life consumption practices.

In this context, it is important to understand how parents interpret sustainability and health-related values, because this can inform interventions aimed at promoting healthier and more sustainable consumption. Families with young children may be an interest segment also for governments, NGOs and companies because they influence food demand, may respond to educational campaigns and sustainability-related norms, e.g., eco-friendly habits. In particular, parents play a central role in shaping children's food-related behaviours and environmental awareness, making them key agents in promoting sustainable consumption patterns, fostering sustainability-oriented values (Halicka et al. 2021), and thus able to shape the future of food systems by influencing tomorrow's consumers

through present-day decisions. Parents as consumers, through their actions, can decide which products and foods to buy and consume, how and what to teach to their children, and whether to adopt or avoid emerging food technologies (e.g., plant-based alternatives).

In this thesis, parents are highly educated and were recruited without any requirement for specific knowledge of sustainability.

1.3 Future thinking and Futures Consciousness

Futures Consciousness (FC) is the capacity to anticipate, reflect on, and act with awareness of long-term consequences (Ahvenharju et al. 2018). In this thesis it is considered particularly relevant for sustainability and parenting research because it helps explain how parents' future-oriented thinking and ethical awareness shape family food choices and the transmission of sustainable values to children.

Studies focusing on parenting and (sustainable) food consumption, as will be discussed in Chapter 2 (Literature Review), often do not explain or explore how parents think about long-term future, they mainly describe what parents do in the present when purchasing and consuming food for their family. However, numerous food-related parenting decisions, considering factors such as health, sustainability and culture, are naturally oriented towards the future and require future-focused thinking (Halicka et al., 2021; Bernard et al., 2024). Thus, adopting a future-oriented perspective is essential to understand how parents anticipate and shape their children's well-being through daily food choices, including considerations of sustainability. "The five-dimensional model" of Futures Consciousness (Ahvenharju et al. 2018; 2021) provides a useful framework for examining how future-focused thinking shapes routines, modelling and negotiation around food and for explaining why certain practices are maintained over time while others change in response to shifting expectations or uncertainties.

1.4 Research questions and structure of the thesis

This thesis brings together Futures Studies (through the concept of Futures Consciousness), sustainable food consumption and parents with young children. The main objective of the study is to explore the Futures Consciousness of parents with young children in relation to food consumption within family life.

More specifically, the study focuses on how parents express the five dimensions of Futures Consciousness (Ahvenharju et al. 2018) in relation to sustainable food consumption, how their food-

related values and everyday practices reflect future-oriented thinking and how tensions or contradictions may arise between their ideals and actual practices in family life. It also considers how parents transmit values related to sustainability, healthy eating and future-oriented thinking to their children and contributes to the application of the five-dimensional model of Futures Consciousness in qualitative research.

To further explore these aspects, this study seeks to answer the following research questions:

RQ1: How are parents' views and practices of (sustainable) food consumption related to the five dimensions of Futures Consciousness? RQ2: What tensions or contradictions arise between parents' ideals and their actual food-related practices in family life? RQ3: How do parents transmit values related to sustainability and healthy eating and future-oriented thinking to their children?

The thesis is organized as follows. Chapter 2 presents the literature review, focusing on sustainable food consumption, parenting and family food practices, and their influences on children's eating habits, as well as introducing the relevance of a future-oriented perspective. Chapter 3 introduces the conceptual framework, focusing on Future Consciousness and its main theoretical background, including Anticipation Theory within Futures Studies and the dimensional model of Futures Consciousness of Ahvenharju et al. (2018; 2021). Chapter 4 describes the research design, including the methodological approach, data collection, ethical considerations and data analysis.

Chapter 5 presents the results of the thesis, focusing on findings organised according to the five dimensions of Futures Consciousness. Chapter 6 discusses the results in relation to the conceptual framework and prior literature and reflects on their practical implications, limitations and directions for future research. Finally, Chapter 7 concludes the thesis by summarising briefly the main insights. A more detailed structure of each chapter is presented at the beginning or the respective chapters.

1.5 The scope of the study

The scope of this study is limited to parents with young children and their perspectives on (sustainable) food consumption in a family context. Specifically, the study focuses on everyday food practices and meanings related to sustainability and health, as well as parents' future-oriented thinking as conceptualised by the Futures Consciousness framework (Ahvenharju et al. 2018; 2021). One parent per family was interviewed. Thus, in this thesis Futures Consciousness is analysed at the individual level, while being interpreted in relation to family practices. In other words, Futures Consciousness does not belong to the *family* as a unit, because the interviewed parents were

individual respondents, and not representatives of the entire families, even though they spoke and reflected about family practices. Their cognition, values and perceptions were individual, and the researcher did not have access to a share, collective or their children's Futures Consciousness. In this view parents can be seen as key mediators of food practices and sustainability-related values within family. The study primarily focuses on nuclear family context, although one participant lived in a multigenerational household. Finally, the thesis uses qualitative methods to dig deeper in the thematics and does not include quantitative measurement or comparison of Futures Consciousness levels. Also, it does not address broader sustainability behaviours beyond food consumption.

2 Literature review on sustainable food consumption and parenting influences

This chapter reviews some of the main concepts that have been read and that are relevant for this study. It starts by introducing the concept of sustainable food consumption: the main challenges (Section 2.1.1), key definitions and dimensions (Section 2.1.2), and the drivers and obstacles that influence more sustainable choices (Section 2.1.3). Section 2.1.4 then looks at the characteristics of sustainable and healthy diets, focusing on where these ideas overlap and where they may conflict. After that, the chapter turns to family food practices, focusing on parents with young children and the transition to becoming a parent (Section 2.2.1). The other subsections focus more specifically on briefly introducing the context of Intergenerational Influences and Family Food Socialization (2.2.2), modelling (2.2.3) and daily routines (2.2.4). All of which illustrate how parents can influence their children's food behaviours, values, attitudes and habits in the present, but also in the long-term. The chapter ends by explaining why a future-oriented framework – specifically the five-dimensional model of Futures Consciousness (Ahvenharju et al. 2018) - is useful for analysing sustainable food consumption in family with young children (Section 2.3).

2.1 Food consumption as a sustainability aspect

2.1.1 The contribution of food

As discussed in Chapter 1, the current food system is widely seen as unsustainable. It is eroding the ecological foundations needed for future production and is tied to environmental degradation. Data shows that it is a big cause of deforestation, it contributes to 20-30% of greenhouse gas emission, it pollutes the water heavily and it uses 70% of all human water (Garnett 2014, 1; Ritchie et al. 2022). Although every part of the food chain contributes to these problems, agriculture causes the biggest environmental impacts. Crops and livestock play a relevant role, but livestock production is especially significant: 14.5% of global greenhouse emissions is produced for raising animals for meat, dairy and eggs and 70% of all agricultural land is used. At the same time, food production does not guarantee adequate or equitable nutrition, since about half of the population is either malnourished, or suffers from micronutrient deficiencies or overnutrition. In fact, despite producing enough calories globally the food system fails to deliver adequate and affordable nutrition to many. (Garnett 2014, 1-2.)

Concerning food waste, developing countries tend to have high waste during the production process or near the farm, but consumer waste is little. A larger share of waste occurs at the consumer level in developed countries, where the food is thrown away even before consumption (Lang & Barling 2013, 2-3). In fact, for the majority high incomes countries have a very high per-person emissions, high energy use and carbon food prints (Shershunovich & Mirzabaev 2024), produce large amounts of waste generation and resource intensive lifestyles. Thus, the richest countries contribute the most per person to unsustainable food consumption, especially when it comes to consumption of meat and dairy products (Li et al. 2023). Developing and non-Western countries contribute differently: their per-person consumption is lower, but population growth, deforestation, and limited waste management can raise demand and pollution. They also experience weaker regulation and emit more methane and nitrous oxide use especially in agriculture soils and fertilizers as well as for some industrial processes and so facing significant environmental challenges. (Shershunovich & Mirzabaev 2024.) In these countries food production represents a major driver of unsustainability, food is producing at large scale (such as soy, beef, palm oil, coffee, cocoa, tropical fruits) for export to wealthy nations (Shershunovich & Mirzabaev 2024; Li et al. 2024). Thus, it is important to take into account consumption-based vs. production-based carbon accounting: national inventories typically count emissions depending on where goods are produced, but many emissions are actually driven by consumption in other countries. (Davis & Caldeira 2010, 5690-5691.)

The unsustainability of the system is not limited to environmental impacts: it also includes social, economic, and cultural dimensions. Eating habits and food choices and preferences are difficult to change because there are shaped by a complex mix of habits, environment, and conflicting priorities, not just knowledge or attitudes. (Vermeir et al. 2020). It is complicated also because eating habits are strongly shaped by culture, society and personal psychology (Gorgitano & Sotano 2014, 210).

Households are estimated to be responsible for a significant share of global greenhouse gas emissions (60%) and resources use (Ivanova et al. 2016). Thus, it is very important to search and identify sustainable ways to transform consumer behaviour to improve environmental and other issues. Food waste is also a major sustainability challenge at the consumption stage. Hebrok & Boks (2017, 383) report that in the EU 53% of the food that consumers buy is wasted. They argue that education alone is unlikely to reduce food waste: knowing about food waste and valuing food does not automatically translate into behavioural change. In their literature review of household food waste from a consumer perspective they identified multiple interconnected drivers, including values and perceived value of food, attitudes and awareness, habits, routines, convenience, planning

habits, leftover management, storage practices, packaging, and perceptions of food risk. These practices can be influenced by cultural values, lifestyles, material conditions, and structural factors, and are often so automatic that consumers may not be aware of how they contribute to waste. (Hebrok & Boks 2017.) In their view, interventions need to address consumer practices, values, attitudes and convenience needs through a combination of individual guidance and broader policy action or on both approaches together. In the field of marketing in Europe, products that can be considered as sustainable food are organic items, fair-trade products, local products and products with protected certification of origin (Thøgersen, 2010; Briamonte & Giuca 2010, according to Vassallo et al. 2016, 423).

2.1.2 Definitions and dimensions

Currently there is no single, universally accepted definition of *sustainable food consumption*. However, the concept is widely discussed across nutrition, environmental, social and policy science. It is generally described through key dietary principles such as reducing overconsumption and food waste, adopting more plant-based diets and reducing intake of energy-dense ultra-processed foods and reducing intake of animal-based foods. (Hoeck et al. 2021, 611.) At the same time, the boundaries between concepts such as "sustainable food consumption", "sustainable food product", "sustainable food practice" are not always clearly defined (Genova & Allegretti 2024, 2). According to the action plan of the European Commission "Farm to fork strategy" a fair, healthy and environmentally friendly food system from farm to fork is the goal to reach. A system that has a neutral or positive impact on the environment from production to supply, protects biodiversity and bio natural resources, provides safe and nutritious food for all and should also support fair, affordable and competitive economic conditions across the food chain. (European Commission 2020.)

Another definition was provided by the UK Sustainable Development Commission (2005;2009). It argues that, for food to be sustainable, it should meet safety, policy and environmental requirements:

> "It should meet safety, political and environmental requirements, such as safe, healthy, and nutritious diets for everyone; viable livelihood for farmers, processors, and retailers; animal welfare; environment protection; biodiversity safeguard; energy saving, minimum waste." (UK Sustainable Development Commission 2005;2009 according to Gorgitano & Sotano 2014, 210).

Many definitions of sustainability in contemporary literature build on the concept of "Sustainable Development" introduced by the 1987 Brundtland Report, "Our Common Future" (World Commission on Environment and Development 1987), where it was defined as "meeting the needs

of the present without compromising the ability of future generations to meet their own needs". This idea of *needs* is often interpreted as covering both environmental and human-centred aspect of sustainability. (Jackson & Holm 2024,1.) Sustainability is often understood as:

> "…a long-term goal (i.e., a more sustainable world) while Sustainable Development refers to the many processes and pathways to achieve it (e.g., sustainable production and consumption, sustainable agriculture and forestry…)." (UNESCO 2012, 5).

The commonly cited three pillars of Sustainable Development – environmental, social and economic – were introduced by The 2002 World Summit on Sustainable Development. (UNESCO n.d.). And it is well known that sustainability also encompasses multiple spheres: environment, society, and economy. The incorporation of culture into sustainability it remains still unclear, both scientifically and politically (Dessein et al. 2015) and it is often considered as an *underlying* dimension of sustainability (UNESCO 2012). Despite the complex conceptual context of sustainability, also in food sector all three dimensions of sustainability should be considered – not only environmental, but also social and economic dimensions are important - to avoid overlooking important aspects (Jackson & Holm 2024) - while also considering cultural and nutritional dimensions. Most often the scientific literature on this topic focuses on food systems and practices mainly through environmental and economic perspectives, while the social dimension receives comparatively less attention (Genova & Allegretti 2024, 2).

Garnett (2014,81) suggests that definitions of sustainable diet should consider food's complex meanings, such as "pleasure, guilt, ritual, status, comfort, bribery and love". Nemeth et al. (2019) also focus on the cultural dimension in food consumption. They explored how international student's cultural traditions shape their food habits and how these habits interact with, the local food environment in Hungary. They state that food choices are culturally driven, complex and have a significant social impact and may also influence local food supply practices. Also, findings from Vassallo et al. (2016, 431) show that food choices in the Southern part of Italy are still influenced by family and traditions, and the consumption of sustainable foods resulted to be much less comparing the Insular macro- region. To make other examples about the different dimensions, in Nordic countries, discussions on sustainable diets often focus on environmental impacts, with less attention to social and economic aspects (Meltzer at al. 2019, according to Jackson & Holm 2024; 6-8). Shifting to plant-based diets favourable for the environment could create economic challenges, especially in countries like Finland, where meat and dairy dominate agriculture and many fruits and vegetables are imported. Adopting such diets would require investments in local production (e.g., of legumes), while also considering food security, jobs, and the future of the agri-food sector. Also,

Jackson & Holm (2024, 6-8), drawing on previous research, show that since meals are social events, dietary changes are not purely individual choices—they require negotiation with others. Addressing the social side of sustainability in food sector also means recognizing that access, affordability, and prices are unequal, shaped by factors like class, ethnicity, and gender. Keeping that in mind, is important to remember that nutritional advice must recognized that the best diet nutritionally is not accessible or available for every community. (Jackson & Holm 2024, 6-8.) Social sustainability can also include agricultural workers' rights and working conditions from the perspective of producers, such as those addressed in Fair Trade initiatives. In addition of how sustainable food it is defined or conceptualize in literature, is interested to know how consumers define sustainable food products and which dimensions they consider most. In their empirical study Genova & Allegretti (2024), explore how interviewees defined a sustainable food product. Overall, consumers place strong emphasis on the production over other phases of the food cycle, highlighting environmental and ethical–social dimensions as important aspects. Sustainability was thus understood by consumers as minimizing environmental impacts, following natural production cycles, reducing waste and chemicals, preserving resources and favouring direct producer-to consumer supply chain seasonal, locally sourced products. (Genova & Allegretti 2024, 5.)

2.1.3 Drivers and obstacles

A vast amount of research that cover many angles discuss what drives people towards more sustainable consumption and what prevents it. For example, Hebrok & Boks (2017, 382) show that research often looks at food waste amounts and composition, consumer behaviour, attitudes, beliefs and values, as well as prevention strategies and interventions. In their introductory review of the literature, Genova & Allegretti (2024) identify six main drivers of sustainable food consumption at the individual level according to different studies: (1) environment concerns of reducing ecological impact, packaging, food waste, and supporting animal welfare including vegetarian, vegan, and plant-based options; (2) health considerations; (3) human rights and fair labour; (4) perceived superior taste and quality; (5) culture factors; and (6) Social relationships. They also identify four main obstacles that influence food choices at the individual level: (1) product availability; (2) affordability; (3) consumer skills and competence (e.g., evaluating products and reading labels); and (4) culinary habits and traditions. (Genova & Allegretti 2024, 3.)

Similarly, Nichifor et al. (2025) review studies published between 2015 and 2024 and identify similar drivers and barriers, where health concerns and environmental awareness emerge as key drivers: sustainable options are often perceived as more nutritious, safer and healthier, while concerns about

climate change, environmental impacts and resource depletion encourage consumers to choose more sustainable options, considering supporting also their local economy. Other significant drivers include ethical values (e.g., animal welfare and social justice), social norms, taste and perceptions (e.g., freshness and flavour), and support for local economies. (Nichifor et al., 2025, 32.)

Nichifor et al. (2025, 33-34) also identify six main barriers: (1) economic barriers, including high prices and financial constraints; (2) availability barriers, referring to difficulties in locating sustainable opinions in local markets; (3) knowledge gaps, such as low awareness of labels and certifications, production methods and healthy and sustainable food benefits; (4) social and cultural influences, for example societal norms that may limit openness to new foods; (5) psychological factors, including scepticism, resistance to change and neophobia for food; and (6) functional challenges, such as cooking complexity, convenience, taste-related difficulties.

Genova & Allegretti (2024) in their study further explore what are the actual main drivers or obstacles to sustainable food consumption to the eyes of the interviewed consumers. The consumers' views of food sustainability only partially align with those found in the scientific literature. Four of the drivers identified by the literature were confirmed - environmental concerns, health considerations, consideration of human rights and perceived superior taste and quality. On the other hand, the biggest obstacles were consumer skills/competence, and affordability, whereas culinary habits had just a little influence.

In the view of these results and different perceptions, Genova & Allegretti (2024, 14) claim the need of a shared definition of *sustainable food*. If public and scientific discussion provide a clear and coherent framework about what constitute sustainable consumption, also individuals would have a better understanding of it.

More specifically about organic food, according to Hjelmar (2011) study, drivers that guide consumer to buy it include: availability and convenience, prices, perceived quality, better quality and health benefits. Trust in organic labels also plays an important role, as consumers often rely on certification systems rather than fully understanding organic standards. In addition, reflective considerations, including concern about health, the environment and animal welfare can affect choices. Finally, events that change routines, such as life events - especially having children - can represent a driver of organic food consumption. Chekima et al. (2019) explore what motivates people to engage in (not just to buy) organic food in Malaysia. They find that consumption is more likely when people have a positive product-specific attitude, are willing to pay and perceive organic options as accessible. These effects are mainly driven by perceived health, safety and quality benefits, rather

than environmental attitude alone. Moreover, they also report that these influences and motivations become stronger among individuals with a high future orientation. (Chekima et al. 2019.)

What could improve the consumption of more sustainable food and reduce food waste? There is a rich literature exploring this topic from different angles; here, only a few articles will be mentioned. First, the unsustainability of the current food consumption is sometimes linked to assumptions about consumer behaviour, which often emphasize self-interest and unlimited wants. In competitive markets, this contributes to the idea that consumers choices alone drive resource use. But this assumption can conflict with the concept of sustainability, which recognize that resources are limited and highlights the importance to care for future generations. (Gorgitano & Sodano 2014, 209.)

From the consumer point of view, access to sustainable food often remains limited to wealthier groups, partly due to unclear labels and higher prices. In the study of Genova & Allegretti (2024) some participants suggest the concept of "public incentive" to make sustainable food more affordable. Other measures to broaden access identify by the researchers are: early education on sustainability (starting from childhood and including both families and schools), clearer and more transparent labelling, economic tools such as taxes on high-impact production and distributions processes or incentives to support producers and consumers, and stronger producer–consumer relationships through direct engagement and experiential activities. Moreover, the study highlights that sustainable food products should provide a positive purchasing experience comparable to that of conventional products. (Genova & Allegretti 2024). Also, in order to ensure trust to be sure that the sustainable product has been really produced in an ecologically friendly way. (Thøgersen and Olander, 2006 according to Vassallo et al. 2016, 430.)

Another important factor to consider is that, even when people have a positive attitude towards sustainable food choices, it doesn't mean that they would actually purchase those foods, showing that there is a relevant gap between favourable attitudes and actual purchase (Vermeir et al. 2020). Food choices are influenced by factors beyond environmental impact, including hunger, pleasure, social status, and norms. Vermeir et al. (2020) propose a goal-directed framework to promote sustainable consumption, involving valuing the environment, recognizing gaps, forming intentions, and acting to reduce the discrepancy. According to Nichifor et al. (2025, 34), emerging technologies, such as alternative proteins (plant-based meat, lab-grown meat and sea food, precision fermented diary), digital smart technologies (blockchain for traceability, AI for supply chain, mobile apps, online platforms), food safety and technology to preserve foods, can support sustainable food consumption. But as was mentioned previously, dietary habits can be difficult to change especially

because food choices are influences by diverse factors such as pursuit of personal benefits and/or traditions and values, that could make difficult the acceptance of new technologies. As state by Vinnari & Tapio (2012, 52), technological improvements in food system alone are not enough for real change. People's values also need to change, including recognition that animals and other living beings have their own importance. If society would adopt these values, it could lead to a future where vast majority of people eats little or no meat – close to a vegan society. (Vinnari & Tapio 2012.)

Hoek et al. (2021, 616) argue that decision-making in sustainable food production and consumption is shaped by a complex interplay of personal, social, economic, and environmental factors. Accordingly, interventions should target multiple levels rather than individuals alone, and a broader systemic environment. Policy and governance should consider how consumers (and producers) interact with social and economic systems. Thus, a transition to a more sustainable food system requires long-term, multi-dimensional transformation, supported by technological innovation, but also by social innovation (e.g., local food network), cultural change, and community engagement to normalize sustainable behaviours over time. (Hoek et al. 2021.)

2.1.4 Sustainable diets and healthy diets

In this thesis, the terms "healthy diet and lifestyle" are understood as broad, value-driven notions rather than a strictly medical or nutritional ones. They serve as a behavioural and conceptual lens for examining how parents make food choices and how these choices relate to sustainable practices.

A healthy diet is one which promotes growth and development and prevents malnutrition" where malnutrition today refers to all forms of poor nutrition, including undernutrition (wasting, stunting, underweight, micronutrients deficiencies) and overnutrition (obesity). And it also includes all the dietary habits that increase the risk of some type of diseases, such as heart disease, stroke, some type of cancers and diabetes. (WHO & FAO 2019, 19.) In many Western countries, unhealthy diets are often low in whole grains, fruit and vegetables, nuts and seeds, and seafood and high in salt, sugar and red or processed meat and they lead to low intake of significant nutrients beneficial for health. E.g., high consumption of red and processed meat is associated with an increased risk of some cancers, while eating more fruit, vegetables, and fatty fish, and reducing saturated fat intake, lowers the risk of cancer and cardiovascular disease. (European Public Health Association 2017, 10.) The diet-related health problems also challenge healthcare systems by increasing costs and reducing work productivity. Overall, unhealthy eating habits significantly affect both individual health and the whole society and economy. (European Public Health Association 2017, 10.)

The concept of "healthy diet" today is focused on optimizing long-term health by considering both excess and shortages of food, and so by promoting protective food groups and limiting the harmful one (Arrieta & Aguiar 2023).

The Science Advice for Policy by European Academies SAPEA working group, which provides scientific evidence to support EU policymaking, explored how to define a socially and sustainable food system for the EU in a report. Their report concludes that broad, system-wide changes are needed to achieve a fair, sustainable, and healthy food system because environmental, health, and socio-economic issues are deeply interconnected. (Jackson & Holm 2024, 3.) On the other hand, sustainable diets help to improve food and nutrition security, have lower environmental impacts, and foster today's well-being as well as that of future generations (Alsaffar 2016). WHO AND FAO (2019) include both adjectives in the concept and define "sustainable healthy diet" as:

> "Dietary patterns that promote all dimensions of individuals' health and well-being; have low environmental pressure and impact; are accessible, affordable, safe and equitable; and are culturally acceptable. The aims of Sustainable Healthy Diets are to achieve optimal growth and development of all individuals and support functioning and physical, mental and social well-being at all life stages for present and future generations; contribute to preventing all forms of malnutrition (i.e., undernutrition, micronutrient deficiency, overweight and obesity); reduce the risk of diet-related non-communicable diseases (NCDs); and support the preservation of biodiversity and planetary health." (WHO & FAO 2019.)

Under these lenses sustainable and healthy diets not only meet nutritional recommendations but also consider environmental, socio-cultural, and economic sustainability.

But how do consumer perceived sustainable and healthy diets? Genova & Allegretti (2024, 6) find out that, from the perspective of personal health, consumers often assume that the more sustainable a food product is, the healthier it is perceived to be. This perception can relate directly to nutrients considerations and indirectly to the way they foods are produced (including perceived impacts affecting consumers and others). Aschemann-Witzel (2015), in her study drawing on previous research examines how health and sustainability in food choices can both conflict and support each other. For example, healthy and sustainable eating can involve some trade-offs— healthy foods may use more packaging, attempts in reducing waste can raise food-safety risks if people keep overeat or consume unsafe expired food, and sustainable options like plant-based meals are sometimes viewed as less tasty, less convenient, or more expensive. Also, fruits and vegetable, even if they are healthy food, can create a lot of waste and require complex storage and transportation. On the other hand, both issues share many similarities and consumer often see health and sustainability as closely linked. (Aschemann-Witzel 2015.)

Diets that reduce meat consumption, processed foods and waste are typically both better for the environment and better for health, because they reduce environmental impacts by improving wellbeing. Moreover, both sustainability of food choices and healthy food require a long-term perspective, with benefits appearing later in life concerning individuals' health and across generation for the society and environment. However, even in the synergies context many things should be considered: for example, vegetarian and vegan diets are better for environment and for health, but it is crucial to ensure all the required nutrients that the body needs, especially concerning children's diets. (Aschemann-Witzel 2015, 7-8.) To mention, there is globally emerging recently formed consumers trend group called LOHAS (Lifestyle of Health and Sustainability) which is characterized by individuals who are attentive to health, well-being, and also consider environmental and social sustainability (Choi & Feinberg 2021).

2.2 Parenting and family (sustainable) food practices: how parents influence children's food habits

2.2.1 Becoming parent as a life transition

Becoming parents can be considered as a critical transitions period, which continues a few years after the child is born. These periods mark shits from one stage of life to the next and usually involve taking on new social roles, as well as facing changes in family circumstance and living situations (Hartmann et al. 2014). Major life events, like becoming a parent bring rapid changes to the home environment, which can motivate changes in diet habits. For example, research show that women tend to eat more vegetables during the transition to parenthood, suggesting that becoming a parent can influence the entire household system. (Hartmann et al. 2014.)

Results from Hjelmar (2011) study about purchase of organic products, show that many participants noticed that having children marked a key turning point in their consumption habits, driven by the responsibility of caring for and feeding them. Food decisions are no longer purely individual but regard the full family. One important factor to take into account, is that often what individuals decide to do or to buy depends a lot from the desires or needs of others (like family) and not only from the own preferences. As Burningham and Venn (2020, 116-117) note, all sorts of consumption are often shaped by the desires, needs and preferences of other household members, not only by one's own preferences.

Concerning sustainable food, Halicka et al. (2021,10) findings, show that parents of young children are for the majority unfamiliar with the term "sustainable food consumption". However, even like

this, 70% of their sample stated teaching their kids the importance of paying attention to the interconnectedness between food, health and the natural environment. Early involvement for children is very significant for fostering sustainability awareness and guiding future food choices. (Halicka et al. 2021,10.)

This thesis focuses on parents of young children because the first five years of life involve rapid physical growth and are also a period in which eating behaviours and food routines are established. These early experiences may potentially serve as foundation for future eating habits through transmission of cultural and familial beliefs, attitudes and practices regarding food and eating. (Savage et al. 2007.) Children's eating habits are shaped largely by their parents. The food they provide, purchase and demonstrate eating themselves are the ones children learn to view as familiar and enjoyable (Hughner & Maher 2006).

2.2.2 Briefly: the context of intergenerational influences

Intergenerational influence broadly refers to the transfer of knowledge, values, and resources across family generations. These often overlooked factors can significantly shape the way we consume as adults (Moore 2018, 2533). Intergenerational Influence is studied across different domains – consumption behaviours, cultural capital, parenting practices and so on – and involved both conscious and unconscious transmission of values, habits, norms and resources (Moore et al. 2002). Thus, it covers many of generational transmission across different domains. Intergenerational transference (unconscious process) is a type of intergenerational influences. Food behaviours and values are often a form of intergenerational transference, and as such, can play an important role in shaping family identity (DeVault 1994, according to Carrigan et al. 2023,1355).

The theory of intergenerational influences also encompasses concepts such as family food socialization. Basic principle from the Socialization Theory (Ward 1974) defines consumer socialization as a process by which children and youth acquire market relevant skills, information and attitudes. Family members, peers, schools, religious institutions, and media are all example of agents that play meaningful roles in the socialization process (Moore 2018, 2533). More specifically, food socialization refers to the ways in which individuals learn how to consume food and understand its cultural significance as a part of overall food well-being (Block et al. 2011, according to Kharuhayothin & Kerrane 2018, 2313) and family food socialization describes the process of how parents' food-related preferences, beliefs and attitudes are transmitted to their children. (Nicklas et al. 2009, 227, according to Kharuhayothin & Kerrane 2018.) Parents are the first and the most powerful socialization agents for children (Ward 1974; Moore 2018, 2533), especially during the preschool years

when their influence is particularly strong (Mollborn & Lawrence 2018,134) - followed by family, peers, school and media - which means they are able to shape, in different ways, children's development as consumers (Moore 2018.) Children acquired skills, knowledge, beliefs and values from parents (Ward 1974) and the early years of a child's life have an important role in shaping health behaviours that can persist into adulthood (Mollborn & Lawrence 2018). In this view, early- life biological and behavioural patterns, together with memories of how food was grown, shared and eaten, can influence and shape the way how individuals approach food as adults. Moreover, parents' choices about what to eat take in considerations different factors, including early years socialization in their childhood food experiences. Thus, children's food habits are influenced and shaped not only by parents' present practices but also by the emotional meanings parents attach to the food practices they inherited from their own parents. (Kharuhayothin & Kerrane 2018.)

Carrigan et al. (2023) investigate how sustainable and unsustainable food behaviours and values are transmitted across generations and how this influence everyday practices. Drawing on food socialization theory, the study shows that family food socialization is powerful, long-lasting, and extends beyond childhood. However, inherited habits can be adapted or rejected as people experience new life transitions, cultural shifts, or even influence from their own children. Socialization is a dynamic process that modifies during the life, for example Kharuhayothin & Kerrane (2018), find out that individuals - which they call "revisionists"- broke away from their parents' food habits, while "traditionalist" reproduce their parents' practices during their lives. However, although some intergenerational influence can diminish when individual encounter new context, others – especially those related to food habits – are absorbed deeply in childhood that they can persist into adulthood (Prichard et al. 2012; Sumodhee and Payne 2016, according to Moore (2018; 2536).

Gong et al. (2021) use Ecological Socialization Theory – which describe how youth develop pro-environmental attitudes, values, knowledge, and behaviours - to show that Chinese parent's green consumption values and environmental responsible behaviours transmit similar values to their children, in their study of adolescents. (Gong et al. 2021.) Children and youth tend to learn by observing and imitating their parent's behaviours, through which they gradually come to understand and adopt their parents' values. And this influence is stronger when the parent-child relationship is close. (Gong et al 2021.)

2.2.3 Modelling healthy and sustainable behaviours

Mollborn et al. (2014) show that pre-school children exhibit distinct, multidimensional healthy lifestyles patterns shaped by socioeconomic factors. These earlier patterns are associated with children

cognitive, behavioral and health outcomes at kindergarten entry. The study also suggests that early childhood is an important period for the social shaping of health behaviours, although long-term life course effects are not directly observed. (Mollborn et al 2014.)

Nazarro et al. (2018) find that socio-demographic and economic factors can contribute positively. They first conducted a literature review and identified that food habits are affected by family: income (high-income families tend to adopt healthier diets, whereas low income families are less likely to do so), parental education (higher education is linked to richer diets that include all the nutrition, while lower education is associated with diet high in added sugar), habits to eat at home (involving children in home meals preparation can affect both healthy food habits and physical activities), and parent's nutritional awareness of food. (Nazarro et al. 2018.) However, results from their empirical data shown that parental education and occupation influence children's food habits but in a complex way. For example, socioeconomic advantages don't translate automatically into healthy child behaviours. Occupation affects time availability for meal preparation and so lifestyle and daily routines play a critical role. From their results, children of self-employed parents generally show healthier habits than those of employed or highly educated parents. (Nazarro et al. 2018,11.)

Food acquisition and consumption are among the first socialization context through which children develop food preferences and habits (Hughner & Maher 2006). Children learn what is considered *good* partly through what their parents buy and provide. As discussed by Carrigan et al. (2023), drawing on broader literature, parents have different buying behaviour and values - such as buying locally, growing their own food, food planning meals, managing preferences and dislikes, attitudes towards food waste, reusing leftovers, and valuing frugality in cooking – that shape children's understanding of food and everyday consumption. (Carrigan et al. 2023,1364).

Parents' attitudes and purchasing behaviours sometimes can be inconsistent (Hughner & Maher 2006). In their study of snack and convenience food consumed by children, many parents affirmed that health and nutrition were very important criteria when choosing children's food, yet this did not always translate into a healthy purchase of food. For example, for some parents practical constraints (e.g. time, cost, convenience) or their children's food preferences made them to buy less healthy but more convenient snack foods, manifesting an inconsistency between what they say and what they actually do, an attitude-behaviour gap. (Hughner & Maher 2006, 934-937.) They identify four themes that can explain why parents often show contradictory attitudes and behaviours in their children's food consumption: (1) level of concern, for example about issues such as sugar and fruit

intake); (2) trust in different parts of the food system, including retailers, institutions, brands, and labels; (3) imperceptible attributes, meaning parents' difficulty identifying unhealthy ingredients such as hydrogenated oils, corn syrup, high sodium; and (4) desire for children to fit in, which can lead parents to buying less healthy foods to prevent children from feeling different from their peers. (Hughner & Maher 2006, 941-945.)

A study conducted in urban Poland found that child health, product taste and nutrition are among the most important factors that influence parental choices in sustainable food consumption. (Halicka et al. 2021, 10). Parents sometimes experience a conflict between health and taste: children may prefer sweet and salty tastes and dislike other flavours, which can lead parents to prioritize taste over health, for example when giving snacks. Other influencing factors were also: price, convenience, familiarity, sensory appeal, social norms. (Halicka et al. 2021,10). Thus, findings suggested a potential discrepancy between what parents' think and what they to do as real actions. Hughner & Maher (2006) state that to reduce such kinds of discrepancy or gaps, it would be important to educate parents, for example on how to choose healthy yet convenient options, and that producers and retailers should design and promote children's food products to better meet parents' health goals and the practical constraints of family lives, including clearer food labelling.

Concerning parents' education in healthy and sustainable food consumption, the study of Wijayarantne et al. (2018), discuss the concepts of "Dietary keeper" and "Food Literacy". The dietary keeper plays a key role in shaping household food consumption, since in many families is generally the one responsible for purchasing food, prepare it, and transforming ingredients into family meals. However, there are trends that show that many people have become disconnected from the origins and production of their food, and how food is made available. For this reason, who prepare the meals in the household need the knowledge and skills how to turn food into nutritious meals. (Wijayarantne et al. 2018, 2451.) Food literacy is an emerging concept that can be defined as the necessary "resources, capabilities and knowledge, skills and behaviours needed to meet nutrition recommendations" (Cullerton et al. 2012, according to Wijayarantne et al. 2018, 2452).

2.2.4 A few words about daily routines

Children's diet and activity levels are shaped not only by individual traits, such as temperament or biological tendencies, but also by families' routines, community environments (e.g., school and shops), and even by large scale cultural and regulatory systems (e.g., cultural norms, food production, marketing and regulation). However, despite this broad network of influences, the family unit

remains a primary locus of influence, shaping children's long-term behaviours and health trajectories. (Moore 2018, 2532.) The family eating environment, along with parents' food attitudes, eating behaviours and feeding practices, are key factors in the development of children's eating patterns. (Roos et al. 2012, according to Halicka et al. 2021, 2.) The environment in which children learn is characterized by routine activities like shopping, meal preparation, shared meals, and family leisure time, which provided stability and repetition. Over time, these repeated experiences gradually form a family culture that teaches children what it means to be part of that household. (Moore 2018, 2537.) Consequently, adults should serve as positive examples. Parents can determine which food become familiar to their children. For example, based on which kind of food they keep in the house, what they serve at meals, and even the food that children eat elsewhere.

It is also important to create routines, such as eating during main meals and sitting together at the table. However, trends suggest that nowadays children frequently encounter oversized servings of tasty, but energy-dense foods and that they often do not eat meals at the family table, compared to earlier generations. This regards especially developed countries, were many children grow up with an abundance of food, where tasty, affordable, and convenient ready-to-eat options are easily acceptable. (Savage et al. 2017.) Genetics place some children at higher risk of obesity, however whether this risk manifests depends largely on the family-taught habits and attitudes children internalize (Moore 2018, 2534).

2.3 Why a Futures Consciousness conceptual framework is needed

The literature reviewed above shows that children's food habits are shaped and influenced by their parents 'current food practices and, in many cases, also by the meanings parents attach to the traditions they inherited from the own parents, and so from the past and present. But, what about the future?

More broadly, the literature review on food consumption highlights that current food practices are influenced by diverse drivers and barriers, and that many aspects of nowadays consumption patterns are unsustainable, indicating a need for a transition toward more sustainable food systems. This shows that food practices need to be transformed to become more sustainable, and that this transformation will take place in the future. This raises another question: how such practices need to be transformed over time and how this transition takes place.

Almost all the studies of the literature review describe what parents do (in the present) but often do not explain how they think about the long-term future when purchasing and consuming their family

food. Many parenting decisions around food – taking into consideration factors such as health, sustainability and cultural preservation – can be understood as future-oriented, particularly in relation to children's long-term well-being (Bernard et al. 2024; Halicka et al. 2021). For this reason, a future-oriented framework is useful. This becomes also relevant in the context of contemporary sustainability challenges in the food system, where it is important that everyday consumption practices shift toward more sustainable forms of consumption.

In this view, through the lens of the five-dimensional model of Future Consciousness (Ahvenharju et al. 2018; 2021) it becomes easier to discuss how parents understand, anticipate and prepare for their children's future well-being, and how this relates to everyday food choices and values around sustainability. Futures Consciousness can also help to connect values and behaviours transmission to daily family practices by showing how future-oriented thinking influences routines, modelling and negotiation around food. A future perspective can also help to explain why parents maintain certain practices over time while others shift due to changing expectations, constraints or uncertainties.

While the literature review explores a broader body of research on sustainable food consumption, parenting, intergenerational influences, modelling and daily routines, the five-dimensional model of Futures Consciousness (Ahvenharju et al. 2018) is used in this study primarily as an analytical framework. The framework provides a structured lens through which parents' reflections on future-oriented sustainable food practices can be interpreted. At the same time, the broader literature helps to contextualise these practices within everyday parenting life and food consumption habits.

The next chapter introduces the concept of Futures Consciousness and explains how the five-dimensional model of Future Consciousness is applied as the analytical framework for this qualitative study.

3 Conceptual framework

This chapter presents the conceptual framework used to analyse how parents' Futures Consciousness manifest in the context of sustainable food consumption. The five-dimensional model developed by Ahvenharju et al. (2018; 2021) is used as the main framework for analysing and interpretating the findings.

Section 3.1 starts by introducing the concept of Futures Consciousness and outlines its roots across disciplines. Section 3.2 situates Futures Consciousness within Anticipation Theory in Futures Studies. Section 3.3 presents the five-dimensional model developed by Ahvenharju et al. (2018) and its characteristics. In its subsections, 3.3.1 summarises the five dimensions at a general level and at individual level, and finally Section 3.3.2 discusses some examples of how the model has been applied in qualitative research and explains its application in this thesis.

3.1 Future Consciousness: a brief overview

The concept of Future Consciousness has a long tradition in Futures Studies, its roots extending and drawing insights across several disciplines, including psychology, philosophy and education. Already back in the 1970s, the term "future consciousness" was adopted and studied in the work of Öystein Sande and Johan Galtung (Sande 1972). Future Consciousness was described by Galtung as the awareness of possibilities, probabilities, and preferred outcomes in the future. Whereas Sande in his work introduced six possible dimensions of Future Consciousness: temporal length, level of interest, optimism versus pessimism, influence, expectations and values. Thus, by offering an early structured approach to how individuals relate to the future. (Ref. Lombardo 2007, 2.) These six dimensions represented a good way to start to explore the concept of future consciousness, but they were incongruent and not very coherent (Ahvenharju et al. 2018, 2). The term became later more popular with Lombardo (e.g., 2007; 2009; 2016), who framed Future Consciousness as an essential human capacity that is needed for survival, progress and prospering, at both individual and collective level. Moreover, in his view, Future Consciousness is not a single skill but he sees it as a holistic matrix of capacities. Thus, an individual possesses a Future Consciousness capacity when, in his every day psychological process, the "perception of time, persistence of change" are considered. And also, by involving other experimental and thematic elements, such as values and ethics (e.g., fears and hopes, visions and so on). (Ahvenharju et al. 2018.) In his concept of "Heightened Future Consciousness" (Lombardo 2016, 144-146), links this capacity guided by wisdom and expressed through a list of character virtues, such as: self-awareness, ethical realism, curiosity and cosmic

consciousness among others. And thus, not anymore just as a general human capacity to think, feel and act with awareness about the future. Lombardo's work has high theoretical value, strong in integrating psychology, ethics and evolution. However, his conceptual model may be overwhelming to be fully operationalised within a single empirical master's thesis.

Other psychological research, e.g., Seligman (2016), Zimbardo & Boyd (2008), emphasized that future oriented thinking, temporal orientation and prospection (thinking about the future) help people to envision possible outcomes and how they can be motivated by them. In education and philosophy, Futures Literacy—learning to use the future to understand the present – emphasising both individual and collective capacities to navigate uncertainty (e.g., Miller 2018). Future Literacy and Futures Consciousness intersect through shared emphases on anticipation, imagination and uncertainty.

In Future Studies, the term *future consciousness* has been used mainly to express the human capacity to understand the future e.g., in Malaska's research (see Wilenius 2014), or to indicate different concepts that are meant to promote future thinking. However, until recent times it was not available a simple definition of the term. Thus, in the field, there have been several researchers and authors who have explored similar phenomena by using different terminology. The same happened also in other fields, such as psychology, sociology and anthropology where distinctive approaches about the future were developed. (Ahvenharju et al. 2018, 3.)

3.2 Anticipation Theory in Futures Studies

In Futures Studies anticipation theory represents an important theoretical foundation which emphasises how the future actively shapes human thought and behaviour. Anticipation theory understands futures as imagined, expected, or feared possibilities that influence present actions and decisions (Poli 2010, 7-8). Thus, differently than forecasting -which extrapolates data and projects current trends into the future - and foresight - which develops scenarios of possible futures and systematically explore alternative futures - anticipation focus on how future-thinking may shape current behaviour and decision making (Poli 2020). From this perspective, individuals and social systems continuously engage with the future by anticipating consequences, risks, and opportunities, shaping everyday practices (Rosen 1985; Poli 2010). The theoretical foundation draws on the concept of anticipatory systems (Rosen 1985), that it is defined as a "system containing a predictive model of itself and/or its environment, which allow it to change state at an instant in accord with the model's predictions pertaining to a later instant" (Rosen 1985, 341). According to the anticipation approach, human agency has an active role, and connects future imaginaries with present actions. In other

words, behaving with anticipatory thinking means addressing future issues by modifying and adjusting current behaviours in the present (Poli 2010, 8). Thus, future representations are not passive or abstract; but they are actively employed to guide behaviour, inform choices and shape actions in the present. In this view, the concept of Futures Consciousness (FC), particularly as operationalised in the five-dimensional model, as developed by Ahvenharju et al. (2018), can be situated within the anticipatory tradition in Futures Studies to describe the human capacity to engage with the future in meaningful ways. It conceptualizes future orientation as a multidimensional phenomenon, encompassing how individuals perceive the future, care about future outcomes, how they value long-term consequences and their sense of agency in shaping what lies ahead. (Ahvenharju et al. 2018.) Thus, the model includes five interrelated capacities, called dimensions. These dimensions show empirically how individuals and groups of people anticipate and orient towards the future. Whereas anticipation theory explains how people and systems use ideas of the future to guide their present actions (Poli 2019), Futures Consciousness provides a clear framework to study and measure these processes at the individual and general level (Ahvenharju et al. 2018). In the following section the conceptual model of Futures Consciousness will be explored in more detail.

In this study, Futures Consciousness serves as the conceptual lens for examining how parents with young children relate to the future when reflecting on sustainable food consumption within the family context.

3.3 Futures Consciousness: the five-dimensional model

The concept of Futures Consciousness describes "the human capacity to understand, anticipate, prepare for and embrace the future". It is considered as a human capacity and not as "a type of human consciousness", and so it can differ between individuals (Finland Future Research Centre n.d.; Ahvenharju et al. 2021). The central question is what qualities an entity needs to achieve a well-developed level of Futures Consciousness? The entity could be an individual, a group, an organisation, a nation, or humanity in general. (Ahvenharju et al. 2018, 5.)

Ahvenharju et al. (2018) constructed the conceptual model of Futures Consciousness by integrating previously distinct bodies of literature from psychology, sociology, and Futures Studies. Despite considerable variation among these literatures—particularly in how they define and delimit concepts such as "future orientation, anticipation, prospection, projectivity, and futures literacy"—they shared a common concern with the human capacity to contemplate the future, rather than with the particular content of those imagined futures. They developed this conceptual model for the operationalization of Futures Consciousness, to be able to use it in empirical research. (Ahvenharju et al.

2018.) The authors suggested that differences in Futures Consciousness helped explain why individuals vary in their capacity to understand, anticipate, prepare for and adapt to the future. The central idea was that future-oriented thinking depends on multiple contributing factors rather than on time orientation alone. Accordingly, the model proposed five dimensions: Time Perspective, Agency Beliefs, Openness to Alternatives, Systems perception and Concern for Others. (Ahvenharju et al. 2018.) Section 3.3.1 examines the characteristics of the five dimensions in general and at the individual level.

Later, the Futures Consciousness Scale (FC Scale) was developed as a validated 20-item survey designed to measure individual differences in Futures Consciousness across five psychological dimensions (Lalot et al. 2020; Lalot et al. 2021a). It has been used, for example, to examine empirically how Futures Consciousness relates to different pro-social and pro-environmental behaviours, suggesting its relevance for understanding future-oriented decision making (Lalot et al. 2021b; Ahvenharju 2022).

Moreover, in Ahvenharju (2021), the five-dimensional model of Futures Consciousness and the FC scale were tested by employing a mixed-method research approach which included: interviews, FC scale and a survey. The study explored elite representatives' preferences regarding policy issues and radical policy shifts through the lens of Futures Consciousness. Lalot et al. (2024, 2), building on their prior work, captured the five-dimensional model of Futures Consciousness in adolescents. To do so, they developed and validated an adolescent version of the FC scale across multiple countries and languages (countries: Italy, Netherlands, Turkey. United Kingdom and Usa; Four languages: English, Dutch, Italian, Turkish), since the previous FC scale was measured and validated only in adults.

The studies above mentioned show how the FC scale has been employed in quantitative or mixed-method research. However, the five-dimensional model of Futures Consciousness has also been applied in qualitative studies (e.g., Sools et al. 2022; Ketonen-Oksin & Vigren 2024; Kymäläinen et al. 2026), and this thesis applies the model as a part of a qualitative approach. The following sub-chapters first examine the five dimensions of the model and their characteristics at the general and individual level (3.3.1) and then illustrate its practical application in qualitative research and explain its use in this thesis (3.3.2).

3.3.1 Five dimensions in general and at individual level

According to Ahvenharju et al. (2018, 5), Futures Consciousness is a "form of future orientation that incorporates five dimensions". The model was created with the idea to ensure a practical and suitable model to be used in empirical research, applicable to both individuals and groups behaviour. In this view, the number of dimensions was kept limited and clearly distinct to prevent overlapping. They are understood as precursors to future-oriented behaviour and encompass motivational, emotional and cognitive processes. Later, Ahvenharju et al. (2021) extended their previous analysis by delving deeper into how the five dimensions manifest in people's behaviour and the psychological phenomena connected to them. Thus, the former article translated the concept of Futures Consciousness into five measurable dimensions and offered the first detailed description of them. Futures Consciousness was addressed at a general level, making it applicable to both individual and collective behaviour. The latter article, investigated the psychological constructs associated with the dimensions. (Ahvenharju 2022, 51.) Each of the five dimensions of Futures Consciousness has a counterpart in psychology and can be used separately in analysis (Ahvenharju 2022, 79). Below the five dimensions are summarised and described by combining insights and information from Ahvenharju et al. (2018, 9-10) and Ahvenharju et al. (2021):

Time Perspective: Awareness of and orientation towards the future, including consideration of long-term consequences. This dimension represents the foundation of the multidimensional model, since being conscious of the future requires understanding how the time passes and being prepared of tomorrow. The focus is not only on the future but in the other two aspects of time as well: the present and the past. It captures how well the relationship between past, present, and future is understood.

Agency Beliefs: Belief and trust in one's ability to influence or shape the future at a personal or societal level. Emphasis is placed on understanding the difference between issues that are within one's influence and those that are not.

Openness to Alternatives: Willingness to consider new ideas, change behaviours, critically question existing truth, and image different futures. This dimension combines several interconnected traits, including creativity, imagination, critical thinking and openness.

Systems Perception: When is needed and useful, understanding how one's choices are part of a larger system, including the complex consequences of one's decisions and the interactions and

interconnections between different systems in people's lives. This includes the interconnectedness of human and natural systems.

Concern for Others: This dimension highlights the importance of caring about and contributing to a better future and to the well-being – for oneself, for others, for society and also for future generations. It brings together qualities that reflect one's values, morals and ethical beliefs.

The five-dimensional model of Futures Consciousness is also designed to capture Futures Consciousness at the individual level and thus suits the purpose of this study. Since the interviewed parents reflected their own views (and not those of the entire family), this research uses Ahvenharju et al. (2021) five-dimensional model as its main reference, which focuses on individual Futures Consciousness, rather than the earlier, Ahvenharju et al. (2018), more general formulation of the framework. This model examines how the five dimensions are expressed in people's behaviour and the related psychological phenomena. In the article it is defined as:

> "Futures consciousness is the human capacity to understand, anticipate, prepare for and embrace the future. It can be considered as the multiple processes that influence, firstly, how one projects the self and its social surroundings in potential futures, in order to actively adapt oneself to it when it will become the present; and secondly, how one projects potential futures and adapts their present actions to bring about the ideal future. Furthermore, the five dimensions of futures consciousness describe the individual differences that affect these processes. "(Ahvenharju et al. 2021, 2)

Thus, Futures Consciousness refers to an individual capacity to acquire skills and abilities-such as futures literacy -which support future-conscious behaviour. It is important to note that this capacity is not immutable, but it can be modified (Ahvenharju et al. 2021, 3): life experiences and education can foster its development (Ahvenharju et al. 2022, 72). Futures Consciousness can help to identify differences in beliefs, biases, thinking patterns and assumptions between individuals, which influence how they interpret information and form their visions of the future (Ahvenharju et al. 2022, 72). It is also suggested that higher levels of Futures Consciousness cannot emerge from a single dimension alone but require the integration of all dimensions. For example, a broader time perspective results in action only if individuals experience a basic sense of agency and an ability to explore alternative possibilities. In the same way, without systemic thinking or concern for others, actions are not future-conscious. However, a lower level in one dimension can be compensated by higher levels in other dimensions. (Ahvenharju et al. 2021, 11-13.) Thus, the five dimensions are interconnected with one another. Time Perspective and Agency Beliefs provide the basic mental framework for Futures Consciousness, whereas Systems Perceptions and Concern for Others represent a further

set of dimensions that expand the understanding of the future beyond a self-oriented focus and include interactions and relationships among other groups, individuals and natural systems. Lastly, Openness to Alternatives serves as a linking dimension between these two blocks by highlighting that the future is not fixed but can unfold in multiple ways. This understanding plays a central role in motivating Futures Consciousness. (Ahvenharju et al. 2021, 11.) Moreover, Time Perspective and Systems Perception are closely connected through their shared emphasis on sequences, consequences, and causal relationships, whereas Agency Beliefs and Concern for Others are linked by their focus on individual actions and their effects (Ahvenharju et al. 2021, 12). Also, Time Perspective, Agency Beliefs and Openness to Alternatives are more individual-centred, whereas Systems Perceptions and Concern for Others focus more on the relationship between the individual and society (Ahvenharju et al. 2021, 3).

3.3.2 The model applied in qualitative analysis and its application in this thesis

In addition to quantitative and mixed methods approaches, the model has been applied also in qualitative research. For example, Ketonen-Oksi and Vigren (2024) conducted an integrative literature review to map and synthesise existing methods used to imagine transformative futures for addressing planetary crises. They used the five-dimensional model of Futures Consciousness as a qualitative analytical framework to assess how these methods engage with important aspects of future-oriented thinking. Each dimension served as an analytical category for examining how futures methods support or neglect key aspects of Futures Consciousness. By comparing methods across the five dimensions, the analysis revealed patterns, strengths and gaps in existing qualitative futures research.

Another study where the five-dimensional model has been applied as qualitative analytical framework is the one of Kymäläinen et al. (2026), in stakeholder workshop analysis. It was used to interpret stakeholder discussions about future food systems. In the study, the model was adapted as coding framework for analysing workshop dialogue. Each dimension was employed as a lens to categorise narrative segments from structured stakeholder workshops and to reveal how stakeholders frame future challenges, responsibilities and possibilities in the context of food system sustainability.

As a last study that will be mentioned in this research is the one from Sools et al. 2022, which explicitly draws on the Ahvenharju et al. (2018) five-dimensional model of Futures Consciousness as a conceptual framework to interpret narratives written by young adults about desired post-pandemic future. The letter text was analysed to assess Futures Consciousness “as a situated and contextual

capacity" rather than a stable trait. Thus, to see how the different dimensions are expressed in participants' words and imaginations. (Sools et al.2022.) The model served as an interpretative coding framework for narrative qualitative data rather than a scale. In other words, the researchers explored how participants talk about future possibilities in their narratives, rather than how much Futures Consciousness they possess on a numerical scale. The findings show that young people express these dimensions in diverse and nuanced ways, shaped by the pandemic context. Thus, in that study the model helped to reveal how the dimensions manifested in lived experience (e.g., agency in imagined futures, openness to alternative futures in narrative content, etc.), not just psychological tendencies. (Sools et al. 2022.)

In this thesis the researcher focuses on the relevance of parents' Futures Consciousness of individuals in the context of sustainable food consumption and family life with young children. As already mentioned in the introduction of this section, although food practices are embedded in family life, Futures Consciousness in this thesis is analyses at the level of the individual parents. Parents are considered as key-actors whose future-oriented thinking influences, but does not fully determine, family food practices. In different words, the Futures Consciousness of parents can shape family food practices. Similar, as in the approach in Sools et al. (2022), this thesis uses the model's five dimensions as interpretative themes or lenses for coding, understanding and analysing qualitative data. The results are organised by dimensions.

Why is Futures Consciousness considered a suitable lens for this study? It offers a structured and multidimensional perspective of how parents incorporate future-oriented thinking into everyday food routines and a way to understand how values are communicated, negotiated, challenged or reinforced. Thus, it can capture the complex relationship between ideals (future-related values) and everyday practices (including constraints of family life with young children). Rather than viewing food decisions as isolated individual acts, the framework highlights how future-oriented thinking, ethical considerations and everyday practical constraints shape parental decision-making and intergenerational interaction around food. Also, it can be considered as a relevant lens to sustainability and health, as both require long-term thinking and ethical awareness. Each of the five dimensions—Time Perspective, Agency Beliefs, Openness to Alternatives, Systems Perception, and Concern for Others—guide family practices, from planning healthier meals to exploring sustainable foods and considering ethical impacts. Finally, Futures Consciousness offers a lens for qualitative analysis, supporting the interpretation of parents' food related decisions, tensions between ideals and practices and intergenerational value transmission.

4 Research material and method

This study is explorative in nature since it aims to gain in-depth understanding of parents' Futures consciousness in the context of sustainable food consumption. Accordingly, it adopts a qualitative research approach grounded in Futures Studies. This chapter presents the research methodology and explains the reasons behind the chosen approach. The first Section examines the data gathering process and the method chosen to collect the material (Section 4.1), which is semi-structured interviews. Section 4.2 then presents the ethical considerations and, finally, the method of data analysis is presented in Section 4.3.

4.1 Methods and data gathering

Due to the explorative nature of this research, a qualitative approach was considered appropriate. Qualitative studies can use different types of methods during the process of data gathering. The two main types of methods that are applied for collecting data are structured (pre-coded, surveying) and unstructured (open, exploratory) methods. (Fisher 2010, 175.) Between these two main types are semi-structured methods. Like semi-structured interviews, which can have preliminary structure or scheduled questions, but the respondents are free to answer as they prefer (Fisher 2010, 175). Since "exploration requires an open approach" (Fisher 2010, 169), semi-structured interviews were selected, as they allow flexibility while maintaining a guiding structure.

Thus, the empirical data for this research were collected by conducting eleven semi-structured interviews of parents with preschool children spread over a period of two weeks in June 2024. The interviews explored participants' awareness of the future in relation to family food consumption. Semi-structured interviews are well suited for this purpose, because as Ruslin et al. (2022) state, semi-structured interviews are powerful tools in qualitative research because they help the researcher to get detailed and rich information from the respondents and also allow flexibility and capacity for adjustment for the research to remain on track. Seven of the interviews were conducted online via video-conferencing platforms, using Zoom or Microsoft Teams (depending on the preferences of the respondents). Three interviews were conducted online but without video, as the interviewees preferred to keep their cameras off, and one interview was conducted face-to-face in a public setting (in a restaurant during lunchtime). When the video was used, it helped to recreate a face-to-face interaction and supported rapport. In the interviews conducted online without video, it was initially more difficult to establish a more *natural* flow, compared to the face-to-face or video interviews. The duration of the interviews varies depending on the tendency and the way of the respondents to

speak. The longest interview lasted 45 minutes and 33 seconds, while the shortest one ended after 21 minutes and 12 seconds.

In order to explore participants' perspective of the future, the interview structure and content was developed based on the five dimensions of Futures Consciousness (Ahvenharju et al. 2018). The structure consisted in a total of 18 open ended questions and as previously mentioned, was divided in four main parts: introductory questions; general questions aimed at understanding sustainability and participants' future-oriented perspectives on daily food consumption; more specific questions based on the five dimensions of Future Consciousness; and, finally, two recap questions. Appendix 1 shows the structure of the interview questions in English and Appendix 2 the structure of the interview questions in Italian. The questions had an open-ended characteristic in order to get also open-ended and in-depth answers that, as Ruslin (2022, 28) states, could explore and cover different meaning including experiences, beliefs and feelings of the respondents.

Before participating in the study, the participants were informed about the nature of the research through an introductory email and were provided with a Consent Form to sign and a Data Protection Statement. Both documents can be found in both English and Italian in Appendix 5,6,7,8, respectively and further information and details regarding them is provided in the Ethical considerations (Section 4.3). In order to create a comfortable atmosphere, the researcher began each interview by restating the purpose of the study and how the data would be used. The researcher also asked whether the respondents had had time to read the brief introduction to the interview sent a few days earlier and if they had any questions regarding the interview before proceeding. Also, the researcher reminded again about the anonymity of responses and Data Protection Statement. Afterwards, the interviewer asked the respondent to provide a brief personal introduction, including family background, general food consumption and dietary habits and their overall perspective with the future. Following this, the main, more specific questions were posed. The interviews were conducted in English and Italian. Generally, the answers of the interviewees were not out of context. Only in a few cases, when the response diverged significantly from the main topics or when the question was misunderstood by the respondent, the researcher rephrased the same question in a different way or asked a follow-up question.

The participants didn't belong to any specific group or organization, lifestyle orientation, or had a specific interest in healthy and sustainable eating and they were recruited thorough work-of-mouth among acquaintances of the researcher. The selection of Italian and Finnish participants reflects the

researcher's background - being Italian and residing in Finland - which provided a practical convenience sample of these groups rather than an assumption that these two nationalities constitute a representative sample for the research. The interviewees were selected by considering two criteria. Firstly, all of them needed to be parents with pre-school age children (0-7 years old). Secondly, all the participants were required to have a completed university degree, this mainly to support communication in English between the researcher (Italian) and the Finnish interviewees. The researcher aimed to recruit an equal number of female and male respondents to ensure balanced perspectives (6 females and 5 males).

The average age of the participants was 39,5 years, with the youngest being 35 years old and the oldest 44 years old. Seven participants were Italian and four were Finnish, one of whom had an Italian partner. All the interviewees lived with their partner and the children, and five were married. The majority of participants lived in nuclear families, with only one case representing a multigenerational household. Most of them had one child, while the rest had two children. Four of the interviewed women were expecting a second child. The average age of the children was 5.09 years; the youngest was six months old and the oldest seven years old. Eight children attended kindergarten, one attended school (a Finnish child) and two were cared for by their mother and/or grandparents.

4.2 Ethical considerations

The researcher has been careful and attentive to attempt to not ask sensitive topics to the participants. This approach remained active for all the duration of the interview and study, and as Kallio et al. (2016, 2962) state, the questions should not cause harm to the interviewees. As introduced in the previous paragraph, each participant before being engaged in the interviews, received an invitation email or a WhatsApp message (including a pdf file containing the interview invitation text, like the one sent by email), where the main purpose of the study was explained and some general info concerning the interview topics- such as future and food consumption. However, to avoid overpreparation by participants and to obtain genuine and realistic data, sustainability of the food consumption was not mentioned in the email. This topic was just explicitly addressed during the interviews. The text of the email and the WhatsApp/phone message invitations sent to the participants are provided in Appendix 3 (the English version) and in Appendix 4 (the Italian version).

Participants also received a Consent Form to sign (Appendix 5 English version, Appendix 6 Italian version) and a Data Protection Statement (Appendix 7 English version, Appendix 8 Italian version)

enclosed in the email. The structure of the consent form was based on the guidelines of the University of Turku templates, which are in line with Articles 13 and 14 of the EU General Data Protection Regulations. The data protection statement was developed according to the Finnish National Board on Research Integrity (Finnish National Board on Research Integrity TENK 2019, 67) guidelines for research with human participants. Its structure and some items were adapted from a form used in a published master's thesis by Lamberg (2021), with modifications to suit the current study's objectives. These two documents informed the participants about the type and purpose of the data collected, as well as about the data subject and data type. Only three consent forms were signed by participants prior to the interview. Although all other participants agreed to take part in the study, they returned the signed consent forms a few days or weeks after being interviewed. Moreover, they were informed that the participation in the interview was voluntary and anonymous. To indicate the quotes of interviewees in the results of this study the researcher used the codes from P1 to P11 (which indicate participant 1 and so on). Gender is not mentioned here due to privacy protection. Finally, as previously communicated to the interviewees, the researcher deleted the video recordings after transcription and only the audio files were retained.

According to the University of Turku's AI guidelines, AI can support study and research if it is used in a responsible and transparently way. Importantly, AI should not replace the researcher's own learning, original analysis or critical thinking. (University of Turku 2025.) Appendix 9 shows how this research employed AI, by following the guidelines of the University.

4.3 Methods of data analysis: qualitative content analysis

In general, qualitative analysis looks constantly for concepts and themes that will help to interpret the data and to provide knowledge of the data (Srivastava & Hopwood 2009). Qualitative analysis is often characterized by an inductive approach. In this view, the themes and categories emerge from the data rather than being fully predefined. (Patton 1980, 306, according to Srivastava & Hopwood 2009). However, Srivastava and Hopwood (2009, 77) emphasise that themes and categories also depend on what the researcher aims to understand and on how the researcher interprets the data in relation to the theories the researcher uses and to what counts as knowledge and truth. Thus, the process in this type of analysis is actually highly reflexive. Central to their article is the idea that the role of interaction in qualitative analysis-if it carried out as a deeply reflexive process rather than merely a repetitive mechanical task- is the key to giving meaning to the data. (Srivastava and Hopwood 2009, 77.)

In this thesis the qualitative content analysis was applied. Content analysis is a research method suitable for different study designs and for analysing various types of data. The process involves the description and the interpretation of data by systematically creating codes in order to identify categories, themes and patterns that make sense of the data (Assarroudi et al. 2018). Content analysis allows researchers to "distil words into fewer content-related categories" (Elo & Kyngäs 2008, 108). Approaches to this type of analysis can be inductive, deductive or a combination between both. In the inductive analysis the themes emerge from the data, including extra findings and data. In other words, the process of induction starts with the observations of the data and continues by seeking to find patterns with the data. By contrast, in a deductive approach the researcher begins the initial coding process based on pre-existing theory or a set of established concepts from the literature, in order to have a structural framework for the analysis. (Bengtsson 2016, 9-10; Coulston et al. 2025, 2; Elo & Kyngäs 2008.) A combined approach involves the usage of some deductive codes as an initial base of the analysis while also generating inductive codes along the process of analysing the data iteratively (Yuwono & Rachmawati 2024).

The analysis in this thesis followed a deductive approach guided by the five-dimensional model of Futures Consciousness (Ahvenharju et al. 2018) used as framework. However, in the initial familiarization phase a preparative reading, inductive in nature, was employed. This phase helped in the identification or early patterns relevant to the research context, as recommended in qualitative content analysis to support a deeper understanding of the material (Elo & Kyngäs 2008). These initial observations were not uses as a separate coding system, but rather to support and enrich the later deductive analysis. To make the analysis process more transparent and easier to follow, Figure 1 provides an overview of the main step in the qualitative content analysis applied in this thesis. The figure outlines how the interview material moved from familiarisation and initial observations to deductive coding process using the five dimensions of Futures Consciousness, and finally to the synthesis of the themes presented in the Results and discussed in Chapter 6.

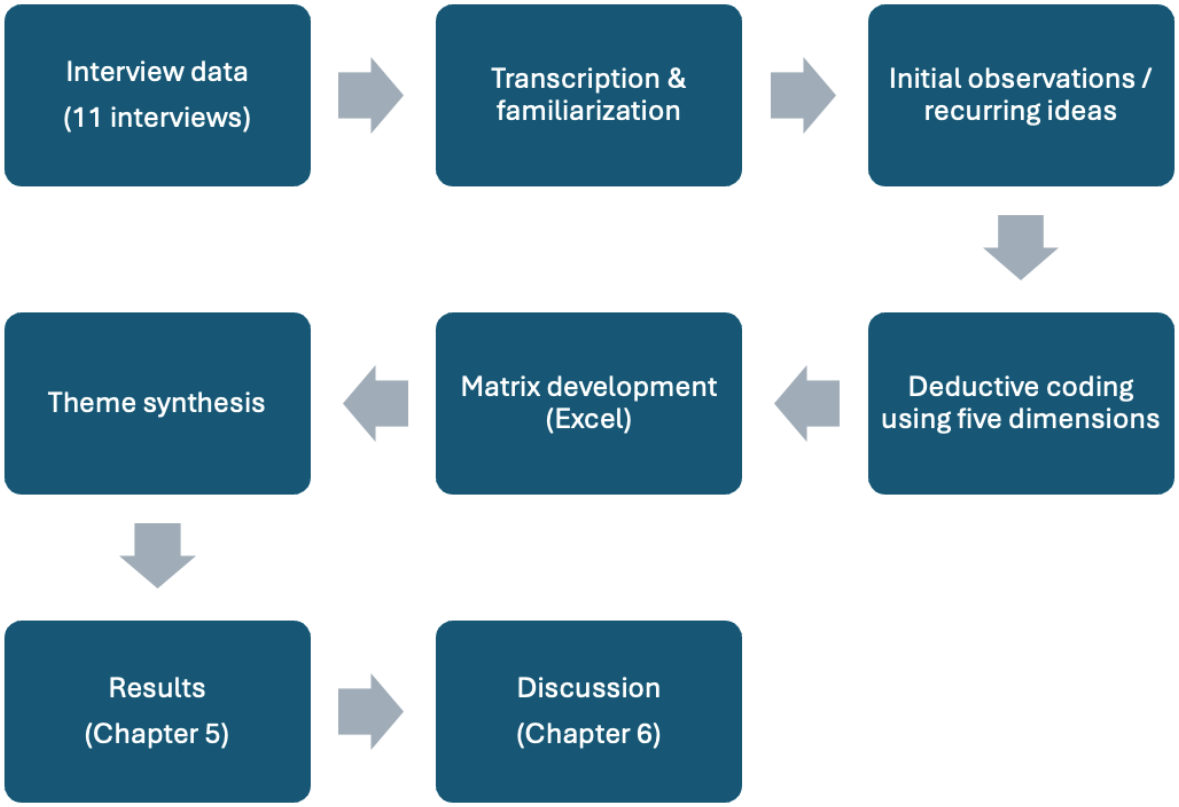

Figure 1. Overview of the qualitative content analysis process in this thesis

The researcher started the analysis process by listening several times the interviews material and by reading the transcriptions to become familiar with the data. During this phase, notes were made on codes dealing with similar issues, which allow the identification of some recurring ideas and relevant issues in the data. This phase served as an orientation to decide what was particularly relevant in the empirical material and what related to the research question and the context, in order to enrich the contextual understanding (Yuwono & Rachmawati 2024). These initial observations were kept aside and were later used and integrated into the Results chapter to enrich the interpretation of each deductive theme to make the dimension themes more concrete and context-specific and to better understand how each dimension is expressed in parents' food consumption.

As mentioned before, since the five dimensions of Futures Consciousness (Ahvenharju et al. 2018) were used as a coding grid and framework for categorization and for the interpretation of the research data, this thesis applied a deductive content analysis approach. In this way the categories existed in advance. In a structured matrix the research takes into consideration only the aspects from the material that are relevant for the categorization frame. (Patton 1990; Sadelowski 1993, 1995, according to Elo & Kungäs 2008, 111-112.) In this research the categories were defined according to the five dimensions of Futures Consciousness: Time Perspective, Agency Belief, Openness to

Alternatives, Systems Perceptions and Concern for Others. The data were then analysed qualitatively using this framework. The dimensions represented the main analytical categories where data were mapped into. For each dimension, a categorisation matrix was developed: the rows represented subcategories relevant to the dimension, while the columns contained descriptions and coding rules. After this, the transcript was read again and coded: each of the relevant statement and quotation was reviewed and organised under each corresponding category, subcategory and dimension. For this purpose, each matrix included eleven extra columns to insert participants' statements when needed. The matrices were developed and saved in Microsoft Excel.

On the other hand, since the target group of this research were parents, and thus individuals, the article (Ahvenharju et al. 2021) was a relevant reference to consider for defining the subcategories because it explored futures consciousness as a psychological capacity of individuals. Additionally, due to the researcher's limited experience applying the model in qualitative research, the initial phase of matrices development drew on a small number of insights from the coding approach described by Somos et al. (2022), particularly for having idea of how to develop certain subcategories. Their framework was not fully adopted or followed; instead, a couple of selected elements were used as conceptual inspiration in shaping particular subcategories. It is also important to note that the research plan of this thesis, including a general intention to use the Futures Consciousness model as a framework for analysis of the data, was developed already in 2021 but it was not yet fully defined in practice. The study experienced a temporary pause due to personal circumstances of the researcher, and while some later literature was consulted during this period, the overall design and approach had already been established independently. A detailed explanation of the structure and construction of these matrices is provided below, and outlines of them can be found in Appendix 10.

Hence, drawing on Ahvenharju et al. (2018; 2021) the main questions that guided the analysis in each category in order to implementing the dimensions into main codes were the following:

- Time Perspective: As Ahvenharju et al. (2018) claims, the emphasis in time perspective is not to focus on the present or to look back in the past, but in looking ahead by using the past and the present. Thus, it is important to perceive and interact with the passing time and to be aware of tomorrow in order to project ourselves to the future. For this dimension it was relevant to distinguish between time perspective in the general context and in the food consumption context. In the former case, the main analysis was focused on answering questions such as: How parents perceive and interact with the passing

time? How do they think about the future in short-term or long-term ways? Do they recognise and understand the interconnectedness of present, past and future? Do they have some fears and hopes concerning the future? In the latter case, it was relevant to know how far into the future parents consider when it comes to food habits and consumption? Do they recognised and understand the interconnectedness of present, past and future? And if they have some hopes and fears about the future of food? For both subcategories the same indicators were created: short-term, medium-term, long-term and time frame not specified. For the general-context subcategory, one extra indicator was included: mixed time frame.

- Agency Beliefs: In this dimension the main question guiding the analysis was: how much do parents believe they can make impactful food-related choices that impact their family and/or the world? There were two subcategories and several indicators: level of agency (feeling empowerment, feeling disempowerment) and extent of agency (individual/personal, collective, mixed).

- Openness to Alternatives: This dimension explored parents' openness of how different the future can be in the context of food consumption. The main questions that informed the analysis were: what is the level of openness of parents concerning the future of food consumption? What is parents' acceptance of new or different food-related alternatives? Are they following trends or are they experimenting with new food-related innovations? The subcategories of this dimension with corresponding indicators were: level of openness (close, open, mixed) and acceptance of the new or different (high and low).

- Systems Perception: This dimension refers to the parents' understanding of the interconnectedness of systems. In the context of food consumption, it reflects parents' capacity to see food choices as part of a broader system (e.g., environmental, economic, social, cultural and health) and to consider problems and issues from a holistic perspective. It describes, as Ahvenharju (2022) states: the way of an individual to "understand its own role in relation to other systems. How far it sees the impacts of its own actions and how responsibilities it feels for these impacts".

  This dimension of Future Consciousness is derived from system thinking principles. Through system thinking eyes, food consumption is understood as part of a complex, interconnected system, and not just as an isolated act of eating food. The 'full system' of food consumption includes all the elements, relationships, and feedback

loops that shape how food is produced, selected, consumed, and disposed of. The full consumption system includes, for example: production, processing and distribution, retail and market, consumption, waste and disposal, governance and policy and cultural, social and economic context (the broader forces influencing food choices). (Adapted from Ericksen 2008.) Hence, drawing from Ahvenharju's (2022) definition of the dimensions and system thinking principles, the main guiding questions for the analysis were: To what extent do parents consider a systemic approach in their food consumption practices? The main subcategory was systems perception reflections, with the following indicators: partial vs. full system, and implicit/not aware vs. explicit/aware.

- Concerns for Others: This dimension reveals how and to what extent parents have developed their moral and ethical values to consider the well-being of physically distant people (e.g., people from other countries) and temporally distant people (future generations) (Ahvenharju et al. 2021, 4) as well as the well-being of other organisms, such as the environment and animals. The main questions that have guided the analysis were: do parents care about and contribute to a better future through their food choices? What is the object of their concern? To what extent do they consider self-transcendence values, and which specific self-transcendence values are reflected in their food-related concerns? The main subcategory was type and degree of concern, with the corresponding indicators: human and other generations, environment and animal, society and self.

The next chapter presents the empirical findings of this study. First section introduces the general results of the study, including participants food habits in general (Section 5.1). After that, the results are presented and organized into the five different dimensions of Futures Consciousness (Section 5.2).

5 RESULTS

This chapter presents the empirical findings of this study as a first step to answer the research questions:

RQ1: How are the parent's view and practices of (sustainable) food consumption related to the five dimensions of Futures Consciousness? RQ2: What tensions or contradictions arise between parents' ideals and their actual food-related practices in family life? RQ3: How do parents transmit values related to sustainability, healthy eating and future-thinking to their children?

The five-dimensional model of Futures Consciousness (Ahvenharju et al. 2018;2021) is the main conceptual framework of this study and guided the analysis of all research questions. Thus, the results of the analysis are presented according to the five dimensions. Although not all research questions are explicitly formulated in terms of Futures Consciousness, the analysis of these questions will be conducted through the five-dimensional model, which will be used as the main lens to interpret parent's view and practices. (Sustainable) food consumption and intergenerational value transmission are treated as everyday contexts in which Futures Consciousness can be observed. Exploring parents' tensions between ideals and their actual practice, as well as how they pass on values to their children, can help to understand how future-oriented thinking works in family-life.

In this presentation of the findings, both vertical and horizontal categories are combined. As some of the interviews were conducted in Italian, the quotations presented in this chapter include the original English quotes from the Finnish participants, while the Italian quotations were first translated by the author and AI tools were later used to improve grammar and style.

5.1 General results: participants' information and food habits

Concerning their dietary habits, the majority of the parents followed an omnivorous diet, three of whom reported a prevalence of a Mediterranean diet (one with a high consumption of dairy products and one participant admitted that she followed a more Mediterranean diet than the rest of her family, as her partner and children did not like vegetables). All participants reported consuming also vegetarian meals during the week, ranging from sometimes to most of the time. Regarding vegan food, two participants reported never consuming it, while three were unclear in their responses, stating that they consumed a lot of legumes. However, two of them did not specify whether they considered meals with legumes to be vegan or vegetarian, and one did not specify whether she included any other protein source in addition to legumes.

Eight participants said that the main location where they bought their food was supermarkets. Only two of them mentioned using small local groceries as their primary location in order to buy higher-quality, fresh, seasonal and local food. One participant sometimes had the possibility owning chickens and cows to share with family and relatives and three participants said that they mainly consume fruit and vegetables from their own gardens or fields, especially in summer. Among those who relied on supermarkets the main reason was convenience, as it was easier to find all the products they needed in one place. However, many also said that they prefer to buy fresh food (such as, meat, fish, eggs, cheese, fruits and vegetables) from small local groceries, outdoor markets or directly from farmers when possible. In particular, when it comes to local food all the participants answered that they try to purchase local and seasonal food "for the majority", "as much as possible" "most often", especially in summer fruits and vegetables. Italian participants also had more opportunities to buy more local and seasonal food from small grocery shops, due to difference in weather and in food retail between the two countries. Obviously, Finland has rigid winters, and the grocery market is dominated by large supermarket chains (S-group and K-group).

Concerning organic food, the majority mention that they try "as much as they can" or "sometimes". One participant did not mention anything about organic food and two said that they never buy it but instead prioritize local food, which they believe is equivalent or even better than organic food. They explain this mainly through freshness, seasonality, and especially easier traceability of origin, which in their view make it as good as or better that organic food.

Finally, none of the participants were familiar with consuming ready meals or ready-made foods: when they did, it happened very rarely or occasionally. All the participants sometimes ate in restaurants, especially on weekends, while takeaway meals were consumed more rarely. For the purpose of this research, only meals shared with the family were considered, not meals that individual participants ate at work or elsewhere.

5.2 Results per dimensions

5.2.1 Time Perspective

In the Time Perspective dimension, the analysis distinguishes between (1) participants' general time horizon and future planning and (2) time perspective as expressed specifically in food-related practices. This distinction helps clarify how parents may think about the future differently across life contexts.

For Time Perspective in the general context, almost all the participants during the interview specified a reference time horizon that they considered when thinking and planning for the future and the majority looked at least from several months and on. Three of the participants clearly identified themselves as long-term planners, considering a time horizon of 5 to 15 years ahead. While two of them considered themselves as more short-term planners, focusing mainly on the present and on daily or weekly routines. However, during the process of interviewing many of the participants demonstrated - implicitly and explicitly - several time-horizons depending on different life context. For example, participants who said they prefer to live in the present and think only a few days (or sometimes a few weeks) ahead later mentioned that they think about the future, especially regarding their child's future. From a financial point of view, for example, they saved more money than before the child was born, to be prepared for future needs or challenges, or they were more careful about their own health and overall well-being. It is also interesting to note that the long-term planners remained consistent: across all topics they discussed during the interview, they showed always a persistent tendency towards to a long-term approach.

> "It's not day to day, but it depends on being: if you think of what's the ordinary day-to-day life, it's quite simple: you go to work on Monday morning and then you work for five days and then you have the weekend off. So, I think this is the longest that we are planning." (...) me and my wife we of course we try to choose the best options for our future and everyone else's future as much as we can" (P2)

> "Well, in general, I believe I am kind of a long planner, so I make five years planning and 15 years planning, and I have probably been that way all my life." (P4)

The following participant, like others, also admitted that long-term plans are sometimes limited by uncertainty. In her case, an unstable job and financial constraints impact the way how she sees the future and the possibility of making long-term plans. She still thinks about the future also in the long term, but she is aware that, due to certain constraints, she must focus more on planning for the near future:

> "A job that I would know it continues, I think it impacts a lot of how far I can think about the future. So, I think it's maybe like half a year or maximum a year the scale we are planning. But of course, I think about like my child's future, like for years on and also I'm thinking about the choices I make now. I'm thinking that they will impact my future, like my health and my opportunities in life. Yes, in a way like planning maybe for half a year, maximum a year. But then, like in a broader spectrum as well, in a different kind of themes." (P11)

Concerning Time Perspective in the context of food consumption, in general the majority of the parents demonstrated a strong future orientation by taking into account the long-term health and healthy habits, especially in relation to their children. When they bought their food parents

considered both short-term and long-term objectives. In the short-term, they thought about how to best organise a few days ahead or a week when they went shopping, to have a versatile organization and to guarantee a complete and nutrient diet to their children for well growing. Some also mentioned that good organization helped to waste less food at home. In the long-term, all the parents made a connection between healthy eating and improved health and well-being in the present, with a greater emphasis on the future. At this point, one participant also made a clear connection by noting that the way he ate also affected his surroundings. Health and nutritional concerns were therefore central within this dimension, both in the short- or long-term views, in particular regarding what was healthy (especially for the child). In this view, the majority said they prefer to cook their own food and to consume, as much as possible, local and seasonal foods, which they considered richer in nutrients and more tasteful. Some parents also included organic food in their purchasing and eating. Moreover, the majority tended to avoid industrial and processed food, and many affirmed to follow diets low in meat consumption and rich in plant-based products. For some, this shift was recent; for others, it was already a consolidated habit.

> "(...) we try to think every Sunday at least three or four dinners that we would make during the week, it is something that we manage to do sometimes, but not every week. So, then it's basically day-to-day. You wrote it down on this list (…) So, then it's easier because it's always the problem of what to do, to cook. I mean, you know; the problem is not making the food, the problem is deciding what to do, and not do the same every day. So that's why when we make this kind of a list that you can choose that there's meat food, there are vegetables, chicken and fish and everything (…)." (P2)

> "(…) I am very aware of the effect of food and the purity of food related to illnesses and health. I am very aware that there are many conservatives and a lot of stuff that when they build enough in your body, it may occur later in many years, like some illnesses or something. So, I try to avoid them. So, it is very present in the moment when I'm making the choices and buying (…)." (P11)

However, they also recognised that even if they would like to focus on the long-term effects, sometimes daily life pressures – such as, time and financial constraints, fatigue and children's diet preferences – can shift the decisions towards short-term convenience, revealing a tension between long-term values and present realities.

> "When I can, I try to think and organize the shopping to have a good variation of food for all the week (…) but in reality, what I think is discordant with what I do. I mean, I would not like that my children eat how they eat, for most of the food they eat (…) but then, a bit reluctantly and after all the long day I buy certain things (…). And thinking about their future I don't agree exactly with what they eat. Probably I should be firmer and handle this situation differently; but, for example, in the morning they eat junk food but I just can't get them to eat anything else. So, instead of sending them to school hungry, I let them have what they want." (P5)

In both general and food-related contexts, parents reflected on and made decisions that consider future consequences for their children and for some of the parents also for other generations. They also experienced both fears and hopes concerning the future in the long-term. Concerns included what would happen in the world - criminality, climate change, wars or other crises – as well as the future availability and the quality of the food and the environmental sustainability of the current food system. However, only one participant admitted feeling anxious about the future; whereas all the others, despite the worries, tried to maintain a more positive approach and they believed that humankind would be able to find different solutions. Almost all the parents hoped for a greener future, ideally based on consumption of more local and seasonal foods, growing one's own food, less packaging, less food waste, less overconsumption and overproduction, and a market less driven by capitalistic values.

> "Let's say I think about it with anxiety. I mean, what will they do? What will happen in the world? Will it still be a liveable place in the future? And let's say, the concern isn't so much economic but more about general living conditions and about their future. I feel anxiety concern climate change, wars, crime, in other words all the worries a parent can have." (P10)

> "Concerning food consumption, the ideal future would be to not have all these supermarkets full of stuff that must always have a perfect look and be fresh or new. I think when one goes to supermarket on Saturday afternoon should find what is still left (…) like when I go to buy local fruits and vegetables to the outdoor market, if I would arrive after 10 am I won't find anything (…). So, the best in the future would be to buy and try to consume and to waste as less as possible (…) it would be important to not have any more overconsumption, because fundamentally nowadays a lot of food is thrown away and wasted." (P5)

> "A preferable future would be a future where it would no longer be needed to kill animals to eat meat. This is the dream. It would be wonderful if humankind, thanks to its intelligence, would be able to escape the logic of the food chain. Anyway, the first step is to think about the way of how we consume food and how we meet our needs (…). So first, intensive farming should disappear. Another step is that the governments should paid more attention, for example, to experiment new things or to implement more limitations to intensive farms." (P8)

As a final consideration concerning the time perspective dimension, all parents explicitly said that they understood the interconnectedness of past, present and future.

5.2.2 Agency Beliefs

Parent's belief about their ability to influence what happens in the future and to make an impact through food choices vary. The majority of the parents believed that their choices had an influence

on their family's future. Parents with stronger agency beliefs felt empowered to make food choices that positively impact their family and sometimes the world.

Their level of agency was also reflected in their food consumption practices and eating habits. Many of them affirmed that they preferred to buy local, seasonal and unprocessed food directly from producers, as already observed in the previous dimension. They also tried to give priority to products with as little packaging as possible, avoiding or reducing materials such as plastic when possible. Moreover, by avoiding food that is produced in intensive farms, reducing meat consumption, and - in four cases- preferring organic food, parents described practices that they associated with positive impacts. For most participants, the reasons for adopting these practices were primarily linked to health outcomes; secondarily, sustainability outcomes were also considered. For only a few of the participants, these reasons differed in importance, and only two stated that they are not interested in acting with sustainability outcomes in mind. On the other hand, more specifically about the role of parents, participants said that they felt empowered especially around home-cooked meals, reducing waste and teaching values to their children.

> "You can make choices that influence the future. Of course, every choice we make influences the future (…). It is just trying to buy as much as unprocessed food as possible and buy from local farmers and not from those big companies that consume much energy and everything else." (P2)

> "I believe that it is a lot, we can affect in many ways (…) for example, affect nature and what will be the state of nature in the future. Also, the wellbeing of my child, how we feed her and how well will affect the way she can grow and her health in the future (…)." (P4)

Parents also felt that one way to influence future outcomes is by teaching food education to their children: transmitting values, habits and food practices and modelling these behaviours themselves. They believed that choosing healthier food would shape their child's long-term habits and would help prevent future health problems. Some parents also included values of sustainability in this education as well and recognised also the importance of discussing these topics at schools as well. One parent showed active agency by claiming that everyone can affect events, including through political processes.

> "What I can do is to educate my children; I don't know what else I can do. Then, everybody does what they can in their own family, but surely, the more we do within our families, the better we contribute to the whole community." (P9)

> "(…) but I think that maybe the best way to affect the next generation, I think that raising children is like the most important job in the world and that has the most responsibility. (…) to try to be for the children an active model: that you can affect things and

> you can affect the future. So that it's really good if you can learn already from the school that yes, I can affect things, I can make a demonstration or I can write to the government or whatever. That you are not just some passive elements, but planning and making the future together for us, it's not for the system. We are the system." (P11)

> "(...) buying organic and local and then we have things like these, where you can order straight from the organic markets or organic farms. And then of course like planting as much stuff as you can and then, by making it all yourself without using the already made. Also, teaching children where the food comes from, like also the seasonality of food. Because it's absurd, really absurd thing that we are accustomed of having everything all the time (…)." (P11)

However, some parents also felt disempowered for several reasons, such as financial constraints, the demands of parenting and distrust in institutions. These factors affected how actively they engaged in future-shaping actions related to their food consumption and restricted their ability to make choices that support their values or aspirations for a better future. Organic and local food are often more expensive than conventional products for several reasons. Regarding organic food, for example, these include higher production and operational costs, lower yields, lack of economies of scale, shorter shelf life for some of the products and lower supply and demand (see FAO 2002). Even when parents preferred these types of products, they often could not buy them due to financial constraints, or in other cases they had to compromise. Thus, affordability and convenience were sometimes prioritised over longer-term considerations related to health and sustainability. Additionally, some parents claimed that the demands of daily life associated with raising children, left them with little time or energy to incorporate sustainable food practices into their routines.

> "(...) when it is possible to choose more sustainably produced food, I mean it depends of course on the situation, it depends on the costs as well, we're not perfect, sometimes we have to find compromises." (P1)

> "Well, probably always when I have an organic option, I'll probably take it. And also, if there are two products to choose from and another shows some kind of flag of sustainability, then I would probably choose that one (…). I have been using this method: if the organic product, for example, is one and half times more expensive than the other option, then it's probably fine. But then, when it starts to be two times more expensive, then I would probably go for the cheapest option." (P4)

> "I would like to make as pure and as organic choices as I can but coming back to the job issue it's not always possible for me to make the choices I would want to make. Some products have almost the same price as the organic ones. But not all. I always try to buy organic and local food, but many times I have to take the offers and products with lower prices, even though they are not the organic and are not the local ones. So, I have to compromise a lot." (P11)

> "I should probably keep more attention to the products I buy, but the reality is that I don't always I have time and possibility to do so. For example, sometimes I go shopping with my son, and after a long day it's very difficult to still find the energy to focus (…)." (P8)

To what extent did parents believe their actions could influence the future of the food consumption? Personal or individual agency in this study relates to the micro level, such as actions that affect oneself, one's family or one's immediate community. Whereas collective agency relates to the macro level: actions affecting groups, companies, institutions, or governments. In relation to this topic, another constraint mentioned by most of participants (particularly by all the Italian ones), was a distrust in institutions, which connects directly to the level and, especially, to the extent of parents' agency. When parents distrusted governments and institutions and so on, they often felt that their individual and personal actions had a little or no impact beyond their immediate sphere. They often differentiated between their own future and the world's future as clearly separate domains. Concerning their personal future, they believed that they could take actions that had a direct impact on their own future. But at the global level and for future generations, some were sceptical about the influence that an individual could have. Some of them acknowledged that collective actions of individuals collaborating together could potentially be influential, while others believed that single individuals had no possibility to affect macro-level outcomes. In this view, individuals can make conscious choices, but the system itself limits what is possible because it is shaped by political decisions, priorities and powerful interests.

Some participants also expressed distrust of organic certificates and sustainability labels and called for greater transparency in food-chain traceability. Moreover, three of the parents were teachers and they recognised that through their work they had even more opportunities to influence the next generation.

> "I believe that I can totally influence my future - I am responsible for about 95% of it, so a lot. Concerning the future of the world and future generations, I feel a bit sceptical. Fundamentally, I can contribute by example. I am also lucky because for my work - as a teacher- I am in contact with future generations. So, through examples and by drawing attentions of my students to certain issues, I can help make them more aware of these topics (…)." (P8)

> "(...) honestly in my opinion the single has a very little impact on the world. This is probably my pessimistic view, but I think that the individual space of influence is already smaller and is getting smaller. And so, also our choices concerning ethics, environment, and society are very limited. I mean, probably if I buy a sustainable product, I can have peace of mind that I did something good. But in reality, only a few people really make a difference, and they actually don't even care about it. For example, I was reading an Oxfam report a few days ago, which was saying that a super-rich in 90

> minutes pollutes more than an average person can do in the entire live (…). I see a lack of planning at higher levels, where problems are discussed but, in the end, contingent interests always prevail instead of solving the problems. I think the problem originates from the top levels of society and the leeway of individuals is very limited. It seems that the responsibility is shifting onto ordinary people. And anyway, the impact of an action depends on the numbers of people making that type of choice." (P9)

> "I think that everyone is the architect of their own life, so the choices we make determine our personal future. Concerning the future of the world and the future generations, I am very fatalistic, and I feel that an individual doesn't have any influence on the future of the world. (…) this mainly because I don't trust the market (…).I don't trust the institutions, not only the Italian ones but also the European and worldwide. Moreover, when they talk about everyday small actions, if everyone would do like that and so on, then maybe many problems would be solved, I completely disagree. Beijing and Hong Kong, for example, pollute in on hour what I won't pollute even in my entire life. Therefore I don't think is the single person that makes the difference, when there are some economic actors that are the ones which makes the real difference. "(P6)

Additionally, some participants attributed responsibilities for the current unsustainability of the food system directly to politics, emphasizing once again that individual agency had limited impact. Thus, from this perspective, the primary responsibility and the power to address sustainability issues in food system rest with political actors.

> "If in the past they had made different decisions, like keeping food sold in bulk, we would probably don't face the issues of today. For sure, governments should have paid more attention, and also should have been more open to experiment with new things, along with more serious rules and limitations, for example on intensive farming and other similar practices." (P7)

> "(...) I mean, in past the politic had a stronger capacity to rally the masses. Instead, nowadays there is a lot of disillusionment. This is quite clear from the electoral abstention that there has been in the last elections, more than 50%, crazy!". (...) Then, it is clear, if the economic power decreases, the choices that people can make on certain issues also become more limited. As a consequences people choose cheaper products (...). (P10)

> "The future will depend on the choices that we make today. Just like our current condition depends on repeated wrong policies and short-sighted choices. Choices dictated by the needs of the moment rather than a proper planning from the high levels (…). (P10)

> "In my opinion an individual can have only a small impact. What I think is needed is a change from the higher levels: laws and legislations should focus more on food waste, ecology and the use different types produced meat. For example, I am not afraid of cultivated meat." (P7)

As seen in the above paragraphs, this dimension presented a clear tension between idealism and realism. From the reflections of most parents, it seemed that they would have liked to adopt more sustainable, healthy and ethical food practices for their families. However, some of these practices - or parts of them - remained ideals due to daily constraints such as limited time, money, distrust in

institutions, or childcare responsibilities, and were therefore difficult to achieve. Moreover, the level of trust that parents had in institutions also affected their idea of agency and the way how they acted, as will be discussed in the Systems Perception dimension.

5.2.3 Openness to Alternatives

Parents showed differing levels of openness to alternatives, but in general openness towards the future was predominant. Only one participant demonstrated a somewhat closed openness to alternatives, saying that even though in her daily life she was free to choose and always tried to do the right thing, she believed that the future was actually predetermined. In her and her family's diet, she had already included more plant-based proteins (legumes) and had reduced the amount of meat consumption, primarily for health outcomes. However, she feared that in the future innovations in the food system might lead to increasingly unnatural foods. In this sense, she also manifested a low acceptance of new or different foods.

> "Sure, I think that there are alternatives, so I truly believe that we have the possibility to affect the future (…). Even though the situation is critical, I think that there are also good things happening, let's say things are going in the right direction." (P4)

> "(…) Even though I always try to do the right thing, I actually think that in life all is about destiny. In my opinion everything is already written, so I believe that the future is in a way predetermined. (…). Today, with A.I., there is a risk of creating diets that are completely unsuitable even if they make life easier for everyone. People nowadays seems to have become lazier. So, people may still eat badly and have shorter lifespans". (P3)

All the other participants affirmed that they believe that the future was open, with different alternatives to choose from. They showed willingness to consider new ideas, new behaviours or image different futures. Concerning the food consumption practices, the majority of them followed sustainable food trends such as buying local, seasonal, zero-waste or organic food. Moreover, all were eager to experiment and introduce more plant-based options in their diets to reduce meat consumption. However, implicitly in their reflections, some of them did not seem to have a clear understanding of the difference between vegetarian and vegan options. For those with an omnivorous diet, reducing meat consumption and substituting animal protein with, for example, more meals containing legumes or other types of plant-based proteins, was mentioned. One participant also emphasised the importance of staying informed and experimenting with new recipes by using creativity in cooking as a means of becoming more open to alternative diets.

> "I am very positive. The future will be better, worse than where we are I don't think we can go (…). We always had legumes, also in the past, they are part of our Mediterranean diet. If people don't know how to cook them or think that it is a boring food to eat, and so they don't feel like eating them (…) it would be enough to search information and find receipts and try to cook legumes by experimenting with different recipes." (P7)

She also showed, like another participant, a high acceptance of innovation in food systems, by supporting the use of apps or systems that helped reduce food waste and by being open-minded about trying new, innovative types of foods:

> "(...) I would accept for example also to experiment the lab-grown meat. I am not afraid of it. Moreover, there are now available, also in Italy, apps like "Too good to go" that help to not waste food that is still possible to be eaten. Many supermarkets also discount of 40% food that is going to expire the same day or some other supermarkets have an 'anti-waste food box'." (P7)

However, even though the parents generally demonstrated openness towards the future and were willing to introduce new foods – especially vegetarian and vegan options - the majority of them did not mention innovative foods or were reluctant or sceptical about them, mainly because of cultural food traditions or concerns about their effects on health.

> "(…) even though I kind of understand there are some laboratories that make food nowadays, like vegetarian food like corn, and they are also making some beef, I guess, also in the lab, so that you don't have to kill animal (…). There might be something good, but personally I have a lot of doubts on those kinds of foods, because I think that food is related to the ground - to the soil, to the real sunlight - which gives food all the nutrients. So, if you grow the plant or the beef in the lab with some artificial light and without real sun, yes, you feed your stomach, but how healthy is it?" (P11)

A couple of participants also expressed a kind of fear about extreme scenarios in which real food would no longer exist.

> "The worst scenario I can image for the future of food is that people will eat only pastilles or pills, instead of real food" (P5)

Sometimes it is also difficult to make changes in family diets and habits because not all the members of the family share the same tastes (circumstance constraints). Especially in family with young children, parents need to deal with selective or 'picky' eaters, who are often not inclined to eat certain types of food or try new alternatives. However, some parents did not give in and continued to support their children in eating what they cook.

> "Me and my wife, we are eating vegetarian food also, we eat almost everything, but this five year old, she's a little picky. She decides if she likes or not by looking at the plate. So, she doesn't eat. We tried to get everything, all the nutrients, so we make some kind

> of food so that she gets all the nutrients that are needed for her. Anyway, we keep trying to convince our daughter to eat the same food as us." (P2)

One additional reflection concerning this dimension is that, since openness to alternatives is also related to creativity (Ahvenharju et al. 2018, 8), sometimes parents' constraints (such as time, financial or situational limitations) can also be seen as the result of a limitless openness to alternatives. These situations sometimes require creative solutions and flexibility in order to maintain sustainable intensions in practice.

As seen from above, this dimension reflected how willing and able parents were to imagine and pursue alternative futures through food choices.

5.2.4 Systems Perception

Many of the interviewed parents demonstrated an understanding of the interconnectedness of the systems by showing awareness of some phases of the food chain and concerns about production ethics. Food consumption was often linked to climate change, industrial agriculture, the economic system, overconsumption and overproduction, food waste and loss and packaging waste. Less often, it was also linked to workers' and producers' conditions and rights. On the other hand, parents also described everyday practices they use to tackle these issues, such as consuming local and seasonal food, buying organic food when possible, reducing meat and fish consumption and increasing plant-based options, avoiding meat from intensive farming, buying food with as little packaging as possible, and choosing products without plastic packaging.

> "...buying locally produce foods and then always of course conscious (…) when I buy tuna I for example check that there is this eco-friendly mark (…). You cannot think that you don't make any difference with your choices because it is your group, you are part of a bigger group. So, we are trying to make choices in order to have a greener future and everything else." (P2)

> "(…) the best would be to buy from local producers, I really don't like multinationals companies, also in agriculture, like the United Fruit for example. They care only about their own interests, buy exploiting workers and countries and financing reactionary army. (...)." (P10)

In the following quote, the participant made a clear critique of industrial production and intensive farming, as well as of the higher prices of healthy food nowadays:

> "When I am in a supermarket and I see how much a bottle of tomato sauce costs, I promise you, that I am really afraid. Since I know how production works and how much a glass container cost. When they sell a sauce bottle at 0,90 euro, I start to wonder what it is actually inside (...). Also, the eggs and the chickens are so cheap that I think they feed them with trash. Otherwise, such low prices wouldn't be possible (...). When I want

> to buy a chicken, I go to buy the free-range yellow chicken that costs 20 euro/kg, at least a price that has a sense. We are what we eat, is better to save money for something else and not to go to vacation (...) but to eat chicken less often but better quality. But also, is true that healthy food is expensive in today's market. Average salaries are too low comparing the price of those food (…)." (P9)

Many of the parents saw food choices as a part of a broader system, by explicitly reflecting on phases of the food system chains. However, only a few participants, across different parts of the interview, mentioned several phases of the full food production system. The majority mentioned only some phases, and processing and distribution phases were the least mentioned. Parents who showed understanding of broader systems also used food to teach children about sustainability, ethics, production chains, health and how to care for one's body. Thus, again by highlighting the importance of food education.

> "I am aware of all this, like logistic and picking up. This is also something that I am also trying to say to my son once in a while, when he is refusing to eat something, I say: somebody has picked this up, has packed it, then it has travelled here and then and now it is here, so it didn't just pop out and that it's important to understand the sort of consequences that we create when we eat. So, also about meat I say: this animal died, and is now for you to eat so don't waste it, respect the life. Because I think is meaningful and you need sort of understand that is not coming from nowhere". (P1)

> "I like teaching children where the food comes from, like if you eat meat then it's important to know that this animal has died (…) so kind of understand the relations, that somebody has grown the food in the field and then it has been picked it and then it has been packed and then it has been maybe flew from different side of the world. Like that kind of understand of the whole thing." (P11)

The following participant included in her reflection the importance of food education also for adults and for society as a whole:

> "Also, if people knew how to eat, we would be all healthier and thinner, and everything would be better: first, the national health care system would work better, because it is full of children with health problems due to wrong diets (...), so for all the society. (...) When I buy, I try to choose the product that's priced more appropriately according to different factors." (P9)

For most of the participants, product traceability emerged as a crucial aspect. Traceability is the capacity to track food products and their ingredients along the supply chain, from production and processing to distribution and retail (European Commission, 2026). Participants stated that making more sustainable choices would be significantly easier if products would have a clear information on their place of production, the producers involved, the production methods used, and where products went afterwards. One participant also included the possibility of making transparent also the wages paid to workers.

> "Basically, I am very interested. And also, when I'm in a store, it seems that it's quite difficult to know how products were produced. And it seems that sometimes it is even tried to hide the facts, put wrong production place, or hide starting point, where the food comes from." (P4)

> "(…) Precisely the traceability, saying who produced it, how they are paid, and how they are treated. In regard of the product itself, but especially for the people who grow it, produce it, and process it." (P10).

Thus, almost all the parents mentioned that it would be important to ensure a more transparency across the full chain of food production by providing clear, easily accessible and trustworthy traceability of the products. They also claimed for a more transparent way of labelling foods, which would allow and encourage people to buy more sustainable food choices. The following participant demonstrated a system perception through a critique of the sustainability of consuming organic products, particularly when they are produced in distant parts of the world, whereas for him it would be more sustainable to consume the own locally produced foods:

> " (...) people buy organic food that arrives e.g. from Nicaragua, that has travelled 10,000 miles by ship and plane, polluting like crazy, just to bring you something wrapped in a few cm of plastic, with the word 'organic' written on it. Honestly, it seems ridiculous to me, I prefer to consume my local food and when possible, to pick it myself from the tree". (P6)

From the quotes above, it clearly emerged that some parents explicitly demonstrated an understanding of how food-related choices connect to broader systems (for example, health, the environment, the economy or a combination of two or all of these). They were aware of the diverse issues in the food systems and linked these connections explicitly and by considering the many parts of the system. Whereas others did not articulate these connections explicitly, instead they focus more on parental and family-level impacts of food habits and practices on health. In addition, the concept of traceability fostered the trust that parents placed in experts, labels, and government food guidelines. Thus, this trust - or distrust - in institutions strongly affected systems perception. This was especially visible when looking at the bigger picture of the system. For example, in the following quote the participant seemed to overlook the broader system by attributing responsibility for earth pollution mainly to countries outside Europe (where relevant emissions happen). However, the lens of systemic connections recognises that wealthier regions, like the EU, often consume many products produced elsewhere, so their consumption indirectly contributes to global pollution and shifts environmental and socio-economic pressures onto producing countries that are already economically and institutionally vulnerable (Shershunovich & Mirzabaev 2024).

> "(…) when you see for example that in India people throw things on the street because they don't put them in trash bins, or leave them in the fields, it makes me a bit angry. I think, first about the fines in (Europe)—if you don't separate your waste. And there are some continents where, historically, there are far more people than here in Italy, and they pollute a thousand times more. So, I think, well, when it comes to the future of the world, the focus should be on those places, not, seriously, within the European Union. At a minimum, all EU member states together, maybe they don't pollute as much as some countries on the other side of the world." (P6).

Consequently, a lack of understanding of the system can undermine individuals' motivation and capacity to take action and make changes.

> "When I go shopping honestly, I am aware that I'm contributing to the problem and I don't do nothing to solve it. I am perfectly aware that if I buy that product I produce more waste, but I anyway participate to this 'chain of destruction'. Hence, I don't follow any kid of active behaviour, because I believe it doesn't help on a small scale. I mean, I believe that if they sell it in the supermarket, the wrong is who sells it and not me that I buy it. Thus, the problem is not and the end of the chain, and an individual in my opinion doesn't have enough power to have an impact." (P6)

The next dimension, Concern for Others, is strongly connected to the understanding of a system perception.

5.2.5 Concern for Others

This dimension drives ethical, empathic and social considerations and explores how parents express care for their children, community, environment, and future generations through their food-related decisions. According to Ahvenharju et al. (2021), Concern for Others includes self-transcendence values - that is, a motivation to promote the well-being of others and to move beyond self-interest - associated with the values of universalism and benevolence. Concern for Others was a consistent dimension across participants. Parents expressed altruistic and intergenerational thinking in food choices and described moral and emotional responsibility especially towards their children's well-being and future. Some participants also expressed concern for the planet, animals, or distant people, such as future generations or, for example, farmers and workers in the food chain. Thus, when reflecting on the effects of their food consumption, parents considered and cared about different aspects and contexts. Some were careful to select fair-trade products, or foods that minimise harm to animals, to the environment and to their own health.

> "But when it comes to food in particular, it's pretty clear that we're exploiting the world around us more and more, in an increasingly intensive way — and, in my opinion, in a way that's more and more unfair and unsustainable. Animals are part of this, but not just animals. I don't really look at it from a human-centred perspective. Not

> like the people who say things like, 'Pigs in factory farms shouldn't suffer because otherwise their meat will contain toxins.' No. They shouldn't suffer because they're living beings, and they're intelligent — at least as intelligent as dogs. (…). We need to slow down and reduce how intensely we exploit everything around us ". (P8)

> "I also like to think in terms of respect for the environment and respect for workers. So, for example, I often shop at Coop because I've seen that it is one of the best companies when it comes to respecting workers' rights and protecting the environment". (P10)

Many of the parents also considered locally produced food as better, not only for own health, but also for supporting the well-being of their own community or country:

> "We decided to consume less meat and choose very high-quality local meat for health reasons, but I understand that this can have an effect also on the environment" (P3)

> "(…) Well, I think there are two aspects which affect me or let's say our family. First, for me it is important that we try to keep the production in local hands or in Finland. And second, the health issues and also the effect on the environments" (P4)

One participant differentiated between the moment when he purchased food and the moment when he cooked meals:

> "(...) Let's say, the right time to think about the effect of my consumption has on the planet is when I am shopping. Whereas when I am at home preparing my food, then I consider the effect that food has on me, so about my health (...)." (P8)

From the reflections of the parents during the interviews, it emerged that most of them also incorporate sustainable values in their considerations. Only two participants clearly stated during the interview that, when making food consumption choices, they focused mainly on their own and their family's health, without considering other issues, such as sustainability or the future of the world. However, for example, P3 in another reflection, implicitly revealed that she perceives personal responsibility and everyday practices as a mean to influence the macro level and future:

> "For the new generations I hope to transmit to my children the basics in general, from nutrition and diet to lifestyle values. In a way, a correct lifestyle to pass on." (P3)

The other participant clearly stated that in his family they consumed mainly local, seasonal and fresh food for their family's well-being and health, but that they did it mainly form themselves. He added that he did not care about the planet's sustainability because he lacked confidence in larger institutions, governments, or systems responsible for sustainability, and therefore felt that his actions made no difference:

> "(…) I do it for myself, not for the sustainability of the planet. I mean, I don't care at all about the planet's sustainability. (…) I don't care, because I have no trust in how the planet is being managed. (…). I think for me and my family, I don't think to the entire

> world, but if I could express my opinion, in my own small way, I would say that if everyone started to consume seasonal food, it would already be an excellent result." (P6)

On the other hand, for almost all the participants, becoming parents marked a change in own's diet and in the way how they thought about the future. Having children often shifted perspectives and led parents to start to think more about long-term implications and well-being instead of instant gratification, not only for themselves, but especially for their children. This way of thinking about the future influenced their eating habits. Parents explained that they wanted and needed to stay healthy for their children, and they wanted to show healthy eating habits to let them grow up with balance and complete nutrition. In practice, for example, they limited or avoided buying sugary or processed foods, ate balanced meals, cooked fresh food at home, and introduced more vegetables and legumes in their cooking habits. In this sense, parenting can be seen as a driver of future thinking. The presence of a child or more (and another one on the way) deeply influenced the participant's orientation towards the future.

> "But I think that before we got our soon it was more like that, I was just enjoying the food but now when you have a son you are thinking more that he gets all possible like energy and also vitamins and ingredients from the food (…)." (P1)

> "So yes, there has been a change, in the sense that I have increased the consumption of legumes. Before I used to eat more meat, more fish, but a very few meals with legumes." (P3)

> "At least I did eat more meat and during this time that we have had child, I believe that we have started to eat more vegan meals". (P4)

> "The main change for us is that we now eat more at home, instead to eat out in restaurants." (P8)

Only one participant affirmed that her eating habits, concerning herself, changed for the worse after children were born. She described an increase in daily responsibilities and constraints, leading her sometimes, for example, to eat fast food in the car while one child was sleeping and before going to pick up the other child from school, as a brief moment for resting and eating. Two participants said that their shift towards healthier dietary options had happened already, before having children, when they got married and adapted to their spouse's healthier cooking. More than half of the parents resulted to have connection to nature and self-sufficiency by mentioning at least one or more of the following practices: gardening, mushroom foraging, growing a personal or a community garden, growing herbs, and other practices that reflect locality and seasonality, often tied to values and taste. Moreover, all these practices were described as joyful, healthy and sustainable.

These practices often connected parents to their past and family practices that had been passed down to them and it seemed important for them to pass these same values on to their children.

> "We love to pick mushrooms, it's our hobby and extremely local." (P1)

> "The ideal would be, in general, to have land and gardens where you can grow your own food, you know? Something people don't really do anymore, and honestly, us young people aren't even skilled at it. I would really love it, because I see my father, for example, who grows and takes care of his fruits and vegetables, and they turn out beautifully". (P3)

> " In theory, it would be great if everyone had their own little garden, so that people could eat what they grow locally." (P6)

> " (…) well, now in the summertime I have all the herbs in the balcony. So, herbs I'm taking from there and then we have these plant boxes in our yard but there are mainly plants for medicine and then also some artichoke that come just later so, it's not like all the year round. And then we have another communal garden where we grow a lot of food, but that is shared for like 10 people. So, in a in a way it's quite minimal the amount we get by like harvesting ourselves or gardening by our own selves. But I would like to increase the amount a lot, but like the situation where we live now, it doesn't give so many chances to make it." (P11)

All in all, this dimension showed the values, ethical motivations underlying parents' concerns for their children's future wellbeing and for the planet they will inherit. These concerns often motivate future-oriented food decisions, by influencing more sustainable or health-conscious food choices.

6 Discussion

This chapter discusses the key findings of the study in relation to the research aims, the five dimensional model of Futures Consciousness and the literature on sustainable food consumption and parenting. While the Result chapter (Chapter 5) presented each of the five dimension of Futures Consciousness separately, this discussion chapter brings insights and findings together and reflects on what they mean for how parents deal with everyday demands, sustainability aspiration, and hope for their children's future practices. In other words, it synthesizes insights from the dimensions to explore how Futures Consciousness functions as a dynamic and relational process within family food practices.

The discussion is structured around the research questions and the findings are connected back to the conceptual framework and previous research (Section 6.1, 6.2 and 6.3). Although two of the research questions are not explicitly formulated in terms of Futures Consciousness, the discussion interprets the findings through Ahvenharju's five-dimensional model. By connecting the findings back to the conceptual framework and previous research, the chapter highlights the main contributions of the study and some practical implications for family, policy and future research (Section 6.4 and 6.5). Finally, Section 6.6 reflects on the study limitations and outlines suggestions for future research.

In addition to answer the research questions, this thesis tries to contribute to the existing literature in three main ways. First, it applies Futures Studies lens into the analysis of everyday family food practices by showing how future-oriented thinking is expressed not only through clear discussion about the future but also in routines decisions and compromises. Second, it illustrates how the five-dimensional model of Futures Consciousness can be used as a qualitative interpretative framework to help organise and make sense of parents' perspectives, including tension between ideals and practices. Third, by focusing on parents with preschool children, it highlights parenting as a period of life in which futures consciousness is particularly visible, as parents frequently connect food practices to long-term health and to their children's future well-being. Figure 2 illustrates how the five dimensions of Futures Consciousness interact within parents' everyday food practices, as shaped by the conditions of daily family life. For clarity, Figure 2 presents all five dimensions as equally connected and equally weighted and an assumed similarity in their influence on parent's everyday food practices. However, the interview analysis revealed substantial variation in the relative impact of the dimensions, as will be discussed in the following chapters.

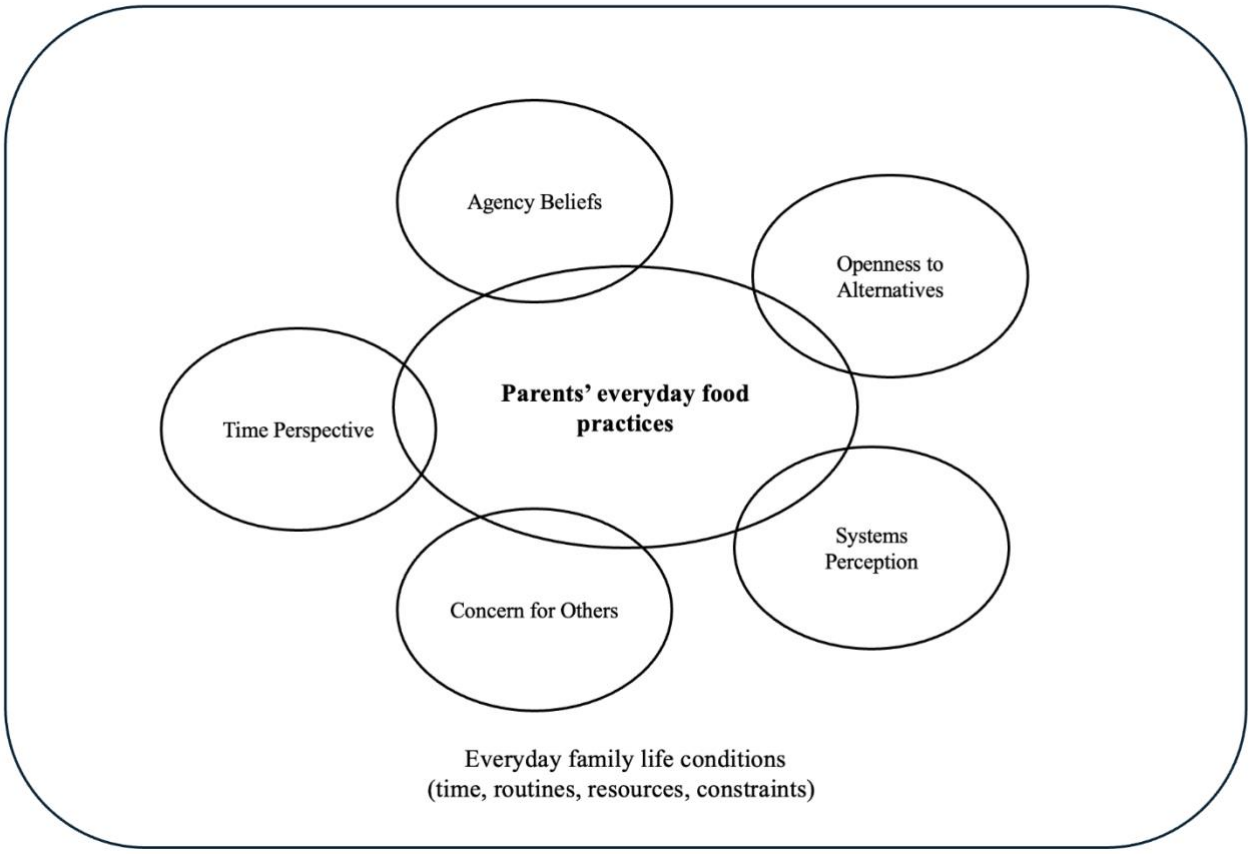

Figure 2. Futures Consciousness in parents' everyday food practices

6.1 RQ1: How are parents' views and practices of (sustainable) food consumption related to the five dimensions of Futures Consciousness?

The main purpose of this section is to show how parents put Futures Consciousness into practice in everyday life. In other words, how parents think about and act towards the future in the context of (sustainable) food consumption and how the model helps to interpret patterns in their practices.

6.1.1 Futures Consciousness as a dynamic framework

According to Ahvenharju et al. (2018), the Futures Consciousness model is conceptualised as a dynamic framework of attitudes, skills, and actions that are oriented toward anticipating, evaluating and shaping future possibilities. It is also understood as an interconnected structure rather than a set of isolated traits. In this study, parents put into practice Futures Consciousness by making food choices that reflect, for examples, their ethical values, long-term health and sustainability considerations, and everyday practical needs. In the empirical material, the five dimensions appear

in different combinations that shape how parents engage with the food consumption practices in daily life.

The empirical findings illustrate how these dimensions interact in everyday practices. For example, several parents described choosing more seasonal, local and plant-based food because they think about their children's long-term future, by caring about their health and well-being (Time Perspective). Some of them also expressed concern about climate change and future food security and wanted their children to grow up healthy in a healthy environment. At the same time, they believed that their everyday choices matter (Agency Beliefs). In this view, even small actions such as reducing meat consumption, avoiding food waste and cooking fresh meals, were seen as meaningful and powerful contributions. Together, Time Perspective and Agency Beliefs form the cognitive foundation of Futures Consciousness (Ahvenharju et al. 2021, 11), which support long-term planning and a sense of responsibility and action.

This long-term future-oriented thinking is broadened by the relational dimensions: Systems Perception and Concern for Others (Ahvenharju et al. 2021, 11). Through Systems Perception, some parents showed awareness of how food consumption was connected to multiple systems, such as health, the environment, the economy and social structures. In this way, everyday food choices were connected not only to their children's well-being but also to environmental issues, animal welfare and global inequalities. For example, some participants explained that choosing seasonal and local food was not only healthier but might also reduce environmental impacts. Concern for Others expanded their motivation beyond itself and their immediate family. The most evident concern among parents regarded their children's health and well-being (child-centred future thinking). However, there were also parents that mentioned not only their children, but that also farmers, futures generations, and people in other parts of the world were affected by climate change and sustainability challenges. In this view, sustainable food choices are therefore seen as moral decisions, not only practical ones. As Ahvenharju (2022, 74) argues, these two dimensions foster a greater understanding of mutual dependencies and highlight how caring for others is inherently linked to caring for oneself. Accordingly, parents' dietary choices can influence their children's health and may also affect the well-being of others.

All these dimensions are interrelated through Openness to Alternatives, which sees the future as "open and unpredictable", embraces new ideas, encourages creativity, and welcomes change (Ahvenharju 2022, 74). For example, all the parents mentioned experimenting with vegetarian

recipes, introducing new plant-based products in their diets and reducing meat consumption. However, only a few mentioned, or were open to, the acceptance of innovation in food systems (e.g., lab-grown meat). Most of them also described that, when they faced their children's reluctance to try new food, they continued to encourage them to eat what they prepared. This willingness to try new foods and to embrace change shows how motivation can turn values and awareness into concrete practices.

In this view, sustainable food consumption among parents reflects a living and dynamic framework: thinking and considering long-term future, believing in one's ability to act, understanding systemic connections, caring for others, and remaining open to change all interact in shaping everyday food practices. However, according to the theory (Ahvenharju et al. 2018) and to what the empirical data of this study have shown, the five dimensions do not always or necessarily appear equally developed in an individual. Rather, there can be variation across dimensions, and different *configurations* can shape parents' food practices. As Ahvenharju (2022) notes, often a person who is strong in one dimension tend to be strong in other dimensions as well. However, individuals may be more developed in certain dimensions than in others. In this view, the dimensions are related but not perfectly aligned, and parents can show stronger tendencies in some dimensions and weaker ones in others.

More broadly, the interviews also suggested that the five dimensions can appear in different combinations, shaping different configurations in parents' food practices. The interviews revealed, for example, that a couple of parents tended to adopt long-term perspective but doubted that individual actions could meaningfully influence broader systems (the macro level). Distrust in institutions further weakened their sense of agency. In these cases, Time Perspective was strong, whereas Agency Beliefs was relatively weak. Concern for Others tended to remain focused on the immediate family, and distrust also weaken Systems Perception, as systems were viewed as e.g., corrupt or uncontrollable. Moreover, if Openness to Alternatives was low, the parent was less propense to experiment or adopt new practices. When was high, the parents might still try new foods, but without strong agency beliefs, these efforts often remained inconsistent or limited. On the other hand, many of the parents focused mainly on medium-term needs while expressing concern about global issues and showing understanding of food systems, as well as relatively high openness to alternatives. Thus, in these cases, sustainable practices may be motivated more by values and moral responsibility than by explicit long-term planning. Here, Systems Perception and Concerns for Others were strong, while Agency Beliefs were moderate. Actions reflected concern about fairness, animal welfare, or justice

– even without an explicit future orientation. Openness to Alternatives may support translation of ethical concerns and systems awareness into concrete everyday practices.

These findings also align with the relationships proposed in the conceptual model of Ahvenharju (2022). Time Perspective and Systems Perception often interact when parents recognise casual links between present food choices and future sustainability outcomes. Similarly, Agency Beliefs is closely related to Concerns for Others, since moral responsibility towards e.g., children, farmers, animals or future generations can motivate attempts to act. Ahvenharju et al. (2018; 2021) conceptualised the Five-dimensional model of Futures Consciousness as consisting of five interconnected dimensions. Based on the examples mentioned above, the dimensions remain interdependent, but they also suggest that these dimensions may appear in different combinations, forming different configurations in parents' food practices.

Futures Consciousness has been used as an explorative framework to interpret how parents combine the different dimensions (thinking, believing, caring, understanding and experimenting). From the theory, both the model and the related measurement work (Ahvenharju et al. 2018), assume that individual differences exist across each dimension and that not all dimensions are guaranteed to be equally developed within a person. However, high levels of Futures Consciousness tend to appear when these dimensions reinforce one another and work as a coherent structure (Ahvenharju et al. 2018). While imbalances between dimensions may limit the translation of awareness and concern into daily practices.

6.1.2 Daily realities and structural barriers

Time perspective, Agency Beliefs and Openness to Alternatives – which are the actor-centred dimension of Futures Consciousness (Ahvenharju et al. 2021) – are very sensitive to everyday contexts and structural factors. For example, immediate demands of daily routines (e.g., childcare responsibility and daily schedules), and constraints (e.g., limited time, financial resources and children's food preferences) can influence parents' ability to maintain long-term Time Perspective by prioritizing short-term needs and/or weakness Agency Beliefs by restricting parents' perceived capacity to make impactful choices. Additional challenges arise also from the difficulty of identifying or trysting sustainable products and uncertainties around traceability, which can diminish confidence in making informed decisions. The empirical data also suggest that a couple of parents tended to favour familiar and accepted food consumption practices or chose options that were easily accepted by their children to avoid conflict or food refusal. This may indicate a constraint level of Openness to Alternatives. As Ahvenharju et al. (2021) stated, creativity is a characteristic of this

dimension, and in the context of this thesis, it refers to the ability to find creative solutions in food consumption practices. Beyond these practical constraints, distrust in institution can further limit Agency Beliefs and System Perception, as parents may doubt the reliability of official guidance or broader systemic solutions, reducing the extent to which understanding of wider sustainability issues is translated into action. By contrast, the relational dimensions – Systems Perceptions and Concern for Others – may remain strong in parent's reflections but are less often manifested in behaviour because of everyday pressures. Overall, these findings show how daily routines, constraints, structural limitations and institutional trust/distrust shape the expression of Futures Consciousness in parents' sustainable food practices.

6.2 RQ2: What tensions or contradictions arise between parents' ideals and their actual practices?

This section looks at the gap between expressed values and actual behaviours of parents. In other words, the gap between what they want to do and what they actually do in everyday family life. As has been already mentioned, many parents expressed intentions to adopt more sustainable food practices, such as reducing meat consumption and buying local, seasonal or organic food. However, these ideals often came into tension with daily realities. Time and financial constraints and children's food preferences often required compromises and leaded some parents to prioritise immediate household needs over longer-term health and sustainability considerations. Viewed through the Futures Consciousness framework, these examples demonstrate how a long-term Time Perspective can coexist with Agency Beliefs limited by situational constraints. Thus, parents may recognise and value the future implications of their food choices, but the capacity to turn these concerns into real actions is often limited by daily family routines and practical limitations.

Even when some parents demonstrated strong concern for the e.g., environment, or ethical issues and had a good understanding of the food system, structural factors often limited their ability to act according to those values. High prices, confusing labels, lack of traceability and sometimes distrust in institutions created practical and cognitive barriers. In terms of Futures Consciousness, relational dimensions such as Systems Perception and Concern for Others may stay strong, but Agency Beliefs can remain low due to these external constraints.

Openness to Alternatives can have two roles. First, it can be important for turning parents' sustainable ideals into real actions. When parents are willing to experiment with new foods, and recipes, and/or use creativity in how to integrate these new options into family routines, this dimension can act as a bridge dimension. For example, a parent may use creativity to introduce new foods and try

plant-base meals, even when daily routines are busy, or children are initially resistant. Second, this dimension can also be constrained by daily family realities. Sometimes resistance from children and time constraints can limit experimentation even for parents with creative approaches. When openness is lower, these practical barriers can limit the translation of e.g., ethical or sustainability ideals into concrete action.

The empirical findings illustrate that the Time perspective and the Agency Beliefs dimensions (actor-centred dimensions) are vulnerable to these constraints, helping to explain the gap between parents' ideals and their real actions in sustainable food consumption. As has been seen, many parents expressed clear concern for environmental issues and awareness of sustainable food practices, yet these attitudes translated into everyday choices to varying degrees. Applying the five-dimensional model of Ahvenharju et al. (2018; 2021) shows how the dimensions of Futures Consciousness interact in shaping these practices. While parents incorporated future-oriented considerations into meal planning, factors such as e.g., time and financial constraints and children's preferences influenced the extent to which these intentions were implemented within family routines.

6.3 RQ3: How do parents transmit values related to sustainability and future-oriented thinking to their children?

This section explores how parents transmit sustainability-related and future-oriented values within family life. The findings suggest that parents transmit such values through a combination of explicit teaching, everyday practices and interactive family dynamics. Parents described explicit teaching practices, such as explaining where food comes from, who produces it, discussing health or/and environmental and social impacts and thus emphasizing to children the importance of the consequences of choices. They also described implicit modelling through everyday routines and shared practices, such as shopping, cooking, trying new foods, reducing food waste and – in some cases – gardening and other nature-based practices. These activities and habits allowed children to experience sustainability in practice, reinforcing learning beyond verbal instructions. This aligns with the literature reviewed in Chapter 2 (Section 2.2.2, 2.2.3 and 2.2.4), especially with socialization theory and intergenerational influences theory, which emphasises how children learn through observation, modelling of parents and everyday interactions, and how values, norms and behaviours are transmitted across generations within families.

Concerning the structural lens, viewed through the Futures Consciousness framework, these transmission modes engage different dimensions even in young children. Although this study analyses Futures Consciousness at the level of individual parents, the framework can also be used to interpret

how parents' practices may create learning environments that support future-oriented capacities over time. For example, through everyday routines such as participation in cooking, shopping food and (when possible) gardening, children can experience simple cause-and-effect relationships (e.g., how food affects the body; how plants grow), observe routines repeated over time, and learn that choices can have consequences. These activities reflect early manifestation of Futures Consciousness dimensions. While very young children cannot yet understand consciously the meaning of the future, such everyday experiences may provide foundations for later sustainable habits and future-oriented thinking. Through everyday family activities, children start to experiences simple cause-and-effect relationships, take part in shared routines, and respond to the care and attention they receive. Their understanding of others and the broader environment is still limited, but these early interactions provide the foundation for building awareness and active participation.

For example, Time Perspective and Agency Beliefs may appear in simple ways, when parents help children understand immediate-cause-effect relationships (e.g., eating vegetable and fruit supports health; planting a seed and seeing it grow) and give them small and meaningful opportunities to act. Systems perception and Concern for Others may emerge through awareness of immediate social or environmental effects, such as sharing food or noticing and avoiding food waste during the meals. Openness to Alternatives enables experimentation and adaptation in daily routines, such as trying and accepting new foods or helping with cooking. These dimensions complement the literature reviewed in Chapter 2, which focused on modelling and routines, while also highlighting how even early participation in family practices may help lay the foundation of future-oriented thinking.

The empirical data also suggests that tension can arise when parents try to transmit ideals that they themselves only partially follow due to different constraints such as time, financial resources and children's preferences. Despite this, shared practices – especially those that allow experimentation, such as cooking and gardening- can support children's learning.

6.4 Multi-theoretical reflections

Taken together, the findings suggest that Futures Consciousness in parents' sustainable food practices does not operate through isolated dimensions, but through dynamic interactions. The analysis indicates that relational dimensions, such as Concern for Others and Systems Perception, remain relatively stable in parents' reflections. While action-centred dimensions, especially Agency Beliefs and Time Perspective and sometimes also Openness to Alternatives, appeared more sensitive to the practical conditions of everyday family life. This helps explain why, even when strong sustainability concerns are present, they can be difficult to translate into consistent practices when

agency or openness to alternatives is constrained by situational factors such as time, resources, trust in institutions and family routines. Thus, the actor-centred dimensions are important for translating the relational dimensions into everyday practices.

At the same time, the findings highlight the contextual and relational character of Futures Consciousness. Everyday practices of parents, such as buying food and cooking, create situations in which health and sustainability considerations, as well as early future-oriented experiences, may be shared within family life. While Futures Consciousness served as the analytical framework for understanding future-oriented capacity, intergenerational influence and socialisation theory - mentioned in the literature review in Chapter 2 (Section 2.2 and its subsections) - helped explain the different mechanisms through which parents introduce sustainability-related behaviours and concepts (through daily interactions, routines and modelling). Although this thesis does not explore children's Futures Consciousness directly, these interactions highlight how parents can provide a basis for children to develop sustainable habits and future-oriented understanding later.

Overall, the study supports the structural perspective of the Futures Consciousness model, while suggesting that in everyday contexts, parents' Futures Consciousness varies depending on the situation and social relationships. Thus, in the context of sustainable food choices, the interaction of the dimensions of Futures Consciousness is shaped by daily routines and practical constraints, highlighting the importance of considering how future-oriented thinking is applied within ordinary life situations.

6.5 Practical implications and (policy) suggestions

This thesis shows how parents' future-oriented thinking about food consumption is shaped by their daily routines and practical constraints, revealing how future-focused perspectives are embedded in everyday life. Parents 'views and practices regarding sustainable food consumption are closely related to their Futures Consciousness, as expressed across all five dimensions of the model. Their reflections on feeding their children are shaped not only by immediate practical concerns but also by their awareness of long-term impacts, sense of agency, openness to change, systemic understanding and their concern for others - especially their children and, more broadly, the planet. A key question is how can parents 'increase their Futures Consciousness? To strengthen their agency beliefs, parents could participate in family-focused food education initiatives that clearly show how everyday food choices influence both health and sustainability, building confidence that their actions matter. To expand their time perspective, parents can benefit from initiatives that connect daily food habits with long-term environmental, social and health outcomes. Systems Perceptions and Concern

for Others can help parents and children understand how food systems impact communities, animals and the environment, fostering awareness beyond the immediate family. Promoting Openness to Alternatives invites experimentation with new foods, recipes and sustainable habits, normalising gradual change and flexibility. Finally, it is important to address distrust by increasing transparency and confidence in food systems and institutions, so that parents feel informed and engaged in shaping their children's food futures.

Through a brief online search, the researcher found a few practical programmes that can support several dimensions simultaneously. A few examples are provided below just to give a general idea. For example, initiatives promoted by the Martat organisation in Finland, that engage parents and children together in interactive cooking sessions and enjoyable classroom activities focused on plant-based and sustainable eating (Martat n.d.). The Cooking Together in Our Families eTwinning project (European School Education Platform, 2025) involves children and their families in monthly cooking challenges that promote healthy eating, sustainable ingredients, and reflection on how these habits support future well-being. Such projects could also be adapted for parents with young children. In Finland, the Finnish Society for Food Education Ruukku ry (Ruukku ry, n.d.) develops and provides resources and programmes, including the Sapere food education method, to foster sensory exploration and food literacy for young children. Many of the Ruukku's programmes are implemented in kindergartens or early childhood education, so children are often the direct participants. However, they also provide training and resources for parents and sometimes run family-oriented activities. As Wijayaratne et al. (2018, 2452) note, Food Literacy is important because many people today are disconnected from the sources of their food and the ways it is grown, produced, and distributed. Together, these programmes help parents develop awareness, skills, and confidence across all dimensions of Futures Consciousness.

On the other hand, many existing food education programmes—often free or low-cost and accessible through schools or online—remain relatively unknown to the broader public, typically reaching families already interested in sustainability or education-related initiatives. Their limited visibility is often due to the fact that they operate within education, research or community networks, rather than being actively promoted through mainstream channels. It is important to reach a wider audience, especially parents who may not initially be interested in these topics. Programmes and projects should be integrated into everyday contexts where parents already interact, such as schools, preschools, health clinics and parenting associations, for example. Using accessible communication channels such as social media, short videos, and local media—combined with practical entry points such as children's health, quick meals, snacks, and budget-friendly shopping—can

make sustainable and healthy eating more relevant and appealing. At the same time, improving trust in institutions requires addressing deeper structural issues. Institutions should prioritise transparency and clear communication about food policies, their impacts, and progress, while recognising that distrust may arise from genuine past failures or systemic concerns. Also, involving parents and communities in participatory decision-making can foster a sense of engagement and strengthen trust. Strengthening local food networks and smaller-scale, transparent initiatives can also serve as accessible entry points for rebuilding broader institutional trust.

6.6 Limitations and directions for future research

It is important to note that this thesis is subject to several limitations that should be recognised when evaluating its outcomes. First, the researcher had just little familiarity in using interviews as a method for data collection. The data collected were still relevant and significant for this research. However, during the interviewing process, the researcher observed that a couple of questions were perceived as too similar by the interviewees, failing to capture the different perspectives the researcher had aimed for. As a result, in certain cases, the answers to these questions overlapped, especially for question n.15 and question n.16 (see Aappendix 7). On the other hand, this is sometimes common in qualitative research, where certain themes are often repeated and highlighted by participants.

Another limitation to mention is that the sample of the study included parents from only two nationalities, all with at least a bachelor's degree to ensure English communication (for the Finnish participants), which may not adequately represent the broader population of parents. Future research should involve participants from more nationalities and varied educational backgrounds, to ensure that the findings represent the broader parent population.

As a final limitation to mention, the study was conducted as a one-time study: data were collected from parents at a single point in time, which makes it difficult to see how parents' Futures Consciousness could be improved and how the dynamics in family habits change over time. This also limits the ability to draw conclusions about cause-and-effect relationships. As Ahvenharju et al. (2021) claims, Futures Consciousness is an inner human capacity that it can also be "learned, enhanced and taught". The initial idea of the researcher was to collect data through two rounds of interviews (spaced several months apart) combined with a Future workshop focusing on sustainability in food consumption and the dimensions of Futures Consciousness. The aim was to explore whether participants' thoughts and everyday food habits would change between the first and second interviews, following the workshop. However, due to the time constraints of a master's

thesis, this design was not implemented. For future research, a longitudinal study including educational experiences for parents on Futures Consciousness and sustainability would be valuable to examine whether such interventions lead to changes in food practices and an increase in their Futures Consciousness.

7 Conclusion

A key contribution of this study is its illustration of the practical value of Futures Consciousness framework for qualitative research on sustainability in everyday life. Rather than treating (sustainable) food consumption as a series of isolated behaviours, the framework helped to understand how parents combine multiple future-oriented considerations when they make food related-related decisions for their families.

The findings show that parents' food related decisions are strongly oriented toward their children's present and future well-being, while sustainability considerations are integrated in more selective and situational ways. Futures Consciousness did not emerge as a stable or uniform orientation, but rather as a capacity that depends also by everyday constraints, family routines, and perceived possibilities for action. Tensions between ideals and practices reflect how future related values are negotiated within the realities of daily family life rather than a lack of awareness or concern. This highlights the importance of understanding sustainable behaviour not only in term of values or intentions, but also in relation to the practical conditions under which family life unfolds.

While this study does not examine food system transformation directly, the findings contribute to understanding one aspect of the broader transition toward a more sustainable food system. By exploring how parents reflect on futures consequences, sustainability and children's well-being everyday food practices, the study highlights how future-oriented thinking may influence the conditions under which more sustainable consumption choices are considered and put into practice.

Beyond its empirical findings, this study also reveals the clear potential of Futures Consciousness and its five dimensions as a useful framework for further investigation. The results suggest that the framework can support a more nuanced understanding of how future-oriented thinking relates to everyday behaviour, making it relevant not only for academic analysis but also for practical applications. By structuring reflection around dimensions the framework can contribute to making individuals more aware of their own everyday practices and the assumptions underlying them. In this sense, Futures Consciousness may complement existing behaviour-based sustainability and well-being initiatives not only by supporting behavioural change, but also by fostering reflection and awareness of how present actions are connected to future outcomes.

References

Ahvenharju, S. – Minkkinen, M. – & Lalot, F. (2018) The five dimensions of Futures Consciousness. *Futures: The Journal of Policy, Planning and Futures Studies*, 104, 1–13. https://doi.org/10.1016/j.futures.2018.06.010

Ahvenharju, S. (2021) Acceptability of radical consumption policies – Utilising futures consciousness to understand elite preferences. *Futures: The Journal of Policy, Planning and Futures Studies*, 128, Article 102711. https://doi.org/10.1016/j.futures.2021.10271

Ahvenharju, S. – Lalot, F. – Minkkinen, M. – Quiamzade, A. (2021) Individual futures consciousness: Psychology behind the five-dimensional Futures Consciousness scale. *Futures: The Journal of Policy, Planning and Futures Studies*, 128, Article 102708. https://doi.org/10.1016/j.futures.2021.102708

Ahvenharju, S., & Turun yliopisto. Kauppakorkeakoulu. (2022) *Futures consciousness as a human anticipatory capacity: definition and measurement*. Turku: University of Turku.

Alsaffar, A. A. (2016) Sustainable diets: The interaction between food industry, nutrition, health and the environment. *Food Science and Technology International*, 22(2), 102–111. https://doi.org/10.1177/1082013215572029

Arrieta, E. M. – Aguiar, S. (2023). Healthy diets for sustainable food systems: a narrative review. *Environmental Science*. Advances, 2(5), 684–694. https://doi.org/10.1039/d2va00214k

Aschemann-Witzel, J. (2015) Consumer perception and trends about health and sustainability: trade-offs and synergies of two pivotal issues. *Current Opinion in Food Science*, 3, 6–10. https://doi.org/10.1016/j.cofs.2014.08.002

Assarroudi, A. – Heshmati Nabavi, F. – Armat, M. R. – Ebadi, A. – Vaismoradi, M. (2018) Directed qualitative content analysis: the description and elaboration of its underpinning methods and data analysis process. *Journal of Research in Nursing*, 23(1), 42–55. https://doi.org/10.1177/1744987117741667

Bénard, M. – Robert, M. – Méjean, C. – Allès, B. – Kesse-Guyot, E. – Paolassini-Guesnier, P. – Bellisle, F. – Etilé, F. – Reach, G. – Hercberg, S. – Touvier, M. – Péneau, S. (2024) The association between consideration of future consequences and food intake is mediated by food choice motives in a French adult population. *Public health nutrition*, 27(1), e82. https://doi.org/10.1017/S1368980023002501

Bengtsson, M. (2016) How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8. https://doi.org/10.1016/j.npls.2016.01.001

Bingham, A. J. (2023) From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, 22. https://doi.org/10.1177/16094069231183620 (Original work published 2023)

Brons, A. – Oosterveer, P. (2017) Making Sense of Sustainability: A Practice Theories Approach to Buying Food. *Sustainability*, 9(3), 467-. https://doi.org/10.3390/su9030467

Burningham, K. – Venn, S. (2020) Are lifecourse transitions opportunities for moving to more sustainable consumption? *Journal of Consumer Culture*, 20(1), 102–121. https://doi.org/10.1177/1469540517729010

Carrigan, M. – Wells, V. – Athwal, N. (2023) 'I'd never cook it now': an exploration of intergenerational transference and its role in facilitating family food sustainability. *European Journal of Marketing*, 57(5), 1352–1379. https://doi.org/10.1108/EJM-10-2021-0804

Chekima, B. – Chekima, K. – Adis, A. A. A. (2019) Understanding factors underlying actual consumption of organic food: The moderating effect of future orientation. *Food Quality and Preference*, 74, 49–58. https://doi.org/10.1016/j.foodqual.2018.12.010

Choi, S. – Feinberg, R. A. (2021) The LOHAS (Lifestyle of Health and Sustainability) Scale Development and Validation. *Sustainability*, 13(4), 1598. https://doi.org/10.3390/su13041598

Coulston, F. – Lynch, F. – Vears, D. F. (2025) Collaborative coding in inductive content analysis: Why, when, and how to do it. *Journal of Genetic Counseling*, 34(3), e70030-n/a. https://doi.org/10.1002/jgc4.70030

Davis, S. J. – Caldeira, K. (2010) Consumption-based accounting of CO_2 emissions. *Proceedings of the National Academy of Sciences - PNAS*, 107(12), 5687–5692. https://doi.org/10.1073/pnas.0906974107

Dessein, J. – Soini, K. – Fairclough, G. – Horlings, L. (Eds.). (2015) *Culture in, for and as sustainable development: Conclusions from the COST Action IS1007 Investigating cultural sustainability.* Jyväskylä: University of Jyväskylä. https://www.jyu.fi/hytk/fi/laitokset/mutku/en/research/projects/culturalsustainability/publications

Devine, C. M. (2005) A Life Course Perspective: Understanding Food Choices in Time, Social Location, and History. *Journal of Nutrition Education and Behavior*, 37(3), 121–128. https://doi.org/10.1016/S1499-4046(06)60266-2

Elo, Satu – Kyngäs, Helvi. (2008) The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Ericksen, P. J. (2008) Conceptualizing food systems for global environmental change research. *Global Environmental Change*, 18(1), 234–245. https://doi.org/10.1016/j.gloenvcha.2007.09.002

European Commission (2020, May 20) A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system [PDF]. Publications Office of the European Union. <https://food.ec.europa.eu/system/files/2020-05/f2f_action-plan_2020_strategy-info_en.pdf>, retrieved 10.4.2026.

European Commission (2026, February 5) Traceability. European Commission – Food Safety. <https://food.ec.europa.eu/food-safety/campaign-2026/traceability_en>, retrieved 10.4.2026.

European Public Health Association (2017) Healthy and sustainable diets for European countries (Christopher Birt, Tatjana Buzeti, Giuseppe Grosso, Lise Justesen, Carl Lachat, Alessandra Lafranconi, Enni Mertanen, Natalie Rangelov & Sirpa Sarlio-Lähteenkorva, Eds.). European Public Health Association. <https://db.eupha.org/repository/advocacy/EUPHA_report_on_healthy_and_sustainable_diets_20-05-2017.pdf>, retrieved 10.4.2026.

European School Education Platform (2025) Cooking Together in Our Families [eTwinning project description]. <https://school-education.ec.europa.eu/en/etwinning/projects/cooking-together-our-families>, retrieved 9.4.2026.

FAO (2002) *Certified organic agriculture – Situation and outlook.* In: *Organic agriculture, environment and food security,* (Chap. 3). Environment and Natural Resources Series No. 4. Rome: FAO.

FAO (2024) *The state of food and agriculture 2024: Value-driven transformation of agrifood systems* (FAO Flagship Publication). https://doi.org/10.4060/cd2616en.

FAO (2025) *The State of Food and Agriculture 2025 – Addressing land degradation across land-holding scales*. Rome. Doi: https://doi.org/10.4060/cd7067en

Fisher, Collin (2010) *Researching and writing a dissertation: A guidebook for business students*. FT Prentice, Harlow.

Finland Futures Research Centre (n.d.) *The concept of futures consciousness*. University of Turku. <https://futuresconsciousness.utu.fi/concept/>, retrieved 30.3.2026.

Finnish National Board on Research Integrity TENK. (2019). *The ethical principles of research with human participants and ethical review in the human sciences in Finland: Finnish National Board on Research Integrity TENK guidelines 2019* (Publications of the Finnish National Board on Research Integrity TENK 3/2019) [PDF]. https://tenk.fi/sites/tenk.fi/files/Ihmistieteiden_eettisen_ennakkoarvioinnin_ohje_2019.pdf

Garnett T. (2014) *What is a sustainable healthy diet? A discussion paper*. Oxford, United Kingdom: Food Climate Research Network (FCRN).

Genova, C. – Allegretti, V. (2024) Sustainable Food Consumption: Social Representations of Definitions, Drivers, and Obstacles. *Sustainability*, 16(4), 1415.

Gong, X. – Zhang, Y. – Wang, S. (2021) Parental influence on children's value formation: An ecological socialization perspective. *Children and Youth Services Review*, 121, 105861. https://doi.org/10.1016/j.childyouth.2020.105861

Gorgitano, Maria Teresa – Sodano, Valeria. (2014) Sustainable food consumption: Concept and policies. *Calitatea*, (15).

Halicka, E., Kaczorowska, J., Rejman, K., & Szczebyło, A. (2021). Parental Food Choices and Engagement in Raising Children's Awareness of Sustainable Behaviors in Urban Poland. *International Journal of Environmental Research and Public Health*, 18(6), 3225. https://doi.org/10.3390/ijerph18063225

Hartmann, C. – Dohle, S. – Siegrist, M. (2014) Time for change? Food choices in the transition to cohabitation and parenthood. *Public Health Nutrition*, 17(12), 2730–2739. https://doi.org/10.1017/S1368980013003297

Hebrok, M. – Boks, C. (2017) Household food waste: Drivers and potential intervention points for design – An extensive review. *Journal of Cleaner Production*, 151, 380–392. https://doi.org/10.1016/j.jclepro.2017.03.069

Hjelmar, U. (2011) Consumers' purchase of organic food products. A matter of convenience and reflexive practices. *Appetite*, 56(2), 336–344. https://doi.org/10.1016/j.appet.2010.12.019

Hoek, A. C. – Malekpour, S. – Raven, R. – Court, E. – Byrne, E. (2021) Towards environmentally sustainable food systems: decision-making factors in sustainable food production and consumption. *Sustainable Production and Consumption*, 26, 610–626. https://doi.org/10.1016/j.spc.2020.12.009

Hughner, R. S. – Maher, J. K. (2006) Factors that Influence Parental Food Purchases for Children: Implications for Dietary Health. *Journal of Marketing Management*, 22(9–10), 929–954. https://doi.org/10.1362/026725706778935600

Ivanova, D. – Stadler, K. – Steen-Olsen, K. – Wood, R. – Vita, G. – Tukker, A. – Hertwich, E. G. (2016) Environmental Impact Assessment of Household Consumption. *Journal of Industrial Ecology*, 20(3), 526–536. https://doi.org/10.1111/jiec.12371

Jackson, P. – Holm, L. (2024) Social and economic dimensions of food sustainability – a background paper for the Nordic Nutrition Recommendations. *Food & Nutrition Research*, 68, 1–12. https://doi.org/10.29219/fnr.v68.10450

Kallio, H. – Pietilä, A.-M. – Johnson, M. – Kangasniemi, M. (2016) Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. https://doi.org/10.1111/jan.13031

Ketonen-Oksi, S. – Vigren, M. (2024) Methods to imagine transformative futures: An integrative literature review. *Futures*, 157, Article 103341.

Kharuhayothin, T. – Kerrane, B. (2018) Learning from the past? An exploratory study of familial food socialization processes using the lens of emotional reflexivity. *European Journal of Marketing*, 52(12), 2312–2333. https://doi.org/10.1108/EJM-10-2017-0694

Kymäläinen, T. – Tamlander, T. – Ritala, A. – Seisto, A. (2026) Towards 2040: Collaborative approach in Finnish food systems transition. *Futures*, 175, 103708. https://doi.org/10.1016/j.futures.2025.103708

Lalot, F. –Ahvenharju, S. – Minkkinen, M. – Wensing, E. (2020) Aware of the future?: Development and validation of the Futures Consciousness Scale. *European Journal of Psychological Assessment,* 36(5), 874–888. https://doi.org/10.1027/1015-5759/a000565

Lalot, F. – Ahvenharju, S. – Minkkinen, M. (2021a) Aware of the future?: Adaptation and refinement of the Futures Consciousness Scale. *Psychological Test Adaptation and Development*, 2(1), 102–110. https://doi.org/10.1027/2698-1866/a000014

Lalot, F. – Abrams, D. – Ahvenharju, S. – Minkkinen, M. (2021b) Being future-conscious during a global crisis: The protective effect of heightened Futures Consciousness in the COVID-19 pandemic. *Personality and Individual Differences*, 178, 110862. https://doi.org/10.1016/j.paid.2021.110862

Lalot, F. – Ahvenharju, S. – Bishop, P. C. (2024) The seeds of tomorrow: Investigating adolescent perception of the future with the Futures Consciousness Scale for adolescents. *Futures*, 162, 103419.

Lamberg, J. (2021) *Business creation for active lifestyles in the Finnish sport-based companies: Enabling a sustainability transformation through ecosystem thinking* (Master's thesis, University of Turku). UTUPub

Lang, T. – Barling, D. (2013). Nutrition and sustainability: an emerging food policy discourse. *Proceedings of the Nutrition Society*, 72(1), 1–12.

Li, Y. – Zhong, H. –Shan, Y. – Hang, Y. – Wang, D. – Zhou, Y. – Hubacek, K. (2023) Changes in global food consumption increase GHG emissions despite efficiency gains along global supply chains. *Nature food*, 4(6), 483–495. https://doi.org/10.1038/s43016-023-00768-z

Lombardo, T. (2007) The evolution and psychology of future consciousness. *Journal of Futures Studies*, 12(1), 1-23.

Lombardo, T. (2009) Understanding and teaching future consciousness. *On the Horizon*, 17(2), 85–97. https://doi.org/10.1108/10748120910965476

Lombardo, T. (2016) Future Consciousness: The Path to Purposeful Evolution—An Introduction. *World Futures Review*, 8(3), 116–140. https://doi.org/10.1177/1946756716673636

Maccoby, E. E. (2000). Parenting and its effects on children: On reading and misreading behavior genetics. *Annual Review of Psychology*, 51, 1–27.

Martat (The Martha Organization) (n.d.) *In English: Food and nutrition*. < https://www.martat.fi/in-english/food-and-nutrition/>, retrieved 19.3.2026.

Meah, A. – Watson, M. (2013) Cooking up Consumer Anxieties about "Provenance" and "Ethics": Why it Sometimes Matters where Foods Come from in Domestic Provisioning. Food, *Culture & Society*, 16(3), 495–512. https://doi.org/10.2752/175174413X13673466712001

Miller, R. (2018). Sensing and making-sense of futures literacy: Towards a futures literacy framework (FLF*).* In R. Miller (Ed.), *Transforming the future: Anticipation in the 21st century.* Routledge.

Mollborn, S. – James-Hawkins, L. – Lawrence, E. – Fomby, P. (2014) Health Lifestyles in Early Childhood. *Journal of Health and Social Behavior*, 55(4), 386–402. https://doi.org/10.1177/0022146514555981

Mollborn, S. – Lawrence, E. (2018) Family, Peer, and School Influences on Children's Developing Health Lifestyles. *Journal of Health and Social Behavior*, 59(1), 133–150. https://doi.org/10.1177/0022146517750637

Moore, E. S. (2018) Intergenerational influences on children's food preferences, and eating styles: A review and call for research. *European Journal of Marketing*, 52(12), 2533–2544. https://doi.org/10.1108/EJM-06-2018-0379

Moore, L. S. – Wilkie, W. L. – Lutz, R. J. (2002) Passing the torch: Intergenerational influences as a source of brand equity. *Journal of Marketing*, 66(2), 17–37. https://doi.org/10.1509/jmkg.66.2.17.18490

Nazzaro, C. – Lerro, M. – Marotta, G. (2018) Assessing parental traits affecting children's food habits: An analysis of the determinants of responsible consumption. *Agricultural and Food Economics*, 6(1). https://doi.org/10.1186/s40100-018-0119-z

Nemeth, N. – Rudnak, I. – Ymeri, P. – Fogarassy, C. (2019) The Role of Cultural Factors in Sustainable Food Consumption—An Investigation of the Consumption Habits among International Students in Hungary. *Sustainability*, 11(11), 3052. https://doi.org/10.3390/su11113052

Nichifor, B. – Zait, L. – Timiras, L. (2025) Drivers, Barriers, and Innovations in Sustainable Food Consumption: A Systematic Literature Review. *Sustainability*, 17(5), 2233. https://doi.org/10.3390/su17052233

Poli, R. (2010) The many aspects of anticipation. *Foresight*, 12(3), 7–17. https://doi.org/10.1108/14636681011049839

Poli, R. (2019) *Handbook of Anticipation: Theoretical and Applied Aspects of the Use of Future in Decision Making* (1st ed. 2019.; R. Poli, Ed.). Cham: Springer International Publishing AG. https://doi.org/10.1007/978-3-319-91554-8

Poli, R. (2020) Foresight. In: *The Palgrave Encyclopaedia of the Possible* (pp. 1–7). Springer. https://iris.unitn.it/handle/11572/345180

Randall, T. – Cousins, A. L. – Neilson, L. –Price, M. – Hardman, C. A. – Wilkinson, L. L. (2024) Sustainable food consumption across Western and Non-Western cultures: A scoping review considering the theory of planned behaviour. *Food Quality and Preference*, 114, 105086-. https://doi.org/10.1016/j.foodqual.2023.105086

Ritchie H. – Rosado. –Roser M. (2022) *Environmental Impacts of Food Production*.Published online at OurWorldinData.org. <https://ourworldindata.org/environmental-impacts-of-food>, retrieved 9.4.2026.

Roos, E. – Tjarnemo, H. (2011) Challenges of carbon labelling of food products: a consumer research perspective. *British Food Journal* (1966), 113(8), 982–996. https://doi.org/10.1108/00070701111153742

Rosen, R. (1985). *Anticipatory Systems: Philosophical, Mathematical, and Methodological Foundations*. Pergamon Press. (cited in Poli, 2019, pp. 5–6)

Ruslin, R. – Mashuri, S. – Sarib, M. – Alhabsyi, F. – Syam, H. (2022) Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies. *IOSR Journal of Research & Method in Education*, 12. 22-29. 10.9790/7388-1201052229.

Ruukku ry. (n.d.) Food education and trainings. <https://ruokakasvatus.fi/en/>, retrieved 9.4.2026.

Sande, O. (1972) Future Consciousness. *Journal of Peace Research*, 9(3), 271–278.https://doi.org/10.1177/002234337200900307.

Savage, J. S. – Fisher, J. O. – Birch, L. L. (2007) Parental Influence on Eating Behavior: Conception to Adolescence. *The Journal of Law, Medicine & Ethics*, 35(1), 22–34. https://doi.org/10.1111/j.1748-720X.2007.00111.x

Schwarzmueller, F. – Kastner, T. (2022) Agricultural trade and its impacts on cropland use and the global loss of species habitat. *Sustainability Science*, 17(6), 2363–2377. https://doi.org/10.1007/s11625-022-01138-7

Seligman, M. E. P. – Railton, P. – Baumeister, R. F. – Sripada, C. (2016) *Homo Prospectus*. Oxford University Press

Shershunovich, Y. – Mirzabaev, A. (2024) Social cost of household emissions: cross-country comparison across the economic development spectrum. *Environment, Development and Sustainability*, 26(6), 15285–15305. https://doi.org/10.1007/s10668-023-03248-3

Sools, A. – de Groot, I. – Coppers, J. – Triliva, S. (2022) Young people's situated capacity to imagine a desired post-pandemic future: A qualitative methodology for assessing futures consciousness. *Futures*, 144, Article 103045. https://doi.org/10.1016/j.futures.2022.103045

Srivastava, P. – Hopwood, N. (2009) A Practical Iterative Framework for Qualitative Data Analysis. *International Journal of Qualitative Methods*, 8(1), 76–84. https://doi.org/10.1177/160940690900800107

UNESCO (2012) *Education for sustainable development: Sourcebook*. UNESCO. <https://www.cbd.int/financial/mainstream/unesco-source-book.pdf?utm_source=chatgpt.com>, retrieved 30.05.2026.

UNESCO (n.d.) *Sustainable development*. <https://whc.unesco.org/en/glossary/375>, retrieved Accessed 10.4. 2026.

United Nations Food Systems Coordination Hub (2025) *Food systems for the planet*. <https://www.unfoodsystemshub.org/fs-stocktaking-moment/programme/food-systems-for-the-planet/en>, retrieved 10.4.2026.

University of Turku (2025) *Guideline for the use of AI in research*. University of Turku. <https://intranet.utu.fi/en/unit/research-affairs/Documents/UTU-guideline-AI-in-research.pdf>, retrieved 10.4.2026.

van Hoeven, W. S. – Simons, M. – Czymoniewicz-Klippel, M. T. – Veling, H. (2024) Creating a healthy and sustainable food environment to promote plant-based food consumption: clear barriers and a gradual transition. *BMC Public Health*, 24(1). https://doi.org/10.1186/s12889-024-19121-5.

Vassallo, M. – Scalvedi, M. L. – Saba, A. (2016) Investigating psychosocial determinants in influencing sustainable food consumption in Italy. *International Journal of Consumer Studies*, 40(4), 422–434. https://doi.org/10.1111/ijcs.12268

Vermeir, I. – Weijters, B. – De Houwer, J. – Geuens, M. – Slabbinck, H. –Spruyt, A. – … Verbeke, W. (2020) Environmentally Sustainable Food Consumption: A Review and Research

Agenda From a Goal-Directed Perspective. *Frontiers in Psychology*, 11, 1603. https://doi.org/10.3389/fpsyg.2020.01603

Vinnari, M. – Tapio, P. (2012) Sustainability of diets: From concepts to governance. *Ecological Economics*, 74(1), 46–54. https://doi.org/10.1016/j.ecolecon.2011.12.012

Ward, S. (1974) Consumer socialization. *Journal of Consumer Research*, Vol. 1 No. 2, pp. 1-14.

WHO (2004) *Global strategy on diet, physical activity and health*. World Health Organization. <https://www.who.int/dietphysicalactivity/en/>, retrieved 10.9.2026.

WHO & FAO (2019) *Sustainable healthy diets*. Rome. <https://openknowledge.fao.org/server/api/core/bitstreams/03bf9cde-6189-4d84-8371-eb939311283f/content>, retrieved 8.4.2026.

WCED. 1987. *Our common future*. United Nations. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>, retrieved 8.4.2926.

Wijayaratne, S. P. – Reid, M. –Westberg, K. – Worsley, A. –Mavondo, F. (2018) Food literacy, healthy eating barriers and household diet. *European Journal of Marketing*, 52(12), 2449–2477. https://doi.org/10.1108/EJM-10-2017-0760

Wilenius, M. (2014) Society, consciousness and change—An inquiry into Pentti Malaska's futures thinking. *Futures : The Journal of Policy, Planning and Futures Studies*, 61, 58–67. https://doi.org/10.1016/j.futures.2014.05.005

World Commission on Environment and Development. (1987). Our common future. Oxford University Press.

Yuwono, M. A. –Rachmawati, D. (2024) Combined methods: Can this solve the differences between deductive and inductive methods in qualitative research? *Moroccan Journal of Quantitative and Qualitative Research*, 5(3). https://doi.org/10.48379/imist.prsm/mjqr-v5i3.45541

Zimbardo, P. G. – Boyd, J. N. (2008) *The Time Paradox: The New Psychology of Time That Will Change Your Life*. (1st ed.). Free Press.

Appendices

APPENDIX 1. The structure of the interview questions in English

Food consumption and Future – Structure of the interview questions

Introductory questions ("Warm up")

First: Nature of research and how it will be used, to inform concerning the use of the recorded material as research material. Explain anonymity of responses. Ask for consent or data protection statement.

1. Brief personal introduction/something about yourselves: name, age, education, your occupation
2. Family/household situation: relationship status (single parents, couple etc.), where do you live, with whom you live, how many children, age of child/children, if children go to kindergarten.

General questions for understanding sustainability relations/consciousness concerning daily consumption of food and relation with the future.

3. Can you tell me something about your daily consumptions of food (where do you buy your food, what are your family diet habits?
4. What could you tell me about your food consumption habits before and after you got your kids? If there has been a change, how would you describe it?
5. On a daily basis, how far into the future you think and plan your life?
6. How has your view about the future changed (if it has changed) after the children have born?
7. What is your relationship with the future, do you think the future as predetermined or with several alternatives to choose?

Specific questions based on the 5 dimensions of Future Consciousness.

The following questions are related to futures, by keeping in mind the (un)sustainability of food consumption that you are aware of, can you tell me:

Time Perspective

8. When you buy your food how often do you think about your personal and your children's future? How far in the future do you think?
9. Which kind of relation do you understand between past, present and future actions? How do you think past, present and future are related?

Agency Beliefs

10. How much and in which way can you influence your future and the future of the world and next generations?
11. Which kind of daily actions can you do for increasing sustainability in food consumption when you purchase your food? (Why?)

Openness to Alternatives

12. As the future does not exist yet, there are alternative pathways. What do you think will probably happen:
    - What would be the ideal dream future in your mind concerning the food consumption?
    - What kind of future would be the worst possible concerning the food consumption?

Systems Perception

13. When you make your daily selections about what food you buy to which extent are you interested in knowing i.e., were and how it has been produced, where it comes from, etc?
14. How much do you consider the effects of your consumption of food? You can answer by giving examples.

Concern for Others

15. If you think about the effects of your consumption of food, what kind of things you consider and care about?

Recap questions

16. What is your view about sustainability or unsustainability of the food consumption?

17. Do you think about the (un)sustainability of a food product when you are shopping? What (if any) socially responsible/sustainable rules do you follow when you choose and purchase your food?

Additional: for question 13 and 14: To show some packages of food and drinks and ask what they consider and check when they buy a product.

The interview is now coming to an end, if is there anything that we have not talked about during the interview that you would like to add or to discuss, please feel free to let me know.

APPENDIX 2. The structure of the interview questions in Italian

Consumo alimentare e Futuro – la struttura delle domande per l'intervista

Domande introduttive ("Riscaldamento")

Inizio: Natura della ricerca e come verrà utilizzata, per informare sull'uso del materiale registrato come materiale di ricerca. Spiegare l'anonimato delle risposte. Richiedi il consenso o mostrare l'informativa sulla protezione dei dati.

1. Breve presentazione personale/qualcosa su di voi: nome, età, istruzione, professione.
2. Caratteristiche del vostro nucleo familiare: per esempio stato civile (genitori single, coppia ecc.), dove vivi, con chi convivi, quanti figli, età del/i bambino/i, se i bambini vanno all'asilo.

Domande generali per comprendere le relazioni/coscienza di sostenibilità relative al consumo quotidiano di cibo e al rapporto con il futuro.

3. Puoi dirmi qualcosa sui tuoi consumi alimentari giornalieri (es: dove compri il cibo, quali sono le tue abitudini alimentari familiari?
4. Cosa potresti dirmi sulle tue abitudini di consumo alimentare prima e dopo la nascita dei vostri tuoi figli? (Se e come sono cambiate le tue abitudini di consumo dopo aver avuto i tuoi figli?) Come descriveresti il cambiamento.
5. Giornalmente, quanto in la nel futuro pensi e pianifichi la tua vita?
6. Come è cambiata la tua visione del futuro (se è cambiata) dopo la nascita dei bambini?
7. Qual è il tuo rapporto con il futuro, pensi che il futuro sia predeterminato o con diverse alternative tra cui poter scegliere?

Domande specifiche basate sulle cinque dimensioni di ´Futures Consciousness`.

Le seguenti domande riguardano il futuro, tenendo presente la (in)sostenibilità del consumo alimentare di cui sei a conoscenza, puoi dirmi:

Time Perspective

8. (Quando fai la spesa) quanto spesso pensi al tuo futuro personale e a quello dei tuoi figli? Quanto in la nel futuro prendi in considerazione?
9. Secondo te che tipo di relazione c'è tra azioni passate, presenti e futuro? Come pensi che azioni passate, presente e futuro siano collegate?

Agency Beliefs

10. Quanto e in che modo puoi influenzare il tuo futuro e il futuro del mondo e delle prossime generazioni?
11. Quando fai la spesa che tipo di azioni quotidiane puoi intraprendere per aumentare la sostenibilità del consumo alimentare tuo e in generale? Perché?

Openness to Alternatives

12. Poiché il futuro non esiste ancora, ed esistono quindi diversi percorsi alternativi per arrivarci. Cosa pensi che probabilmente accadrà?
    - Immaginando il futuro, quale sarebbe lo scenario ideale e preferibile per quando riguarda il consumo alimentare?
    - Immaginando il futuro, quale sarebbe lo scenario peggiore per il consumo alimentare?

Systems Perception

13. Quanto effettui i tuoi acquisti alimentari in che misura sei interessato a sapere, per esempio, dove e come un determinato articolo e stato prodotto, da dove viene?
14. Quanto consideri gli effetti che il tuo consumo di cibo possa avere(su di te, su di te e piu in genrale)?

Concern for Others

15. Se pensi agli effetti del tuo consumo alimentare, che tipo di cose ti interessano o consideri?

Domande riassuntive

16. Qual è la tua opinione riguardo alla sostenibilità (o insostenibilità) del consumo alimentare?
17. Quando fai la spesa consideri la (in)sostenibilità di un prodotto alimentare? Quali (se esistono) regole socialmente responsabili/sostenibili segui quando scegli e acquisti il tuo cibo?

Supplementare: per le domande 13 e 14: Mostrare alcune confezioni di cibi e bevande e chiedere cosa considerano e controllano quando acquistano un prodotto.

L'intervista sta giungendo al termine, se c'è qualcosa di cui non abbiamo parlato durante l'intervista e che vorresti aggiungere o discutere, non esitare a farmelo sapere.

APPENDIX 3. The invitation letter to the interview in English

Dear recipient,

Are you parents with children between 1-7 years old? Are you interested about future?

I am Veronica Moscuzza and I study Futures Studies at Turku School of Economics. I am currently writing my thesis about food and future from the perspective of parents with pre-school children. I would like to understand the attitude of parents towards future and (in relation to) food consumption.

Thus, I am looking for interviewees and I'm reaching out to you via this email. Parenting has a big impact in the foundations of future behaviours of children. Thus, it is important to understand the relation that parents have with future and food consumption in their everyday life. I'm interested in investigating about the relation that parents with pre-school children have with their everyday food consumptions habits and with future. All your opinions are very valuable for me, as for example did you notice any change in your food consumption habits after you got your children? How much do you think about future in your everyday life? When you purchase your food do you think about the effect of your consumption?

I'm planning to have the interviews during next week, 23 and 24/25 (from 3rd to 18th of June (excluding 13th and 14th of June). The interviews can be held either online (e.g., in Microsoft Teams) or also in person depending on the preferences of the interviewees. The interview will take approximately 40/45min. All you need to participate is to have a university degree (full bachelor's/master's degree) and to be parent of a child or children between 0 to 7 years old. Please let me know your best suitable time in the period that goes from 3rd to 18th of June (excluding 13th and 14th of June), and whether you'd prefer to meet online or in person. If you have any questions about the interview or my thesis, just let me know. Thank you in advance for your help, I'm looking forward to the discussion.

APPENDIX 4. The invitation letter to the interview in Italian

Gentile destinatario,

Sei genitore di bambini tra gli 1 e i 7 anni di età? Sei interessato al futuro?

Mi chiamo Veronica Moscuzza e studio Futurologia (Futures Studies/Strategic Foresight) all'Università di Economia di Turku in Finlandia, presso il Finland Futures Reasearch Centre (FFRC). Molto in breve, Futures Studies, o lo "studio dei futuri" è una meta-disciplina che si concentra nel cercare di anticipare i grandi cambiamenti sociali, tecnologici, culturali della civiltà, e prevederne gli sviluppi attraverso l'elaborazione di diversi scenari. Attualmente sto scrivendo la mia tesi di Master riguardo al consumo alimentare e al futuro dalla prospettiva di genitori con figli in età prescolare, il cui tema si colloca più nel contesto dei futuri preferibili e dell'anticipazione. Mi piacerebbe cercare di capire l'attitudine dei genitori riguardo al futuro e (in relazione) al consumo alimentare.

Attraverso questa e-mail sto cercando persone disponibili a farsi intervistare per questo studio. La genitorialità ha un grande impatto sulle basi dei comportamenti futuri dei bambini. Quindi, da questo punto di vista è importante capire la relazione che i genitori hanno con le loro abitudini e consumi alimentari quotidiani e con il futuro. Le vostre opinioni sono importanti per me, come per esempio sapere se avete notato un cambiamento nelle vostre abitudini di consumo alimentare dopo la nascita dei vostri figli? Quanto pensate al futuro nella vostra giornata? Quando acquistate il vostro cibo siete interessati all'effetto che il vostro consumo possa avere?

Le interviste sono programmate dalla prossima settimana, dal 4 al 18 di giugno (escludendo il 13 e il 14 giugno) e possono essere svolte online tramite i softwares Microsoft Teams o Zoom. La durata di un'intervista e all'incirca di 40 minuti. Tutto quello di cui avete bisogno per partecipare e di avere un'istruzione universitaria (per esempio una Laurea triennale completata) e di essere genitori con figli in età prescolare. Gentilmente, fatemi sapere via e-mail o per WhatsApp il momento migliore per voi nel periodo che va dal 4 al 18 giugno e che software preferite per l'intervista (se Zoom o Microsoft Teams per potervi inviare il link di invito). Se avete qualsiasi domanda in più riguardo all'intervista o alla mia tesi, sarò felice di rispondere alle vostre domande. Grazie in anticipo per la vostra disponibilità, spero a presto.

APPENDIX 5. The consent form in English

UNIVERSITY OF TURKU

CONSENT FORM[1]

Research Project for a Master's Thesis
Food and Future, a parenting perspective

Conducted by
Veronica Moscuzza
Final year student in the Master's Degree Programme of Futures Studies
Finland Futures Research Centre (FFRC), University of Turku, Finland

Contact: veronica.moscuzza87@gmail.com

	Please mark the box
1. I confirm that I have been informed about the nature of the research and that I had the opportunity to ask questions.	☐
2. I understand that my participation is voluntary and that I can withdraw at any time without giving a reason.	☐
3. I agree to take part in this research.	☐

	Please mark the box	
	yes	no
4. I agree that the interview is digital recorded by using Microsoft Teams as a software, including spoken discussions and possible video recordings.	☐	
5. I understand that the collected data concerning the interview will be anonymised before reporting, and no individual participants can be identified.	☐	☐
6. I agree to the use of anonymized quotations in publications.	☐	☐

FINLAND FUTURES RESEARCH CENTRE

Name of participant: .....
Signature: .....
Date: .....

[1] Modification of the consent form designed by Nina Jentl in the Master's Thesis of Seyedeh Akhgar Kaboli (2016), *The multicultural images of the future of young adults.*

APPENDIX 6. The consent form in Italian

UNIVERSITY OF TURKU

MODULO DI CONSENSO[1]

Progetto di Ricerca per una tesi di Master
Consumo alimentare e futuro, una prospettiva genitoriale

Condotto da
Veronica Moscuzza
Studente dell'ultimo anno del programma di Master in Futures Studies del *Finland Futures Research Centre* (FFRC), Università di Economia di Turku, Finlandia

Contatto: veronica.moscuzza87@gmail.com

	Contrassegnare la casella, prego
1. Sono stato informato/a riguardo sulla natura della ricerca e ho avuto l'opportunità di fare domande a riguardo.	☐
2. Sono stato informato/a che la mia partecipazione è volontaria e che posso ritirarmi in qualsiasi momento senza dover dare spiegazioni.	☐
3. Sono d'accordo nel prendere parte a questa ricerca.	☐

	Contrassegnare la casella, prego	
	si	no
4. Acconsento a che l'intervista sia registrata digitalmente utilizzando Microsoft Teams o Zoom come softwares, comprese discussioni audio ed eventuali registrazioni video.	☐	☐
5. Comprendo che i dati raccolti che riguardano l'intervista saranno anonimizzati nel testo della tesi e nessun partecipante potrà essere identificato.	☐	☐
6. Acconsento all'uso di citazioni anonime nelle pubblicazioni.	☐	☐

FINLAND FUTURES RESEARCH CENTRE

Nome del/la participante: .....
Firma: .....
Data: .....

[1] Modifica del modulo di consenso progettato da Nina Jentl nella tesi di Master di Seyedeh Akhgar Kaboli (2016), *The multicultural images of the future of young adults.*

APPENDIX 7. The Data Protection Statement in English

UNIVERSITY OF TURKU

DATA PROTECTION STATEMENT: Interview recording of a Research Project for a Master's Thesis; Food and Future, a parenting perspective.
[date].

The date of issue:

1. **Conducted by**

Veronica Moscuzza
Final year student in the master's degree Programme of Future Studies
Finland Future Research Centre (FFRC), University of Turku, Finland

Contact: veronica.moscuzza87@gmail.com

1. **What kind of information do I collect?**

I save the interview [date] as a digital recording, including spoken discussions and possible video recordings. As softwares for the digital recording and transcriptions I use Microsoft Teams for online interviews and Word Dictate for in person interviews.

2. **For what purposes do I collect the data?**

The data recorded during the interview is used for research purposes for one Futures Studies master's thesis at the University of Turku. The collected data concerning the interview will be anonymised before reporting, and no individual participants can be identified.

3. **Sharing information**

I do not share the raw data with anyone outside the FFRC and University of Turku. We do not transfer personal information collected to organizations or companies for marketing purposes. We will not transfer personal data to countries outside the EU/EEA.

4. **Retention of information**

The personal information you have provided to me is processed and stored for the aforementioned purposes as long as the purposes are valid and after this for a limited time due to our purposely determined back-up and deletion routines.

5. **Your rights as a data subject**

• You have the right to request access to and rectification or erasure of your personal data.
• You also have the right to object to the processing of your personal data and have the processing of your personal data restricted.
• You have an unconditional right to object to the processing of your personal data for direct marketing purposes.
• If processing of your personal information is based on your consent, you have the right to withdraw your consent at any time. Your withdrawal will not affect the lawfulness of the processing carried out before you withdrew your consent.
• You may always lodge a complaint with a data protection supervisory authorit

FINLAND FUTURES RESEARCH CENTRE

APPENDIX 8. The Data Protection Statement in Italian

UNIVERSITY OF TURKU

DICHIARAZIONE SULLA PROTEZIONE DEI DATI[1]: Registrazioni audio e video per un progetto di ricerca di tesi di Master; consumo alimentare e futuro, una prospettiva genitoriale.
[data].

Data di emissione: …

1. **Condotta da**

   Veronica Moscuzza
   Studente dell'ultimo anno di corso del Master in Futures Studies del *Finland Future research center* (FFRC). Università di Economia di Turku, Finlandia.
   Contatto: veronica.moscuzza87@gmail.com

2. **Che tipo di informazione viene raccolta?**
   L'intervista di [data] viene salvata come registrazione digitale, comprese le discussioni parlate ed eventuali registrazioni video. Come software per la registrazione digitale e le trascrizioni si utilizza Microsoft Teams o Zoom per le interviste online.

3. **A quale scopo vengono raccolti i dati?**
   I dati registrati durante l'intervista vengono utilizzati a fini di ricerca per una tesi di Master di *Futures Studies* presso l'Università di Turku. I dati raccolti relativi all'intervista verranno resi anonimi prima di riportare citazioni e altre tracce dell'intervista e non sarà possibile identificare i singoli partecipanti.

4. **Condivisioni delle informazioni**
   I dati grezzi non vengono condivisi con nessuno al di fuori del FFRC e dell'Università di Turku. Le informazioni personali raccolte non vengono trasferite a organizzazioni o aziende per scopi di marketing. I dati personali non vengono trasferiti verso paesi al di fuori dell'UE/SEE.

5. **Conservazioni delle informazioni**
   Le informazioni personali fornite vengono elaborate e archiviate per gli scopi sopra menzionati finché gli scopi sono validi e successivamente per un tempo limitato a causa dei nostri backup di proposito stabiliti e dal nostro sistema con routine di cancellazione.

6. **I tuoi diritti in qualità di interessato/a**

- Hai il diritto di richiedere l'accesso, la rettifica o la cancellazione dei tuoi dati personali.
- Hai anche il diritto di opporti al trattamento dei tuoi dati personali e di limitarne il trattamento.
- Hai il diritto incondizionato di opporti al trattamento dei tuoi dati personali per scopi di marketing diretto.
- Se il trattamento dei tuoi dati personali si basa sul tuo consenso, hai il diritto di revocare il tuo consenso in qualsiasi momento. La tua revoca non pregiudicherà la liceità del trattamento effettuato prima della revoca del tuo consenso.
- Potrai sempre proporre reclamo all'autorità di controllo della protezione dei dati.

[1] Modifica della dichiarazione della protezione dei dati di Johanna Lamberg nella sua tesi di Master (2021), "Business Creation for Active Lifestyles in the Finnish Sport-Based Companies. Enabling a Sustainability Transformation Through Ecosystem Thinking".

FINLAND FUTURES RESEARCH CENTRE

APPENDIX 9. Transparency in the use of Artificial Intelligence in this thesis

Following the guidelines of the University of Turku, this research employed AI in the following ways:

- As a tool to transcribe the empirical data: For most of the interviews, which were conducted online, the programs Microsoft Teams or Zoom were used, which provide the option to transcribe the interview in real-time. However, after generating the initial automatic transcripts, all the interviews were reviewed and corrected by the researcher to ensure accuracy.
- As a language and writing support: When some sentences of the text did not sound or appear correct, tools such as ChatGPT and Microsoft Copilot were used to improve e.g., sentence's structure and polish grammar, and, when necessary, to suggest better or more formal phrasing. For example, the Italian interviews quotations were initially translated into English by the researcher. After, when some translations did not sound sufficiently natural or accurate, individual sentences were revised and refining with the assistance of the above-mentioned two programs. They were also employed in the same way during the final editing process.
- As a tool for brainstorming: ChatGPT and Microsoft Copilot were occasionally used to help organised ideas that had already been developed, generate new ideas or proposals and to explore alternative interpretation and perspectives. The researcher posed questions and, through an iterative process, critically evaluated and refined the responses generated by the tools, before integrating any insights into the study. For instance, these tools were a useful tool for brainstorming how to organise the discussion chapter and how to improve the structure of table of contents.

During all the processes described above, the researcher remained an active participant who critically evaluated and revised any insights provided by the AI before incorporating any improvements or suggestions into the text.

APPENDIX 10. Detailed explanation and structure of the codes in qualitative content analysis

TIME PERSPECTIVE			
	Description	P1	P2…
General context	How parents perceive and interact with the passing time? How do they think about the future in short-term or long-term ways? Do they recognised and understand the interconnectedness of present, past and future? Do they have some fear and hopes concerning the future?		
Short-term	Focus on days or week		
Medium-term	Focus from several months		
Long-term	Focus from 5 years or more		
Not specified	Not specified time frame		
Mixed time frame	For something short-term, for other longer term		
Food consumption context	How far in the future parents consider when it comes to food habits and consumption? Do they recognised and understand the interconnectedness of present, past and future? And if they have some hopes and fears about the future of food?		
Short-term	Focus on days or week		
Medium-term	Focus from several months		
Long-term	Focus from 5 years or more		
Not specified	Not specified time frame		

AGENCY BELIEFS How much do parents believe they can make impactful food-related choices that impact their family and/or the world?			
	Description	P1	P2...
Level of Agency	Do parents feel empowerment or disempowerment?		
Feeling of empowerment	Action or intentions of self-confidence and determination, active agency, aspirational behaviour		

Feeling of disempowerment	Future can't be influenced, passivity and reactive attitude, low belief in our capabilities to influence the future		
Extent of agency	To what extent do parents believe their actions can influence the future of the food consumption?		
Individual/personal	Agency at the individual or personal level, e.g., actions affecting oneself, one's family, or immediate community (micro-level). Small scale, personal sphere of influence.		
Collective	Agency at the collective or societal level, e.g., actions affecting groups, companies, institutions, or governments (macro-level — social, political, and economic systems).		
Mixed	Agency that involves both individual/personal and collective/societal influence.		

OPENESS TO ALTERNATIVES

What is the level of openness of parents concerning the future of food consumption?
What is parents' acceptance of new or different food-related alternatives?
Are they following trends or are they experimenting with new food-related innovations?

	Description	P1	P2...
Level of openness	Parent's perception of future, is open or close?		
Close	Close and/or predetermined		
Open	Open /or with different alternatives		
Mixed	For something, open for something close		
Acceptance of the new or different	Willingness to explore alternative food or diets, also innovative foods. Experiment with plant-based options. Following trends (e.g., zero-waste, local food). Systems change.		
High	Almost all alternatives are present		
Low	Only one or no alternatives are present		

SYSTEMS PERCEPTION

To what extent do parents consider a systemic approach in their food consumption practices?

	Description	P1	P2...
Systems perception reflection	Capacity of the parents to consider a systemic approach to food consumption practices. Ability to see food choices as a part of a		

	broader system (e.g., environmental, economic, social, cultural and health) *. Systemic trust or distrust.		
Partial	Capacity to consider partial system thinking		
Full	Capacity to consider the full system thinking (all the phases of the system are present in their reflections)		
Implicit /not aware	Implicit or not aware reflections		
Explicit /aware	Explicit and aware reflections		

* The full production system includes, for example: (1)production system (e.g., type of agriculture, farming practices, environmental impacts), (2) processing and distribution (e.g., processing and packaging, transport and logistic, wholesale and retail distribution), (3) retail and market system (e.g., grocery stores, markets, supermarkets, restaurants, pricing strategies), (4) consumption system - factors influencing individual and collective eating behaviours- (e.g., taste preferences, cultural norms, nutrition knowledge, time availability) and (5) waste and disposal system (e.g., food waste in households, retail, production. composting, recycling, environmental impacts of waste), (6) governance and policy (rules and institutions shaping the food system, such as government regulations, taxations, trade policies) and (7) cultural, social and economic context (the broader forces influencing food choices). (Adapted from Ericksen 2008.)

CONCERNS FOR OTHERS (and the World) Do parents care about and contribute to a better future through their food choices? What is the object of their concern? To what extent do they consider self-transcendence values, and which specific self-transcendence values are reflected in their food-related concerns?			
	Description	P1	P2...
Type and degree concern	Which type and to which extent parents have developed their moral and ethical values?		
Humans and other generations	Concern for all the humans and the other generations, not only for itself		
Environment and animal	Concern also for the environment and considering also animal welfare and rights		
Society	Concern for inequalities in different systems (i.e., health care)		
Self	Concern for the own life and the own family		