

Identifying motivations and barriers to vegetarian diets

An exploratory study on young internationals in Sweden

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Abstract

Our current food system is a significant contributor to anthropogenic greenhouse gas (GHG) emissions, land and water use, biodiversity loss among other issues. In order to achieve the sustainability agendas, a shift in the food system is required. With livestock production responsible for up a considerable amount of food system GHG emissions, diets with reduced meat consumption are suggested to be a solution by numerous studies. This study seeks to explore the motivations behind various forms of vegetarian diets and identify barriers that hinder the sustain of such diets. Through a qualitative approach with a combination of surveys and interviews, this study reveals that individual factors, including values and beliefs (concerns of animal welfare/rights, environmental concerns, compassion and empathy, personal challenge/responsibilities), health benefits, taste and sensory preference, knowledge/capability/skills, and vegetarian identity are the most significant to the adoption and maintenance of vegetarian diets, with social and situational factors including supportive social relationships, positive social identity and availability as additional support. However, social and situational factors such as social relationships and social norms, cultural context and the low availability of vegetarian options are found to be challenging to the maintenance of vegetarian diets. Individual factors such as taste preferences and financial capability are also found to affect the maintenance of such diets. Vegetarian advocates and policymakers are recommended to promote public awareness of vegetarian benefits and provide relevant knowledge. Furthermore, food providers and restaurants are suggested to better accommodate various types of vegetarian diets, taking into account price and quality considerations.

Keywords: Sustainable food consumption, Vegetarian diet, Vegetarian motivation, Vegetarian barrier

Executive Summary

Our food system contributes to 21~37% of overall anthropogenic greenhouse gas (GHG) emissions as well as 70% of the freshwater use (IPCC, 2019; Food and Agriculture Organization of the United Nations, 2017). To meet the current sustainability agendas, a transformation of the global food system is urgently needed (World Health Organization & Food and Agriculture Organization of the United Nations, 2019). One approach to this issue is to promote more sustainable diets among the public.

Numerous studies have suggested that diets with reduced animal product consumption hold promise as an effective strategy for reducing GHG emissions within the food system (e.g., Springmann et al., 2016; Sun et al., 2022). Animal agriculture is a significant contributor, accounting for up to 80% of GHG emissions of the entire food system (Springmann et al., 2016). Therefore, adopting a more vegetarian diet has been widely recommended as a means to mitigate emissions and promote sustainability.

At the same time, vegetarianism is not a new concept, with ethical and spiritual initiatives since ancient times and recent scientific findings on health benefits (Ruby, 2012). However, there have been many challenges related to the adoption and maintenance of such meatless or meat reduced diets. Numerous studies have been conducted surrounding the discourse of vegetarianism, from health and nutrition studies (e.g., Craig, 2010) to the psychology aspect (e.g., Rosenfeld, 2018). Nonetheless, despite the abundant evidence on the benefit of vegetarian diets, recent data fail to show an evident growth in vegetarian population.

Aim and Research Questions

In order to add to the current discussion and to find hints to increase the acceptance and popularity of vegetarian diets, this study aims to provide more empirical evidence by exploring the motivations and barriers to the adoption and maintenance of vegetarian diets among a unique population—young internationals in Sweden. This chosen population represents individuals with various cultural backgrounds living in the same social context. This characteristic enables an exploration of the commonness of vegetarian motivations and barriers across countries, and a reveal of barriers in the Swedish context.

This is achieved by investigating the following two research questions.

RQ1. What are the motivations for individuals to choose and maintain a vegetarian diet?

RQ2. What are the barriers that hinder the consistent practice of a vegetarian diet?

Research Design, Data Collection and Analysing Methods

Considering the exploring nature of the research questions, this study is conducted with a qualitative approach by a combination of surveys and interviews.

Initially, the researcher examined existing literature to identify influential factors and barriers related to vegetarian motivation. Drawing from the insights gained through the literature review, a conceptual framework was developed, guiding the formulation of survey and interview questions. The survey was distributed through the researcher's network, which includes WhatsApp groups including *Vegan students in Lund* group which consists of over 90 vegetarian or prospective vegetarian students in Lund, Sweden, student group chat of the International Institute for Industrial Environmental Economics (IIIEE) at Lund University, and other social

media platforms. Participation in the interviews was also invited through the survey and agreed via email.

Collected data include survey answers from 50 vegetarians of different types and interview transcripts that were transcribed from recordings. These data were then organised into thematic categories and compared with information obtained from the literature to form results.

Findings

Motivations

Through the survey and individual interviews, several individual, social and situational factors were found to be facilitating the adoption and maintenance of vegetarian diets.

Individual factors include Perceived or Experienced Health Benefits; Taste and Sensory Preferences (including the liking of vegetarian food and dislike of the taste and touch of meat); Values and Beliefs: concerns for animal welfare/rights/ethics; compassion and empathy; environmental concerns; personal responsibilities/challenges; Knowledge/Capability/Skills (on the benefits of vegetarianism and preparing a well-balanced diet for themselves); Vegetarian Identity (considering being a vegetarian part of one's self-concept)

Social factors include Supportive Social Relationships (including socialising with people with similar dietary preferences and generally open-minded people); Positive Vegetarian Social Identity (perceiving being vegetarian positive and being proud to be vegetarian).

The only situational factor found is the wider availability of vegetarian alternatives in Sweden.

According to the survey results, individual factors are the most determining factors to one's decision and continuation of a vegetarian diet variety. Ethical concerns about animal welfare and rights is the most dominant initial motivation for the respondents in this study to transition to a vegetarian diet variety, followed by environmental concerns and health considerations. Whereas environmental concerns are the most common added motivations as one progresses in their vegetarian journey, helping them sustain their diets through obstacles, followed by ethical concerns.

Barriers

Factors that inhibit the commitment and continuous sustain of vegetarian diets were also found as the following.

Individual factors include Health requirements (for eating animal products); Taste Preference, (including enjoying the taste of meat and certain dishes with meat); Knowledge/Capability/Skills (financial capability of purchasing vegetarian protein alternatives).

Social factors are Social Norms and Relationships (including meat-centred traditions and people embracing traditional values); Cultural Context (e.g., when visiting a country with different cultures and traditions about meat).

The only **situational factor** found here is the limited availability of quality and affordable vegetarian options.

The most highlighted inhibiting factors were social and situational factors, with social relationships when dining on the top of the list, followed by availability of satisfying vegetarian options and unfamiliar environments.

Conclusion and recommendations

Although there has been sufficient scientific evidence showing that vegetarian diets benefit health, animals and the environment, the adoption of such diets faces obstacles from different aspects. Sustaining vegetarian diets is not easy either. Motivations of vegetarian diets are subjective to individuals whereas the barriers are largely social and situational. To increase the acceptance and encourage more individuals to attempt and adopt vegetarian diets, much needs to be done.

Recommendations for practitioners

1. For vegetarian advocates and policy-makers who seek to promote sustainable diets— increase information regarding vegetarian diets for greater acceptance and awareness of the implications of meat consumption.
2. For food providers and restaurants in general—ensure satisfaction of various types of dietary needs with a focus on quality, taste, nutritional values and price fairness. Include ecological vegetarian dishes to accommodate health-conscious populations.
3. For traditional restaurants—offer different vegetarian versions of traditional dishes to accommodate vegetarians' need to taste culture through food.

Recommendations for future research

1. An increased attention to environmentally motivated vegetarians as a separate category from animal welfare motivated ones. It has been common to include environmentally motivated vegetarians as part of animal welfare vegetarians in previous studies. As the environmental reasons are more widely cited in recent studies, a dedicated focus on environmentally motivated vegetarians should be given to investigate their unique characteristics.
2. An investigation on how vegetarians negotiate their contradicting values when making food choices is also promising in forming strategies to encourage vegetarian dietary choices.
3. A greater variety of social and cultural background in the population shall help further consolidate the generalisability of this study and potentially yield new insights in future research.

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1 Introduction

Anthropogenic greenhouse gases (GHG) are the main cause of climate change. According to the Intergovernmental Panel on Climate Change (IPCC) 5th assessment, the current climate system is changing rapidly, casting a grave impact on humans and nature. An increase in global temperature, loss of ice volume, rising sea levels, and changing precipitation patterns are some of the consequences. The continuous emission of GHG will further result in more extreme weather events, and long-lasting, irreversible impacts on humans and ecosystems (IPCC, 2022).

Anthropogenic greenhouse gases come from various sources. Our food system (pre- and post-production activities included) contributes to around 20~37% of total anthropogenic GHG emissions (IPCC, 2019) and is a major contributor to land-use change, biodiversity loss, eutrophication etc (WHO & FAO, 2019).

A shift to sustainable diets with nutrition balance and diversity is needed to enhance food security under climate and social-economic changes (IPCC, 2019). Sustainable diets such as a vegetarian diet are a way to reduce emissions, research shows that a vegetarian diet can cut carbon footprint by 42~70% compared to a meat-based western diet (Baur et al., 2022, Springmann et al., 2016).

Apart from GHG emissions reductions, a vegetarian diet benefits the environment in many other ways such as a reduction in land use and eutrophication (Springmann et al., 2016). It is also considered to be healthy since excessive animal product consumption is linked to chronic diseases, and animal agriculture feeds zoonotic infectious diseases and antibiotic-resistance-related illnesses (Hayek, 2022), a well-planned vegetarian diet is commonly chosen to prevent and treat diseases of welfare, and there is indeed some evidence from nutritional science that supports this belief (De Groeve et al., 2022). Another benefit of a vegetarian diet is the avoidance of animal suffering in industrialised farms such as intensive captivity in artificial environments, unhygienic overcrowding, and mutilating procedures (Graça, 2016; Nordquist et al., 2017), and the issue of speciesism—species-based discrimination (De Groeve et al., 2022) (the belief that humans are superior than other species).

The environmental impact of the current food consumption patterns and the food system in large has been recognised as a focus area to tackle complex environmental issues in many countries. For example, in Sweden, the dietary guidelines established by the Swedish Food Agency prioritise a healthy and sustainable diet, emphasising the consumption of plant-based foods and a decrease in meat intake (Livsmedelsverket, 2015). The Swedish Food Agency acknowledges the crucial role of a transition of the food system in order to achieve the goal set forth by the Swedish environmental objectives. The Swedish environmental objectives aim to resolve significant environmental issues within Sweden's borders while preventing the exacerbation of environmental and health problems beyond its borders, and to reach the United Nations' Agenda 2030. Several Environmental Quality Objectives, such as *Reduced Climate Impact* and *A Rich Diversity of Plant and Animal Life*, are intricately linked to the functioning of the existing food system, but unfortunately, the current trajectory indicates a contrary direction. Therefore, a societal shift is imperative within the coming decade to align with these objectives and achieve desired outcomes (Livsmedelsverket, n.d.a). Food-related environmental impacts, in particular, gains focus as one third of the Swedish households' consumption based GHG emissions comes from food, along with other negative environmental impacts occurred in food production such as eutrophication, overfishing and pesticides use (Livsmedelsverket, n.d.b). Not just Sweden, the Nordic Nutrition Recommendations 2023 also put emphasis on the co-benefit of health and sustainability of a mainly plant-based diet based on scientific evidence (Nordic co-operation, 2023). Similarly, the European Commission's Farm-to-Fork strategy also recognises the

environmental impact of the current food system, such as the GHG emission, the massive amount of resources uses, adverse effect on human health, and fair economic returns in all actors, hence emphasises on improving the fairness, healthfulness and environmental-friendliness of the food system (European Commission, n.d.).

1.1 Problem Definition

There are significant barriers to committing to a vegetarian diet, both for omnivores to transition to a certain vegetarian diet and for current vegetarians to maintain consistent with their chosen dietary patterns. Despite increased awareness about the benefits of vegetarian diets for example, health-related benefits such as decreased saturated fat intake, increased fibre intake and disease prevention (Lea et al., 2006), the actual growth in the vegetarian population has been limited in recent years. Statistical data indicates that the total number or proportion of vegetarians has not significantly increased over time. Unfortunately, there is no data from the recent years showing the vegetarian population trends in Sweden. However, a survey in the UK shows that the number of varieties of vegetarians (this includes flexitarians, ovo-lacto vegetarians, pescatarians, vegans) has been fluctuating between 27% to 32% over the past 4 years yet showing no increasing trend (Our World in Data, 2023; see Figure1-2).

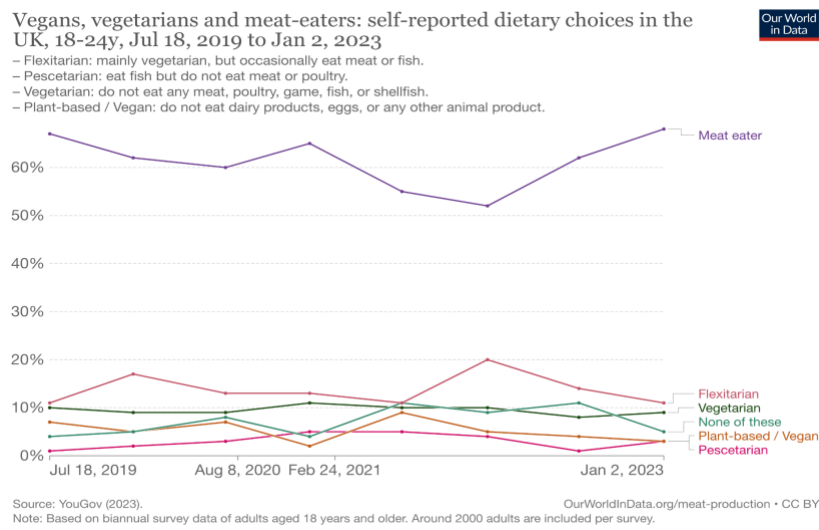


Figure 1-1. Vegans, vegetarians and meat-eaters: self-reported dietary choices in the UK, 18-24y, Jul 18, 2019 to Jan 2, 2023¹

Moreover, research suggests that many self-identified vegetarians do not strictly adhere to a typical vegetarian diet. Discrepancies between self-identification and one’s actual dietary behaviour have been observed in various surveys. For instance, a study in the United States compared the statistics and found that the percentage of people who actually consume a vegetarian diet is lower than those who self-identify as vegetarians. Compared the statistics gathered from the US in 2012, while 5% of adults considered themselves vegetarian, only 3% actually followed a vegetarian diet (Rosenfeld & Burrow, 2017a). And Ruby (2012) also pointed out that the majority of vegetarians consume different animal products such as meat and fish from time to time. Eating meat occasionally does not automatically change one’s identity as a vegetarian. Studies have shown that people who mostly avoid meat but occasionally include it

¹Source: <https://ourworldindata.org/grapher/dietary-choices-uk?time=2019-07-11..latest&country=~18-24y>, based on YouGov - Dietary choices of Brits: <https://yougov.co.uk/topics/lifestyle/trackers/dietary-choices-of-brits-eg-vegetarian-flexitarian-meat-eater-etc>

in their diets often self-identify as vegetarians (Plante et al., 2019). This discrepancy indicates there might be difficulties hindering the maintenance of a vegetarian diet.

Many studies have explored and tested factors that influence the choice of eating a vegetarian diet. Common motivations are for example, health benefits, ethical (moral) considerations (such as concerns about animal welfare), environmental considerations (carbon emissions and climate change), and personal beliefs (religious or spiritual reasons) (De Groeve et al., 2022a). At the same time, there are barriers to adopting and adhering to a vegetarian diet such as personal preferences, social pressures, limited dietary options in certain contexts, and the difficulty of breaking ingrained habits, high cost, unfavourable taste, lack of availability, social pressure, nutritional concerns, certain medical conditions, increased vulnerability (De Groeve et al., 2022a). It is crucial to recognise these barriers in order to promote better adoption and maintenance of vegetarian diets and to support individuals making sustainable and healthy dietary choices.

Although many studies have done on different populations in different countries, there is no research specifically on a young vegetarian population with diverse cultural backgrounds, especially international population in Sweden. With a population with a diversity of cultural backgrounds, the study can explore a wider range of motivations and barriers surrounding the adoption and maintenance of different vegetarian diets, as well as make identify the shared factors across countries. At the same time, the shared social and cultural context of Sweden helps to identify issues that are present in Sweden. This shall help generate solutions that that apply to wider populations. For example, questions such as how different social and cultural context can potentially affect the same individual's maintenance of diet, and how the availability of vegetarian options influence the quality of their diets, and how the same social and cultural context of living in Sweden can change their motivations and the upkeep of their diets can only be answered through such a population with intercultural backgrounds.

1.2 Aim and Research Questions

The study aims to explore the motivators and barriers to a vegetarian diet and how vegetarians deal with challenges in practice in young international vegetarians of different types in Sweden. The research questions are

RQ1. What are the motivations for individuals to choose and maintain a vegetarian diet?

RQ2. What are the barriers that hinder the consistent practice of a vegetarian diet?

1.3 Scope and Delimitations

This study is conducted with a limitation of the researcher's reach and network. The studied population is various types of self-identified vegetarians (considering that there is not a single universal definition of vegetarian (Ruby, 2012), and individual explanations and understandings of the terms have not reached a consensus, the sample gathered for this study is recruited in a way that all the participants relate to the term *vegetarian*, hence represents a realistic vegetarian population).

The method for sampling is not random and therefore can introduce biases into the collected data and the result. As detailed in Chapter 3, the participants were recruited through the spreading of a survey among and through (mostly) international students at Lund University. The interview participants were recruited through the survey. It is noteworthy that this way of recruiting has resulted in that the respondents and participants in this study are similar in age and even in level of education. The sample individuals are mostly in their twenties and are

currently undergoing or have undergone higher education at the university level. Another potential source of bias can come from the fact that many respondents are recruited from the same group chat, which can result in individuals influencing each other in their social group within the group chat. Despite the fact that not much similarity was observed in survey responses or interviews, it is difficult to rule out the social influence within the vegetarian sample.

Although the context of the study is centred in Sweden, as explained in more detail in Chapter 3, the respondents and participants represent a wide range of different cultural backgrounds and some have very distinctive experiences of being vegetarian in unique contexts. Some of the findings might not be representative of the Swedish context.

Regarding how vegetarian identity and behaviour evolve is highly dependent on self-reporting from interview participants without prolonged observations to confirm the accuracy of their statements. There might be discrepancies between the self-reported evolutions and their respective realities.

1.4 Ethical Considerations

The thesis work follows the preceding ethical considerations throughout the entire research process according to Creswell & Creswell (2018).

Researcher honesty and personal integrity

The study does not receive any financial support from any individual or organisation. The research outcome shall truthfully reflect reality and shall not be influenced by any party.

Data collection and analysis

During the data collection process, all participants are expected to be recruited on a voluntary basis and shall be treated with honesty and respect for their boundaries and demographical differences. The researcher shall make sure that the data collected and used in this research reflect the honest opinions of the participants by providing a safe space for diverse opinions and actively avoiding leading questions.

Reporting, sharing and storing data

The research findings are reported with honesty, granting credits to respective contributors for the sources of information. The participants in the study shall be kept anonymous and represented by code numbers. All the data recorded and constructed is kept in a safe location and kept in multiple copies.

1.5 Audience

This study aims to provide insight into the practice of vegetarianism for practitioners of vegetarian or other types of sustainable diets with a focus on reduced animal product ingestion, including current or aspiring vegetarians, vegetarian advocates and promoters.

1.6 Disposition

This thesis is presented with an extensive literature review on vegetarianism with a focus on motivations and barriers (Chapter 2), the methodology of this study including data collection and analysis methods (Chapter 3), findings and analysis from data collection in comparison to current knowledge from the literature (Chapter 4), the discussion of the result (Chapter 5) and last but not least conclusion of the study, including recommendations for practitioners and future research (Chapter 6).

2 Literature review

2.1 Vegetarian diet as part of sustainable food consumption

Our food system including all pre- and post-production activities contributes to around 21~37% of total anthropogenic GHG emissions (IPCC, 2019), with agriculture occupying 38% of the global land surface (Food and Agriculture Organization of the United Nations, 2020) and count for 70% of all freshwater use (IPCC, 2019; FAO, 2017). The excess application of fertilisers can also lead to surface and groundwater pollution (Bijay-Singh & Craswell, 2021). Additionally, the expansion of agricultural land use has resulted in the increase of net GHG emissions, loss of natural ecosystems such as forests, savannahs, grasslands and wetlands, as well as a negative impact on biodiversity (IPCC, 2019). Thus, to achieve current sustainability objectives, such as the Sustainable Development Goals (SDGs), the Paris Climate Agreement, and the Convention on Biological Diversity Aichi Conservation Targets, transformation in the global food system is imperative (World Health Organization & Food and Agriculture Organization of the United Nations, 2019). One widely suggested approach to reach this goal is the promotion of vegetarian diets.

The concept of vegetarianism remains without unanimous agreement among both the general public and academia. It can be defined as the exclusion of meat including red meat, poultry and fish from one's diet, and may or may not exclude other animal-derived products such as eggs and dairy. Alternatively, vegetarianism can be viewed as abstaining from meat consumption. Individuals who self-identify as vegetarians exhibit a range of practices, from complete avoidance of all animal products to occasional consumption of red meat, seafood, and poultry (Ruby, 2012).

Various vegetarian communities and dietary guidelines have also their own definitions of what are considered different types of vegetarian diets. Often, the term "vegetarian diet" without further specification is understood as an ovo-lacto vegetarian diet, a diet of "foods derived from plants, with or without dairy products, eggs and/or honey" (International Vegetarian Union, 2013). Other vegetarian associations such as Association Végétarienne de France and the UK Vegetarian Society also share a similar interpretation (Association Végétarienne de France, n.d.; Vegetarian Society, n.d.).

However, some definitions may be more specific or stringent. For instance, the European Vegetarian Union goes beyond dairy products, eggs, and honey and includes colostrum, beeswax, propolis, or wool grease including lanolin derived from living sheep or their derivatives (European Vegetarian Union, 2021). There are also various modified versions of vegetarian diets with exclusions of different food categories such as the vegan diet (or a strict vegetarian diet) which according to the Vegan Society is defined as "*the practice of dispensing with all products derived wholly or partly from animals*" (The Vegan Society, n.d.); flexitarian diet, the diet allows meat consumption occasionally; pescatarian diet, the diet excludes all meats but except for fish and seafood; ovo vegetarian, the diet that excludes meat and dairy but includes eggs products, and lacto vegetarian, the diet excludes meat and eggs but includes dairy (Hargreaves et al., 2023).

The various forms of vegetarian diets encompass distinct dietary inclusions and exclusions. Among these, the vegan diet stands out as more than just a dietary choice; it represents a broader lifestyle encompassing consumption behaviours related to cosmetics and clothing items. It is seen as a philosophy and way of living with the aim to avoid all forms of exploitation of and cruelty to animals by the Vegan Society in the UK (The Vegan Society, n.d.)

Given the diverse range of vegetarian diets and the absence of universal consensus, vegetarianism can also be understood as a continuum. At one end of the spectrum, individuals self-identify as vegetarians but still consume meat, while in the middle, there are those who avoid certain animal products like eggs, dairy, and fish. At the other end of the spectrum, vegans abstain from all animal-derived foods entirely (Beardsworth & Keil, 1991; Ruby, 2012). This study chooses to adopt the continuum notion of vegetarianism considering individuals as vegetarians regardless of their specific placement on the spectrum. As discussed further in Chapter 3 Methodology, the sample for this study is recruited based on their participation in the *Survey on Vegetarian Identity*, ensuring their association with the term "vegetarian."

2.2 Benefits of Vegetarianism

Many studies have shown that vegetarian diets have a considerable amount of benefits on health, environment and animal welfare compared to an omnivorous diet.

2.2.1 Health

A well-planned vegetarian diet is proven to be able to provide enough nutrition and add health benefits. The excessive consumption of animal products is usually associated with some chronic diseases such as cardiovascular disease, stroke, cancer, obesity and type 2 diabetes. Whereas a well-planned vegetarian diet is suggested to lower the risk of major chronic diseases and promote health (Appleby & Key, 2016; Craig, 2010). Vegetarian diets are generally low in saturated fat and cholesterol and provide a high intake of dietary fibre and other health-promoting phytochemicals thanks to the increased intake of fruits and vegetables, whole grains, legumes nuts and various soy products (Craig, 2010). As a result, compared to omnivores, vegetarians typically have lower body mass index (BMI), serum total and low-density lipoprotein cholesterol levels, and blood pressure; reduced rates of death from ischemic heart disease; and decreased incidence of hypertension, stroke, type 2 diabetes, and certain cancers (Appleby & Key, 2016; Craig, 2010). From a public health point of view, a global modelling analysis predicted that adapting a low-meat dietary pattern in line with scientific evidence on healthy eating can reduce premature mortality rate, with a 19% reduction for a flexitarian diet and a 22% for a vegan diet (Springmann et al., 2016).

It is important to mention that while a properly arranged vegetarian diet can fulfil the recommended nutritional requirements for both adults and children, there are instances where additional nutrition from supplements and fortified foods may be necessary to prevent deficiencies (Craig, 2010). On the other hand, an inadequately planned diet lacking balanced nutrition, such as one predominantly composed of processed vegetarian alternatives high in fat, sugar, and salt, can also be detrimental to health (De Groeve et al., 2022a).

2.2.2 Environment

Apart from the health benefits, having a vegetarian diet is also considered to benefit planetary health compared to a meat-heavy diet. Many studies have shown that switching to a vegetarian can bring a considerable amount of GHG reduction. For example, a study by Berners-Lee et al. (2012) attempted to calculate the potential GHG savings from having a vegetarian or vegan diet instead of an average diet in the UK and suggested a 22% to 26% reduction in GHG emissions respectively.

The FAO and World Health Organization (WHO) joint report on guiding principles for a sustainable healthy diet published in 2019 suggests that the shift toward a more plant-based diet and away from animal foods is crucial to the decrease of the environmental impact of the food

system and to reaching the sustainability agenda (WHO & FAO, 2019). To be specific, a global modelling analysis on the environmental impact of three different dietary scenarios estimated that a diet with lower meat intake is shown to reduce environmental impact globally with reduced GHG emissions by 54-87%, nitrogen application by 23-25%, phosphorus application by 18–21%, cropland use by 8–11%, and freshwater use by 2–11% in most countries (Springmann et al., 2016).

A study by Sun et al. (2022) suggested that dietary change shows great potential to substantial GHG reduction in high-income countries. A dietary change from animal product-intensive towards plant-based in high-income countries not only leads to less intensive emissions from the food system itself but also free the large area of spared land that carries the potential to sequester carbon. This evidence shows that vegetarian diets are a promising avenue for reducing various environmental impacts caused by the current food system.

2.2.3 Animal welfare

The adoption of a vegetarian diet is considered a rational choice for individuals seeking to combat speciesism and prevent animal suffering. Many people express moral concerns regarding the consumption of animal products as farmed animals, such as pigs, chickens, and fish, are sentient beings capable of experiencing suffering, and hence the mass production is morally problematic (De Groeve et al., 2022a). A number of neuroscientists have shown consensus in the Cambridge Declaration on Consciousness that research evidence has shown that many animals such as mammals, birds, and octopuses exhibit human-like abilities and brain structure of consciousness (Low, 2012). The living conditions of these animals, characterised by overcrowding, artificial environments, and unhygienic conditions, along with the use of mutilating procedures and electrocution during slaughtering, further raise ethical concerns (Browning & Veit, 2020; De Groeve et al., 2022a; Graça, 2016; Nordquist et al., 2017). Internationally, the Treaty on the Functioning of the European Union and the African Union's Animal Welfare Strategy for Africa both recognize the sentience of animals (Verkuijl et al., 2022).

Moreover, animal welfare is also suggested as a key element of human health and sustainable development (Verkuijl et al., 2022). Despite the vision of promoting harmony among humans, nature, and other species in the world's development agenda in 2015, individual animal well-being has been pointed out to be lacking in specific targets (Verkuijl et al., 2022). Enhanced animal welfare and reduced suffering in sentient animals are believed to bring benefits to human health, social development, poverty and hunger reduction, disaster management, climate change mitigation, and overall sustainable development, as stated in the proposed Universal Declaration on Animal Welfare. The proposed declaration has garnered support from over 45 countries (Verkuijl et al., 2022).

2.3 Factors that influence the adoption and maintenance of a vegetarian diet: Motivations and barriers

The decision to adopt a vegetarian lifestyle can be influenced by various factors, encompassing individual determinants as well as social and cultural influences. In Western cultures, it is uncommon for individuals to follow a vegetarian diet from birth, and most vegetarians make a deliberate choice to embrace this dietary path at some point in their lives (Beardsworth & Keil, 1991). In contrast, certain regions, such as India, exhibit a higher prevalence of vegetarianism due to cultural norms and practices (Ruby et al., 2013).

There have been numerous studies conducted to explore why one chooses to be vegetarian. These motivations generally fall into two categories: ethical and health reasons. This categorisation, known as the ethical-health framework, is a common way to differentiate vegetarian motivations. According to this model, two types of vegetarians are divided based on their motivation for adopting a vegetarian diet sharing different characteristics. Health-motivated vegetarians have chosen their diet to avoid potential diseases and tend to eliminate meat gradually. Whereas ethically motivated vegetarians converted to out of moral concerns for animals. Unlike health-motivated vegetarians, ethically motivated individuals may undergo a sudden dietary shift resulting from a 'conversion experience,' which results from the connection between animals and meat consumption (Jabs et al., 1998a). However, recent studies have highlighted more reasons for vegetarianism that not necessarily fall into these two categories, such as environmental concerns (e.g., Fox & Ward, 2008; North et al., 2021). Another way of categorising these motivating factors shall potentially capture more varieties of motivations and assist better understanding behind them.

Simultaneously, various barriers influence the adoption and the maintenance of a vegetarian diet. Research has identified several inhibiting factors that pose challenges to a broader population in adopting and sustaining a vegetarian diet (e.g., Markowski, 2022; Reipurth et al., 2019; Rosenfeld & Tomiyama, 2020). Unlike motivations, barriers are more diverse and sometimes individual. This study attempts to structure these barriers in the following framework.

Given the prominent prevalence of animal welfare and environmental concerns as the primary motivations behind adopting a vegetarian diet, as demonstrated in many previous studies (e.g., Fox & Ward, 2008; Martinelli & De Canio, 2021; North et al., 2021), it is evident that a vegetarian diet aligns closely with sustainable development principles. Viewing the choice of a vegetarian diet through a sustainable consumption lens appears reasonable. Furthermore, opting for a vegetarian diet often involves a conscious decision that deviates from mainstream social norms, much like sustainable consumption practices. As environmental concerns play a significant role in driving changes in consumers' food behaviours (Martinelli & De Canio, 2021), and vegetarian diets are considered a form of sustainable food consumption, it is plausible to apply the influential factors categorised in the Decision-making Model of Sustainable Consumption organised by Terlau & Hirsch (2015) to the study of vegetarian diets as well. According to this model, beliefs lead to attitudes, which, in turn, influence behavioural intentions, ultimately determining purchasing behaviour. Throughout the decision-making process, this attitude-intention-behaviour pathway is influenced by various individual, social, and situational factors.

In a similar light, a study by Jabs et al. (1998b) also identified three major factors that are important for the maintenance of a vegetarian diet—personal factors, including concerns about animal welfare, personal health and skills and knowledge; social networks, including vegetarian close friends, being part of a vegetarian social group, and supportive family members; and lastly, environmental resources, including the availability of ready-made vegetarian meals and the accessibility of vegetarian food products. Hence, inspired by both the **Decision-making Model of Sustainable Consumption** organised by Terlau & Hirsch (2015) and the three factors identified by Jabs et al. (1998b), the motivations (motivational factors) and barriers (inhibiting factors) to a vegetarian diet retrieved from previous studies are categorised into **individual factors, social factors, and situational factors**, and renamed accordingly in this study.

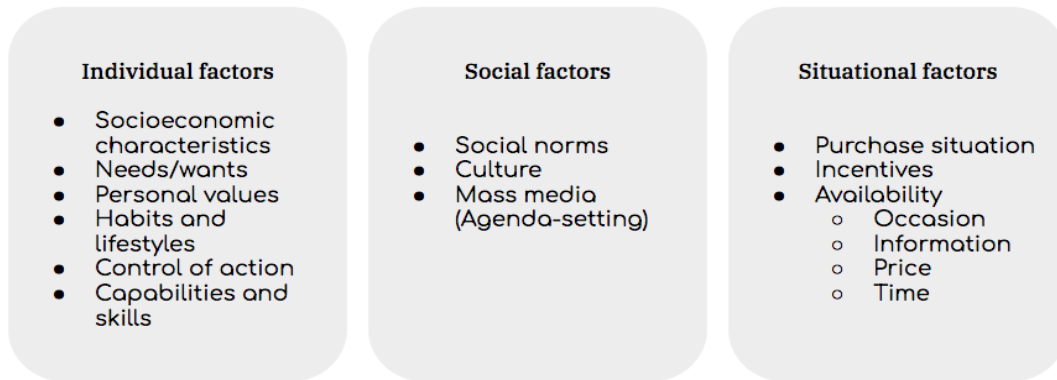


Figure 2-1. Factors influencing decision making process, adopted from Terlau & Hirsch, 2015

Individual factors are the ones related to the socio-economic characteristics of the individual who is practising a vegetarian diet. These include needs and wants, personal values, habits and lifestyles, control of action and capabilities and skills (Terlau & Hirsch, 2015). **Social factors** are those related to the social norms and cultural context of the individual undergoing a vegetarian dietary practice. These include social norms, culture and mass media (Terlau & Hirsch, 2015). **Situational factors** are related to the act of choosing or not choosing a vegetarian option at the point of consumption, including the consumption situation, incentives and availability of occasion, information, price and time. Together with social factors, situational factors reflect the context where an individual makes the decision to or not to choose to adhere to their vegetarian diet.

In this study, both motivations (also referred to as motivational factors) and barriers (also referred to as inhibiting factors) are combined and classified into individual, social, and situational factors. This classification method is preferred due to the ambiguous nature of many factors, which can act as both motivations and barriers depending on the context or individual involved. For instance, factors such as taste and health perceptions may serve as motivational factors for some, while simultaneously acting as inhibiting factors for others, depending on whether their perceptions are positive or negative. The following section will provide an overview of factors influencing the adoption of a vegetarian diet, drawing insights from previous studies. These factors will be organised into the categories of individual, social, and situational factors.

2.3.1 Individual Factors

Taste preference

Taste preference is an individual factor that can influence one's attitude towards adopting or avoiding a vegetarian diet, and hence making it both a motivational and inhibiting factor. A study conducted by North et al. (2021) revealed that among individuals following vegetarian, vegan, and omnivore diets, taste and enjoyment play a crucial role in their dietary choices. For omnivores, perceptions of the tastiness of a vegetarian diet strongly predict their openness to adopting such a diet, while the enjoyment of meat emerges as the strongest perceived barrier. Omnivores often perceive vegetarian diets as lacking variety, being bland, and less flavourful compared to their meat-based counterparts. They associate meat with being the most delectable part of a meal and find it too enticing to give up. The fear of missing out on the taste of meat becomes a significant barrier for omnivores considering vegetarianism (Rosenfeld & Tomiyama, 2020). This sentiment is further supported by another study conducted in an Australian

population, which also highlighted taste and enjoyment as the most prevalent reasons for omnivores to maintain their current diet (North et al., 2021).

At the same time, taste preferences can also act as a motivational factor to move towards a vegetarian when individuals perceive a vegetarian diet as tastier, or when they dislike the taste of meat. Many vegetarians have reported taste as a reason for them to undergo a vegetarian diet (Hoffman et al., 2013). In a Danish study, the researchers found out that people who believed plant-based food tastes delicious also displayed a low intake of meat, fish, dairy and eggs, while those who dislike the taste of plant-based food show a high intake in all these food categories (Reipurth et al., 2019).

On the other hand, the aversion to meat can also stem from ideological reasons, driven by moral beliefs or values such as compassion. That is, the individuals dislike the idea of meat can be a result of their moral beliefs or values such as compassion. Although whether the disgust toward meat is a cause or an effect of meat avoidance is remaining unclear, ethical concerns are shown to enhance the disgust and ethically motivated vegetarians have shown higher levels of meat disgust compared to health-motivated vegetarians (Hamilton, 2006). A recent study further highlighted that compassion positively influences individuals' subjective taste perceptions of meatless food and enhances their intention to avoid meat, making them more likely to choose vegetarian options over meat-containing alternatives (Pohlmann, 2021).

However, it is worth noting that sometimes the perception of how vegetarian food tastes is not necessarily how consumers actually experience it. Some customers perceive healthy food as less tasty. The negative tastiness perception of vegetarian food can be a result of a broader cultural narrative that the healthier the foods are perceived, the worse the taste is experienced (Reipurth et al., 2019)

It is important to consider that the perception of how vegetarian food tastes might not always align with consumers' actual experience. This phenomenon is not unique to vegetarian food but can also be observed in the perception of healthy food in general. A study has shown that people tend to infer unhealthy food as tastier and healthier food options as less tasty (Raghuathan et al., 2006). This negative perception of tastiness regarding vegetarian food could be influenced by a broader cultural narrative, suggesting that as the healthiness of foods increases, their taste may be perceived as less enjoyable (Reipurth et al., 2019).

Health

Many vegetarians and non-vegetarians acknowledge the health benefit of having a plant-based diet such as the reduction in fat intake, increased fibre intake, and disease prevention (Lea et al., 2006). Also, a reduction in meat especially red meat intake is supported by many studies, dietary guidelines and health promotion campaigns (e.g., The 2019 FAO and WHO joint report on guiding principles for a sustainable healthy diet (WHO & FAO, 2019); Livsmedelsverket (the Swedish Food Agency)'s dietary guidelines for adults (Livsmedelsverket, 2015); Dietary Guidelines for Americans 2020~2025 (U.S. Department of Agriculture & U.S. Department of Health and Human Services, 2020); Meatless Monday Campaign², the Nordic Nutrition Recommendations 2023 (Nordic co-operation, 2023)).

At the same time, research has indicated that a significant number of individuals adopt vegetarian diets due to perceived health benefits. Previous studies have found out that health reasons is among the most popular reason for vegetarians and vegans to choose their respective diets (North et al., 2021). This motivation often arises from personal experiences or the

² <https://www.mondaycampaigns.org/meatless-monday>

diagnosis of health conditions, such as heart disease, in oneself or close acquaintances. By adopting a vegetarian diet, individuals aim to either manage existing health issues or prevent the onset of certain diseases (Jabs et al., 1998a).

However, health concerns are also a reason for omnivores to not adopt a vegetarian diet. Health perceptions can also act as a barrier to vegetarianism if individuals view the diet as unhealthy for them. In the study conducted by Rosenfeld & Tomiyama (2020), the perceived healthfulness of a vegetarian diet is found to be among the strongest predictors of openness to vegetarianism out of all identified factors. This perception can be shown in the beliefs that a vegetarian diet does not provide enough nutrients including protein one needs, meat is essential in a healthy diet, and a meat-containing diet is healthier than one without meat (Rosenfeld & Tomiyama, 2020). Similarly, Reipurth et al. (2019) also acknowledged that the perceived nutritional need for meat as a source of protein acts as a barrier to detachment from meat in diets in their study of Danish consumers. This is also confirmed by North et al. (2021) that among the reason for omnivores to not give up meat completely stands concerns of keeping healthy without nutrition that are commonly believed to be abundant in meat, such as iron and protein. And many non-vegetarians are shown to be uncertain about the association between some health benefits and a vegetarian diet (Lea & Worsley, 2003b). This is especially likely to be a barrier for those who do not perceive that a plant-based diet is healthy and hence have a high intake of animal products (Reipurth et al., 2019).

Despite the scientifically proven benefits of a vegetarian diet and meat intake reduction in general, there are new suspicions appearing about the healthiness of modern plant-based diets. Traditional plant-based diets usually contain fruit, vegetables, pulses, nuts and whole grains, whereas nowadays, to accommodate our modern diets, there come more and more vegetarian alternatives to meat-based dishes and ingredients. Many of these meat alternatives are highly processed and are not as healthy as assumed (Macdiarmid, 2022). Especially ultra-processed plant-based alternatives that are typically energy dense and high in fat, added sugar or salt, despite their attractiveness and affordability, are unhealthy (Monteiro et al., 2019). Yet, conversely, a recent review which analysed 43 studies on the healthiness and environmental sustainability of plant-based alternatives compared to their animal-derived counterparts shows differently. It highlights that these alternatives provide a number of health benefits including generally preferable nutritional profiles, aiding effects on weight loss and muscle synthesis, and suiting specific health conditions, as well as lower environmental impact such as GHG emissions, water and land use (Bryant, 2022).

Health concerns can also lead to the termination of vegetarian diets. The perceived decline in health or well-being is also a very common reason for ex-vegetarians to return to animal products (Menzies & Sheeshka, 2012). A study on vegetarian women in Canada revealed that health concerns, such as fatigue and anaemia, were the primary reasons cited by former vegetarians for abandoning their meatless diets (Barr & Chapman, 2002). Similar findings were reported by Menzies & Sheeshka (2012), where all former vegetarians in their study attributed a perceived decline in health or well-being, such as constant fatigue and low iron levels, to their vegetarian diets. Faced with the dilemma of prioritising physical wellness or adhering to their vegetarian diet, they chose to reintroduce animal products, such as meat and fish, and abandon their vegetarian lifestyles.

Meat attachment

Having a positive bond towards meat consumption is shown to be an inhibiting factor for omnivores to transition towards a vegetarian diet. This is different from the mere A study by Graça et al. (2015) explored the four dimensions of meat attachment: hedonism, affinity,

entitlement and dependence. These capture *the feeling that meat is enjoyable, the repulsion associated with meat consumption, and the belief that eating meat is natural and necessary*. Similarly, Piazza et al. (2015) also explored the rationalisation of animal product consumption and concluded that the endorsement of “the 4Ns”—that eating meat is *necessary, natural, normal* and *nice* is associated with low ethical concerns when it comes to food choices.

Knowledge, capabilities and skills

Studies have shown that a positive attitude towards a vegetarian lifestyle is significantly correlated to scientific information and facts one possesses, such as nutritional knowledge (Corrin & Papadopoulos, 2017). Information that initiates the awareness of animal welfare issues and the diet-health connection is also found to have an indirect effect on directing individuals to a vegetarian diet, in both tangible ways such as through media and sensory ways such as perceived physical feedback from dietary shifts (Jabs et al., 1998a). This initial information causes them to remove some animal-derived food, most commonly meat, from their diet. Interestingly, not only the right information can encourage the adoption of a vegetarian diet, but research has also shown that having a vegetarian diet may also cause the individual to have an increased amount of nutritional knowledge (Pribis et al., 2010). They also start to eliminate more animal products from their diet (Jabs et al., 1998a), forming a reinforcing feedback loop.

At the same time, a lack of information about vegetarian diets can inhibit the adoption of a vegetarian diet (Lea et al., 2006). This information barrier includes not knowing how to prepare vegetarian meals and not knowing what to eat besides meat (Lea & Worsley, 2001; Lea et al., 2006).

Other capability and skill factors such as time for cooking fresh plant-based food, and financial capability are also mentioned in the literature (De Groeve et al., 2022a). As vegetarian food can be perceived as both cheap and expensive, the lack of money is common among non-vegetarians for not frequently eating meat (de Boer et al., 2017), whereas others can also perceive maintaining a vegetarian diet especially when eating out as too expensive and result in exiting vegetarianism (Menzies & Sheeshka, 2012).

Values and beliefs

Numerous studies have revealed that vegetarians and omnivores not only differ in their food choices but also possess distinct sets of values. For example, according to a study by Ruby et al., (2013) Euro-American vegetarians are associated with liberal values while omnivores are associated with more conservative values. These vegetarians are more likely to endorse universalistic values such as peace, equality, and social justice and display more concerns about the ecological footprint of their food choices and animal welfare in general. They are also found to less strongly endorse the ethic of Authority in the ways of respecting societal traditions or fulfilling the duties of their role. Similarly, vegetarians in the UK, US and Italy have observed that ethically motivated vegetarians are also more empathetic towards humans, including showing more concerns about human suffering and anti-violence (Ruby et al., 2013).

However, the same study pointed out that this association of values and attitudes is not always universal. At the same time, in another cultural context, the values behind vegetarianism can be very different. Through a comparison between North American and Indian vegetarians, despite the fact that both groups share some similarities in viewing eating meat as polluting than their omnivorous peers, there is a vast difference in other values (Ruby et al., 2013). In India, vegetarians were reported to be more religion-motivated, and they strongly endorse the ethics

of Purity (including attending to matters of disgust, decency, virtue, and controlling one's desires), Authority (e.g., respect authority and traditions), and Ingroup (e.g., caring for the interest of their group). And they did not show distinctions in concern for the environment, animal welfare or universalism from other omnivores (Ruby et al., 2013).

Rosenfeld's (2018) review on vegetarian motivations suggests the dominance of ethical and health motivations for vegetarianism, where concerns for the environment was included in ethical motivations, following animal welfare/rights. Following the same trajectory, this study considers the adoption of a vegetarian diet is also driven by these two primary values and beliefs: concern for animal welfare/rights and concern for environmental impacts of consuming animal products. These two aspects will be further explored in the following sub-section.

Animal welfare/rights (ethical)

Ethical reasons regarding animal welfare and rights, including concerns about the way animals are raised and slaughtered, are among the most popular reasons why an individual avoids eating meat (Ruby, 2012). Among previous studies on vegetarian motivations, animal welfare/rights are often on the top of the list (e.g., Fox & Ward, 2008; North et al., 2021). These concerns can originate from making a connection between the animal-derived food product one eats and the animal it comes from during one's childhood and consequently result in the avoidance of animal-derived food in one's diet. Similarly, this animal-meat connection together with information on animal welfare, for instance by having a pet, act as a catalyst to the adoption of a vegetarian diet among adults. These incidents of connections are called "conversion experiences" and can also introduce psychological "meat disgust" and are more common among ethically motivated vegetarians than health-motivated vegetarians (Jabs et al., 1998a). Intriguingly, many ethically-motivated vegetarians made the dietary switch simultaneously with other significant life changes, including changes in location or social roles such as moving to a new area, going to university, or having a divorce as a way to take some control of their life (Jabs et al., 1998a).

These ethical values and beliefs are not only expressed through vegetarian diets alone, they are often embedded within a philosophical, ideological, or spiritual framework, as many ethically motivated vegetarians view vegetarianism as a lifestyle rather than a mere diet (Fox & Ward, 2008). It is also common for those primarily driven by ethical reasons to prioritise the welfare of other creatures over their own health and well-being. This is exemplified by some strict vegans suffering poor health as a result of their diet (Fox & Ward, 2008).

Environmental concerns

Although animal welfare/ethics and health remain the most popular reasons for vegetarianism, many people also cite their concerns for the environment as a motive for them to commit to a vegetarian diet in the Western society. A recent study in Australia among a sample of more than 400 vegans and vegetarians showed that environmental concerns are the second most cited motivations (North et al., 2021).

Environmental values such as concerns about climate change, and environmental sustainability are continuously found to motivate a vegan diet (Janssen et al., 2016). Despite that environmental concerns have always been in the discourse of vegetarian motivations, it is not uniformly shared among all vegetarians. Although many have cited animal welfare and environmental concerns as part of their motivations for vegetarianism, some studies have also reported that among the non-health benefits of adopting a vegetarian diet, these two are the least agreed upon (Corrin & Papadopoulos, 2017). At the same time, many people are not clearly

aware of the environmental impact of the meat production industry and they tend to perceive it as less harmful to the environment than other human activities (Corrin & Papadopoulos, 2017).

In previous research, the acknowledgement of environmental benefits and the enhanced concerns for the environment has been argued to be associated or subsequent to the adoption of a vegetarian diet. A study by Fox & Ward (2008) shows that only one of the participants cited environmental reasons as their primary motivation, whereas other vegetarians who displayed environmental commitment have adopted this motivation along the vegetarian trajectory. Many who adhere to a vegetarian diet, regardless of their initial reasons for choosing vegetarianism, recognised the environmental advantages associated with such dietary choices. These individuals have broadened their commitment to vegetarianism by adopting an environmentally friendly lifestyle encompassing various eco-conscious behaviours such as recycling, energy-saving practices, using public transportation, and contributing to waste reduction. Interestingly, the study indicated that the connection between vegetarianism and environmental concerns often develops after individuals have already adopted a vegetarian diet, with environmental factors not being the primary motivation for their initial decision. This suggests that vegetarianism tends to extend beyond its initial narrow focus. This expansion may be driven by several factors, including vegetarians seeking additional justifications for their dietary choices, exposure to the perspectives of other vegetarians, or the convergence of behaviours considered radical by society, such as energy saving and waste reduction. Consequently, vegetarianism encompasses a broader context that reflects a shift towards a more holistic and environmentally conscious lifestyle (Fox & Ward, 2008).

Values and beliefs hold significant influence on one's behaviour. In exploring the motivations underlying vegetarianism, some studies have employed the cognitive dissonance theory proposed by Cooper & Fazio (1984). For instance, individuals who consume meat may experience cognitive dissonance, a sense of conflict between their enjoyment of the taste of meat and their simultaneous concern for animal welfare, as well as the health and environmental implications of meat consumption. When faced with this cognitive dissonance, individuals are driven to resolve the perceived inconsistency by either modifying their behaviour and avoiding meat consumption or by altering their attitudes towards eating meat. As a resolution, some choose to eliminate meat and become vegetarians whereas others seek to find justifications for eating meat to alleviate the inconsistent feelings (De Groot et al., 2022a).

Identity

How one views themselves is shown to be crucial in influencing their behaviour intention and their actual behaviour (Jackson, 2005). This can be applied to the motivation for pro-environmental behaviours, according to Jackson (2005). A study on organic food has tested the role of self-identity in influencing consumer behaviour and found that it is a significant influential factor on consumption intentions in addition to their attitude (Sparks & Shepherd, 1992). Similarly, a study on veganism found out that the individuals who perceive being vegan as the central part of how they see themselves (Plante et al., 2019).

Identity is considered to involve the self-image an individual perceives based on their interactions with people, groups and objects. Identity can be divided into personal and social identity. A personal identity shows the particular traits one possesses, including how one views their own attitudes, feelings and behaviour. Whereas a social identity relates to the social group one assigns them to and to the social roles they occupy (Bisogni et al., 2002). Individuals possess multiple identities at the same time and they manage them by prioritising the important ones and by enacting different identities according to the context. Also, identities are by no means

fixed or static, individuals construct and modify their identities throughout their lifetime (Bisogni et al., 2002).

Food is one of the ways individuals assign identities to either themselves or other people. This process involves personal preferences in taste and preparation methods, as well as one's own definition of what constitutes food (Bisogni et al., 2002). Being voluntarily vegetarian and deviating from the norms of eating makes vegetarians more likely to internalise their food choices as a central part of their identity (Rosenfeld & Burrow, 2017b).

The process of categorising oneself based on dietary patterns can lead to the incorporation of this attribute as a meaningful component of an individual's social identity. For vegetarians, perceiving themselves as distinct due to their food choices can transcend a simple dietary preference and become part of the defining feature of their social identity. This self-categorisation can help an individual following a vegetarian diet to develop a salient vegetarian identity (Rosenfeld & Burrow, 2017a). Vegetarian identity can be defined as the thoughts, feelings and behaviours one holds in regard to being a vegetarian (Rosenfeld & Burrow, 2017a). It includes internalised and externalised aspects, which enable vegetarians to manage their dietary choices in an omnivorous society.

How an individual views their identity is also shown to be important in changing or maintaining a behaviour. When individuals face challenges in making efforts to change their behaviour, the degree of congruence they feel between their identity and the perceived appropriateness of such changes for people like them becomes crucial. This sense of identity-congruence significantly impacts their motivation to overcome these difficulties (Oyserman, 2014). Specifically, when avoiding meat aligns with the integral aspect of one's identity as a vegetarian, this identity-congruence profoundly shapes their mindset and translates into consistent vegetarian behaviour (de Boer et al., 2017). Studies recognise the significance of socially grounded and personalised identities in the adoption, maintenance, or relinquishment of vegetarianism (de Boer et al., 2017).

A final remark on the role of identity is that as mentioned above, an identity can have both individual and social aspects, in this section, for the convenience of presenting a holistic picture of the identity factor, the social aspects are also included in the individual factor section here. However, the social side of identity cannot be omitted when it comes to its influence on the practice of vegetarian diets.

Motivation and diet modification

It is worth noting that in addition to the individual differences in motivations for being vegetarian, diverse motivations can be present in the same individual at different points during their lifetime. This means that a vegetarian's motivation for undergoing such a diet is not always, or if ever, fixed. The trajectories vegetarians follow are both continuous and developing (Fox & Ward, 2008). Some motivations can sustain, and some can be added, dropped, or modified over time (Beardsworth & Keil, 1991). These updated motivations can also be translated into respective behaviours. Health vegetarians can converge subsequent ethical and environmental commitments, according to a study done by Fox & Ward (2008).

It is pertinent to consider that the motivations for adopting a vegetarian diet can vary among individuals and may evolve over time. Vegetarians may experience diverse motivations at different stages of their lives, indicating that their reasons for following a vegetarian diet are not fixed or constant. Rather, the trajectories of vegetarians' motivations are continuous and subject to development (Fox & Ward, 2008). Studies have revealed that motivations can be sustained,

added, dropped, or modified over time (Beardsworth & Keil, 1991). For instance, individuals initially motivated by health concerns may subsequently adopt ethical and environmental commitments related to their dietary choices, as indicated by research conducted by Fox & Ward (2008).

Furthermore, the specific food choices made by vegetarians can also undergo changes over time. For example, one study in Vancouver, Canada by Barr and Chapman (2002) found that most individuals reduced their animal-product intake range, for instance, eggs and dairy. This shift in dietary preferences can be attributed to the increased knowledge of vegetarian nutrition and factory farming of animals (Ruby, 2012). Similarly, Fox & Ward (2008) reported that both health and ethically-motivated vegetarians may alter their dietary choices, transitioning from consuming organic food to adopting partial vegetarian diets, or even shifting from an ovo-lacto vegetarian diet to a vegan diet.

2.3.2 Social factors

Social norms

Why are social factors critical to the adoption of a vegetarian diet? It is because food and eating activities are far more than just getting the nutrients we need to survive, it is considered part of social and cultural practice. Food is perceived as a social enterprise and eating is a central activity for humans to spend time with others, establishing commonalities among group members and assisting social bonding (Markowski & Roxburgh, 2019). Food carries social values, and sharing meals serves a social function, such as defining group boundaries, strengthening and maintaining in-group relationships, and as a way to pass on and reinforce cultural beliefs and values (Ochs & Shohet, 2006)

While vegetarian diets in meat-eating culture are deviant and that means vegetarians are rejecting a core component of a culture and social custom where eating meat together act as a bonding effect. Vegetarians who refuse to take part in such culture are considered openly disrupting convention and tradition (Markowski & Roxburgh, 2019). This consequently prevents bonding, one of the central functions of sharing food, and contribute to the negative emotions such as anger and discomfort among omnivores (Bresnahan et al., 2016).

As mentioned in the identity factor above, being a vegetarian goes beyond a personal identity but also constructs as a social identity. This means vegetarians consider themselves as part of a social group and adhere to the social norms of the group to demonstrate their commitment and to affirm their own identity as a group member. The social norms are the rules and standards that are understood by members of the group, and guide or limit their social behaviours (Cialdini and Trost, 1998, as cited in Salmivaara et al., 2022). This belonging to a social group also creates a distinction between in-groups (which they belong to) and out-groups (where they do not belong). Becoming a vegetarian not only changes how an individual view themselves, but also changes their relationship with non-vegetarians. When there is a salient boundary between in-group and out-group or tense family relations, social norm conflicts can happen. When an individual belongs to several social groups that may have conflicting norms, they sometimes need to negotiate which norms they prioritise in a specific situation (Salmivaara et al., 2022).

Social relationships

The influence of broad social and cultural norms on an individual's dietary choice and public perception is noteworthy, but it is equally important to consider the impact of closer social relationships on the decision to become a vegetarian and the maintenance of such a diet.

Support from family members plays a crucial role in sustaining one's commitment to a vegetarian diet, while the absence of such support can pose challenges for vegetarians. Particularly, children and adolescents who choose to adopt a vegetarian diet may encounter resistance and lack of support from their immediate family members, especially their parents (Ruby, 2012). Family members often express scepticism and concerns about the nutritional intake and overall health implications of a vegetarian diet for their children (Jabs et al., 2000). The decision of children to choose a vegetarian diet, which differs from their parents' preferred dietary choice, may be perceived as a rejection of the parents' values, leading to a lack of support for the children's vegetarian decision (Beardsworth and Keil, 1991). As a result, many vegetarian children and adolescents may defer their dietary choices until they attain greater independence from parental control (Ruby, 2012).

Conversely, when adult children choose to adopt a vegetarian lifestyle, reduced interactions with family members and tension during family events, particularly those centred around food, have been reported (Jabs et al., 2000). Parents of adult children who become vegetarians may also encounter similar challenges. The change in diet can potentially challenge the cherished childhood memories of their adult children, leading to resistance and negative feelings towards the parents (Jabs et al., 2000). Opting for a vegetarian diet later in life can also result in a lack of support or even hostility from various family members, including parents, siblings, and adult children (Jabs et al., 2000).

In addition to family members, friends and other close social relationships also influence an individual's adherence to their vegetarian diet. One's dietary choices can easily be shaped by the people they live with. Living with vegetarians can lead to the adoption of a vegetarian lifestyle, while living with meat eaters may result in a return to an omnivorous diet (Menzies & Sheeshka, 2012). This phenomenon demonstrates the significance of social networks in dietary decisions. As revealed by Jabs et al. (1998b), the support provided by social networks plays a vital role in sustaining a vegetarian diet. Belonging to a vegetarian group or a social circle that upholds vegetarianism as a shared goal, or having a vegetarian friend, fosters a supportive social network that facilitates the continuation of a vegetarian diet. Within these networks, individuals can exchange information about new food products and preparation techniques, share ideas and challenges, and establish acceptable eating practices and behaviours. Conversely, just as social relationships can influence dietary choices, an individual's dietary preferences can also influence their choice of close friends and even partners (Menzies & Sheeshka, 2012).

Stereotypes and stigma

Studies have shown that anticipated vegetarian stigma presents a significant barrier for omnivores contemplating a transition to a vegetarian diet (Markowski and Roxburgh, 2019; Rosenfeld & Tomiyama, 2020). Stigma, in this context, refers to unfavourable attitudes and prejudiced behaviour towards individuals who possess certain unfavourable statuses or characteristics. (Goffman, 1963; Link & Phelan, 2001, as cited in Markowski & Roxburgh, 2019).

While some individuals may admire vegetarians for their moral commitment, others exhibit contrasting views, perceiving vegetarians' moralistic traits as being arrogantly overcommitted (De Groeve et al., 2021; Judge & Wilson, 2019, as cited in De Groeve et al., 2022b). There are some negative characteristics associated with a vegetarian diet and vegetarians, such as being unhealthy, weak, insane and freak (Burgess et al., 2014, as cited in Corrin & Papadopoulos, 2017). Among vegetarians, vegans are the most negatively viewed among meat-eaters, as their diet is the most different from an omnivorous diet (Povey et al., 2001). This ambivalent stereotyping is termed “the vegan paradox” by recent research (De Groeve and Rosenfeld,

2022), in which, the cognitive dissonance from eating meat causes omnivores to view vegans as morally committed because of their care for animals while at the same time, they need to defend their choice of eating meat by negatively stereotyping vegans as arrogantly overcommitted (De Groot et al., 2022b). This attitude is considered a barrier to meat reduction in omnivores (De Groot et al., 2022b).

In addition to the negative perceptions of vegetarians, research indicates that vegetarians, particularly vegans, may experience feelings of embitterment associated with their dietary habits, according to Reuber & Muschalla (2022). Embitterment refers to the emotional experience of upset and bitterness related to certain aspects of one's life, including their dietary choices. A study suggests that vegetarians, in particular vegans, tend to place a more vital centrality on their dietary patterns, meaning that being vegan holds a central role in their self-image. Consequently, they are more susceptible to experiencing feelings of embitterment and perceiving discrimination. They also have displayed lower satisfaction in social relationships with other people, despite they are more satisfied in terms of other aspects such as leisure, environment, health, future and life perspective. The sense of embitterment may come from the higher centrality of a vegetarian identity, particularly when motivated by ethical and moral considerations. They may perceive omnivores as violating their deeply held beliefs and feel a moral obligation towards animals and the environment. Such perceived violations of their core beliefs may lead to feelings of anger and rejection, resulting in the experience of embitterment (Reuber & Muschalla, 2022).

The presence of stigma and negative perceptions is also evident within the vegetarian community itself. For instance, ethically motivated vegetarians, who prioritise the well-being of others over their own, may view health-motivated vegetarians, who adopt a vegetarian diet for their personal health and wellness, more negatively. They consider health-motivated vegetarians to be selfish in their dietary choices (Fox & Ward, 2008). Another example is that some vegans perceive a vegetarian diet as hypocritical (Povey et al., 2001).

However, a recent study conducted by Rosenfeld & Tomiyama (2020) challenges the notion of vegetarian stigma as a significant barrier. This quantitative research has found that while certain demographic groups, specifically young, politically conservative, white individuals residing in rural communities, may be more susceptible to associating the adoption of a vegetarian diet with stigma, the anticipated vegetarian stigma does not significantly predict an individual's openness to becoming vegetarian. The researchers propose that the perceived stigma is more likely to be an effect of barriers to vegetarianism, which means meat-eaters may use the anticipated stigma as a justification to avoid adopting a vegetarian diet.

This might be explained by the cognitive dissonance theory proposed by Cooper & Fazio (1984) as mentioned previously. This posits that meat-eaters experience inconsistency in their behaviour of consuming animal products while also holding feelings of care and concern for animals. To alleviate this cognitive dissonance, meat-eaters may choose to view vegetarianism as stigmatised by society and anticipate potential negative social consequences, thereby resisting the adoption of a vegetarian diet themselves (Rosenfeld & Tomiyama, 2020). Nonetheless, it is essential to note that this perspective should be further supported by empirical evidence to fully validate its claims.

2.3.3 Situational factors

Situational factors such as product availability, price and information on the food can influence the consistency of vegetarians' dietary practices.

Availability

The availability of vegetarian foods in supermarkets and restaurants plays a role in supporting the adherence to vegetarian diets (Jabs et al., 1998b). Conversely, the absence of sufficient vegetarian options, particularly when dining out, hinders the adoption and maintenance of vegetarian diets (Lea et al., 2006). A study conducted in Belgium revealed that individuals identifying as semi-vegetarians (including flexitarians and pescatarians) and omnivores cited the insufficient availability of meat-replacement products as a reason for not adopting a vegetarian diet. Some also reported that the lack of nutritious and appealing vegetarian alternatives influenced their decision to consume meat, indicating that a greater variety of vegetarian options could lead to a more plant-based diet (Mullee et al., 2017).

The availability of vegetarian options is also shown to encourage non-vegetarians to choose vegetarian dishes over meat dishes. An experiment conducted among non-vegetarian consumers found out that, despite their overall preference for meat dishes, their choices were affected by the availability of options. When presented with a menu featuring more vegetarian dishes, a significant number of consumers opted for these alternatives (Parkin & Attwood, 2022).

In addition to the general availability of vegetarian options, situational factors such as pricing (Menzies & Sheeshka, 2012; Rosenfeld & Tomiyama, 2020) and ease of preparation (Menzies & Sheeshka, 2012; Reipurth et al., 2019; Rosenfeld & Tomiyama, 2020) have also been mentioned in the literature as contributing to dietary decisions.

2.4 Summary of the influential factors

These three categories encompass a wide range of factors that have been identified in existing studies as influencing the adoption and maintenance of a vegetarian diet. Some of these factors play a facilitative role and act as motivations for certain individuals, while others serve as barriers. As mentioned earlier in this section, it is common for certain factors to be ambivalent, exerting both positive and negative influences on the decision to adopt and sustain a vegetarian diet. This ambivalence is contingent upon individual differences, social context, background, and specific situational circumstances.

Furthermore, it is important to acknowledge that many barriers reported in the literature are based on perceptions rather than concrete experiences. For instance, individuals may perceive potential adverse effects on their health or concerns about compromised taste in relation to a vegetarian diet. However, these perceptions do not necessarily reflect their actual experiences with vegetarian foods or diets.

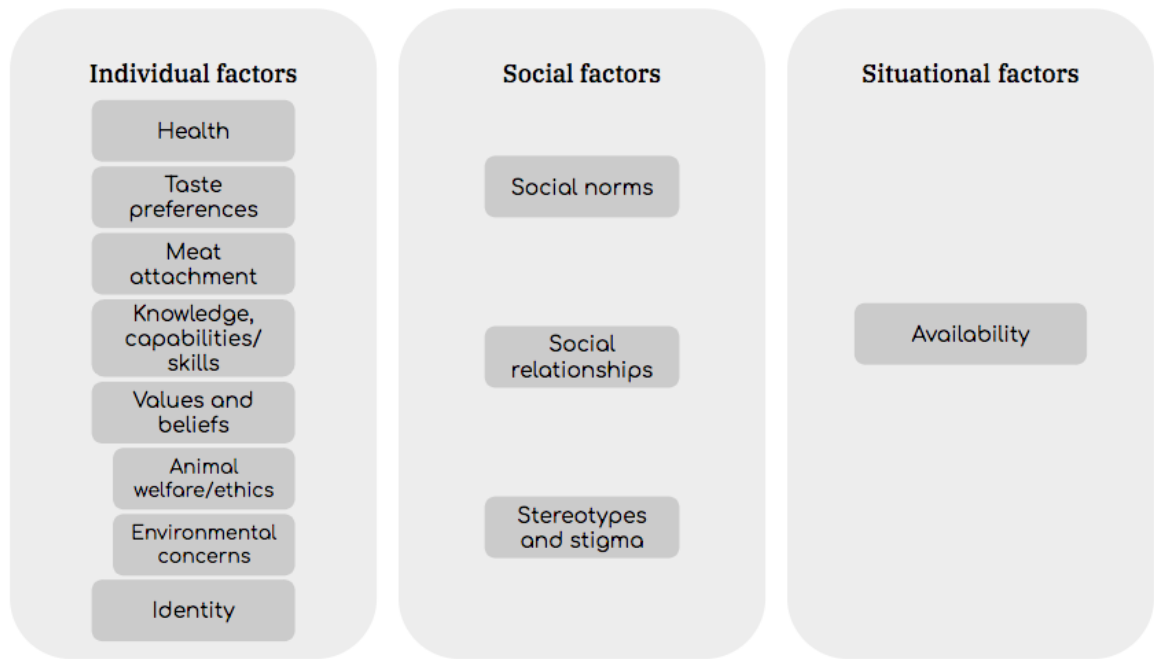


Figure 2-2. Factors that influence the adoption and maintenance of a vegetarian diet

3 Research design, materials and methods

3.1 Research design

The study is conducted by examining existing influential factors of vegetarian motivation and barriers from the literature and analysing empirical data collected through surveys and interviews based on these factors. This information structured to form the conceptual framework of the study, which serves as the basis for addressing the research questions.

A qualitative approach is adopted to delve into the underlying individual characteristics, social and situational contexts that influence vegetarian choices and behaviours. This approach is well-suited for comprehending the meaning individuals or groups attribute to a social problem (Creswell & Creswell, 2018), in this case, the suboptimal commitment to vegetarianism and the varying dietary practices among different types of vegetarians. By exploring the broad culture-sharing behaviours of individuals and groups, the qualitative approach provides valuable insights into the social and cultural context that influences dietary choices, as well as the individual motivations and barriers to adopting and maintaining a vegetarian diet.

Considering the social nature of eating practices (Markowski & Roxburgh, 2019) and the influence of both personal and social factors on dietary choices, this qualitative approach helps explore the deeper causes of the identified problem. Through this study, the aim is to gain a deeper understanding of the factors contributing to the issue and to offer valuable insights for addressing it effectively in the future.

3.2 Methods used to collect data

This study aims to explore the motivational factors behind choosing a vegetarian/vegan/flexitarian diet, as well as the inhibiting factors that causes lapses in their diets in young internationals in Sweden. By studying a diverse population with varied cultural backgrounds, this research can delve into a broader spectrum of motivations and barriers influencing the adoption and maintenance of different vegetarian diets, as well as identify common factors across countries and cultures. Furthermore, the shared social and cultural context of Sweden should provide valuable insights into issues specific to the country, which can potentially lead to solutions applicable to broader populations. The participants of the study were recruited through the network of the researcher, through group chats and social media in Sweden.

Data was collected through two venues, a survey and individual interviews with some of the survey respondents. First, the survey was used to gain a preliminary grasp of the motivations and challenges of choosing a vegetarian diet together with the literature review. The survey answers were also used to gather information on what situations make it easy or difficult to maintain vegetarian diets, consequently indicating the barriers. The survey is constructed using Google Forms and it has also included demographic questions and requires a submission of email address to evaluate the validation of answers. The name of the survey is **Survey on vegetarian identity (for all types of vegetarians and former vegetarians)** (Appendix 3). The title of the survey, with vegetarian as a keyword, is expected to appeal to those who identify with or perceive a personal connection to the term vegetarian, for example, being a vegetarian in the past.

There are 15 questions regarding the dietary pattern, respondents' perception of their dietary identity, the perceived salience of such identity, motivations, perceptions of in-group and out-group dieters, perceived challenges and strictness of maintaining such a diet. Most of the

questions are open-ended exploratory questions in order to gather the thoughts and opinions of respondents, whereas some are designed in a quantitative way to reflect the extent of certain parameters such as the strictness of maintaining their respective diet.

In order to gather responses, the survey was sent through group chats and social media where the members are more likely to be vegetarian, such as the *Vegan students in Lund* group on WhatsApp. And further, through vegetarian respondents with more contacts, the survey was also spread to their social circles.

To collect responses for the survey, the researcher utilised group chats and social media platforms that have a higher likelihood of having vegetarian members, such as the *Vegan students in Lund* group on WhatsApp. Additionally, the author also took advantage of the network of vegetarian respondents to further disseminate the survey to their social circles. This approach allowed a wider and more diverse pool of potential participants.

As a second objective, the survey served as a means to recruit participants for subsequent interviews. A specific question (Question 20) was added to the survey to inquire if respondents were interested in further involvement in the research. Those who expressed willingness to participate in interviews were subsequently contacted via email, receiving comprehensive information about the research's purpose, the interview process, and the rights of interviewees (see Appendix 4).

A total of 33 respondents expressed interest in taking part in the interviews. From this group, 17 participants scheduled interview slots, of which 16 interviews were successfully conducted.

The next phase of data collection involved semi-structured interviews with the participants who were recruited through the survey. These interviews offered more comprehensive insights into the research questions, allowing the researcher to ask follow-up questions and explore the shared characteristics and unique ideas of each individual.

The researcher has designed a set of 10 primary questions for the semi-structured interviews. These questions align with the insights gained from both the literature review and the survey results, and aim to address the research questions by exploring the following aspects:

The interview questions follow the findings from the literature review in order to answer the research questions, including investigations on the following:

- The motivations underlying the decision to adopt a vegetarian/vegan/flexitarian diet and how these motivations may shift or develop over time (RQ1).
- The difficulties or challenging circumstances individuals encounter while adhering to their dietary choices and how these challenges impact their sense of identity (RQ2).

The complete interview guide can be found in Appendix 7.

3.3 Materials collected

3.3.1 Survey responses

In total, 51 responses were collected from participants. After conducting data familiarisation, 50 of these responses were considered valid and included in the subsequent content analysis.

During the data familiarisation process, the researcher carefully reviewed all the survey answers and applied specific criteria to exclude certain responses from the analysis. Responses were excluded if they met any of the following conditions:

- The answer did not directly correspond to the question asked.
- The answer was written in a manner that the researcher found difficult to comprehend.
- The answer lacked clarity in terms of indicating whether the situations described were perceived as easy or challenging. For instance, for the questions “*In what situations do you feel the most easy/ challenging to maintain your vegetarian diet (any type)? Why and how do you deal with challenging situations?*”, if respondents provided situations without explicitly stating whether they found them easy or challenging, the answer was excluded from the analysis.

Following these criteria, one survey response entry was excluded from the content analysis.

Home countries:

The survey respondents represent a diverse range of countries, primarily from Europe, while also including participants from Asia, the Americas, and Oceania. This information is retrieved from the survey question “*Where do you consider as your homeland?*”. Through this question, the general social and cultural background of the respondents can be retrieved and possibly used in understanding their vegetarian motivations and challenges.

The home countries and the number of respondents are the following, as also shown on the map below: Australia (2), Austria (1), Belgium (1), Bulgaria (1), Canada (3), Costa Rica (1), Denmark (1), Dominican Republic (1), France (3), Germany (9), Hungary (1), India (2), Indonesia (1), Italy (2), Japan (1), Lithuania (2), UK (3), US (5), Singapore (1), Sweden (7), Sweden, Canada, and England (1), Switzerland (1), The Netherlands (1)



Figure 3-1. Home countries of survey respondents (created with mapchart.net)

Residing countries:

According to the survey result, all respondents currently reside in Europe, with the vast majority living in Sweden (45), fewer in Denmark (3), Spain (1), Switzerland (1), and France (1). Residing

countries can also contribute to the cultural and social influence when it comes to vegetarian motivation and behaviour.



Figure 3-2. Residing countries of survey respondents (created with mapchart.net)

Age: 80.4% of the respondents are in their twenties, 17.6% are in their thirties, and those under 20 years old count for 2% of the sample.

Gender: The majority of the respondents are female, which counts for 64.7 % whereas males count for 25.5% and non-binary and others count for the rest of the sample.

3.3.2 Interviews

All interview participants were recruited through the survey, and a total of 16 interviews were conducted, with durations ranging from 20 to 36 minutes, excluding greetings, introductions, and wrap-ups. These interviewees were divided into three dietary groups based on their current self-identification: 6 participants identified as vegetarian, 6 as vegan, and 4 as flexitarian.

Age: 20~39

Home countries: The participants' home countries, as mentioned during the interviews, play a significant role in discussing challenging situations, offering suggestions or improvements, and frequently serve as a point of comparison with their resident country, mostly Sweden. The following countries were represented among the participants: Sweden, Italy, Lithuania, the

Dominican Republic, the US, the UK, France, Canada, Indonesia, Germany, Costa Rica, and Singapore.

Residing countries: Regarding residing countries, the majority of the participants were currently living or working in Sweden, with a few residing in Spain and Denmark. Furthermore, all participants had either spent a considerable amount of time living in Sweden or were currently residing there, allowing them to be well-versed in the social and cultural context of Sweden concerning vegetarianism.

3.4 Methods used to process information

Both survey results and interviews are used in qualitative analysis, with the help of coding software NVivo 12. The data from the survey is exported from Google Forms as an Excel spreadsheet and reviewed by the researcher to exclude invalid answers according to the criteria mentioned above. The final Excel file is imported into NVivo 12 as a dataset to be autocoded by question. Within each qualitative survey question, all the responses are first read by the researcher to comprehend the meanings, and then further organised into several codes with an inductive approach. After the initial inductive coding process, the codes are adjusted by merging with other codes or further divided into sub-codes. Finally, codes with similar attributes form themes that are later used to interpret the data.

The interview scripts are first cut and organised into readable and coherent paragraphs manually for further data analysis. The researcher first read through all the transcripts to make sure the answers are comprehensible. The interview transcripts are more complicated in the sense that the participants do not always necessarily answer the questions in a fixed order, and many answers are weaved into different parts of the interview. So, for interview transcripts, the content is first roughly coded into prepared questions (see appendix 7) and then cross-coded into the themes that the researcher deems to be the most appropriate ones. Each code is further coded into sub-codes, to distinct and compare perspectives and meanings. All the codes are reviewed once all the transcripts are coded and adjusted accordingly by merging into other codes or further dividing into sub-codes. Similar codes and subcodes are organised into themes. Findings are reported based on the themes: dietary patterns, motivations, motivation involvement, and barriers.

Furthermore, it should be noted that the interview participants were recruited from the pool of survey respondents, with each participant assigned a unique Respondent Number (Rn) as well as a Participant Number (Pn). In citing survey responses, the corresponding Respondent Number (Rn) is utilised, regardless of the participant number, and vice versa.

3.4.1 List of codes

Code name	Description	Example
Dietary patterns and practices	How the individual describes their typical diet and their dietary identity (label). *In this theme, the “vegetarian” diet is used in a narrower sense as in an ovo-lacto vegetarian diet to	Vegetarian, vegan, flexitarian etc.

	distinguish from other types of vegetarian diets.	
Diet duration	How long the individual has followed their dietary pattern. This can be separated into stretches when one has followed different types of vegetarian diets in their life.	<i>“1-year vegetarian (but vegan/vegetarian for 9 years)” --R6</i>
Individual factors		
Health	Health-related perceptions and experience in relation to vegetarian diets.	
Taste and sensory preferences	What types of food an individual prefers to consume or prepare in relation to taste and senses.	Dislike the taste or the touch of meat; in favour of the taste and flavour of vegetarian dishes
Knowledge/capabilities/skills	The possessed knowledge of vegetarian diets.	The impact of consuming animal products on animal welfare, health and the environment; benefits of vegetarian diets; cooking skills; financial capabilities etc.
Values and beliefs	Values and beliefs that are central to the conversion to vegetarian diets.	
Animal welfare/rights/ethics	Reasons for adopting vegetarian diets in relation to animal welfare/rights/ethics.	Animal welfare; animal empathy; animal rights; ethical reasons etc.

Environmental concerns	Reasons for adopting vegetarian diets in relation to environmental reasons.	Environmental concerns; climate change; ecological footprints; sustainability etc.
Compassion and empathy	Compassion towards animals and other human beings.	Compassion for farmed animals; compassion for other people; not wanting to hurt others etc.
Personal responsibility and challenge	The belief that having a vegetarian diet/reducing humans' impact on the planet is one's personal responsibility and challenge.	The duty of reducing negative environmental impact by having a vegetarian diet.
Identity/self-concept	How the individual perceives being vegetarian/vegan/flexitarian as part of their identity.	<p><i>"I think it's (being vegan is) a big part of who I think of myself as." -- P11</i></p> <p><i>"I guess I can't think of myself without being this, because it is part of a whole set of ideology and in a way of living and things that I do as part of my routine every single day." --P13</i></p>
Social factors		
Social norm	Traditions of the social context. What is accepted and not accepted within a social circle.	Traditional family dinners etc.
Social relationships	Interpersonal interactions with family, friends, and individuals during food-related occasions.	Cooking with others; eating out with others; eating at home with other

		family members etc.
Cultural context	The cultural context one is in and its influence on the maintenance of their diet.	The cultural value of consuming animal products; the acceptance of vegetarianism etc.
Social identity motivation	How vegetarians view other vegetarians.	<i>“I admire their commitment; a lot of vegetarians are a lot more strict than I am” --R31</i>
Stereotyping/stigma	Negative perception or assumptions of vegetarians.	<i>“That's why sometimes when I stopped eating meat, I didn't like to think that I was vegetarian because I thought that people would immediately put me in a box.” --P12</i>
Situational factors		
Availability	Availability of vegetarian options. Accommodations to various vegetarian diets.	<i>“In Sweden it has been extremely easy to maintain my diet, since all restaurants have a vegetarian option, which is really nice.” --R13</i>
Others		
Vegetarian process	How an individual become vegetarian.	Incidents that make the connection between meat and animals (conversion experience); being exposed to information on

		animal welfare issues in animal agriculture; experiencing vegetarian diets etc.
Motivation evolution	The addition, modification, transformation of motivations behind the adoption and continuation of vegetarian diets.	<i>"...at first it was mostly for animal welfare concerns and then as I sustained it throughout the years, it's mostly for like environment and health." --P11.</i>

Table 3-1. List of codes

4 Analysis

This chapter will present and discuss the findings from the 50 collected survey responses and interviews with 16 of the respondents according to the list of codes from Chapter 3 Methodology.

4.1 Who are vegetarians?

4.1.1 Dietary patterns and practices

This theme unravels the diets participants practise and how they perceive their dietary identity. It is noteworthy that all participants in this study have, at some point in their lives, made compromises in their diets. Given that vegetarianism is viewed as a continuum, individuals may define their dietary identity and patterns with varying degrees of distinction (Ruby, 2012). Before delving further into the findings within this section, it is important to clarify that the term "vegetarian" is used in this study as an overarching category encompassing various positions on the spectrum, ranging from "vegans" to "flexitarians". In this case, to avoid confusion and misunderstanding, when the term "vegetarian" is used along without further explanation, it encompasses all types of vegetarians (e.g., different types of vegetarians). While when examining participants' self-identifications (e.g., in contrast to vegans, pescatarians and flexitarians, or when used in quotation marks) or referring to a specific individual (e.g., a vegetarian participant), the term "vegetarian" is used in a narrower sense as the diet that excludes animal flesh yet not all animal derived products. Further explanation of how the term vegetarian is perceived by the respondents is elaborated below.

To explore how different types of vegetarians perceive their dietary identity, the survey included the question: "*Which dietary identity do you relate to the most at the moment? (e.g., vegan, vegetarian, flexitarian etc.)*". By asking what their dietary patterns are, the researcher gains an understanding of the shared dietary patterns among the respondents and how they associated each term. The most frequently encountered term found in the respondents' answers are: "vegetarian", "vegan" and "flexitarian" (as shown in the table below). However, it is worth noting that a subset of participants (n=6) chose to describe their dietary identity using mixed terms such as "*vegetarian/pescatarian*" or "*flexitarian, mostly vegetarian*", and some even provided details regarding the specific rules they follow, for instance, "*vegan home, flexitarian if a friend invites me home*".

Vegetarian	17
Vegan	19
Freegan	1
Flexitarian	6
Mixed descriptions	(n=6)
Vegetarian/pescatarian	2
Flexitarian, mostly vegetarian	1
Vegan/vegetarian	1
Vegan home, flexitarian if a friend invites me home	1
Pescatarian-flexitarian	1

Semi-vegetarian/Flexitarian	1
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Table 4-1. Current dietary identities of survey respondents

4.1.2 Current dietary identities of survey respondents

The participants' interpretations of the terms they use to define their dietary identity were explored through their responses to the question: “*In general, which animal-derived products do you exclude from your diet?*”. They were asked to select all applicable items from a list of five options: *egg, dairy, red meat, poultry, and seafood*. These food categories were chosen as they are commonly referenced in the literature, dietary guidelines, and vegetarian associations when describing vegetarian diets.

All self-identified **vegans** have chosen all 5 food groups to exclude from their diet, including modified vegans such as “*vegan/vegetarian*” and “*vegan home, flexitarian if a friend invites me home*”. Whereas among self-identified **vegetarians**, the food groups they exclude vary. Most self-identified vegetarians exclude the 3 categories of red meat, poultry, and seafood from their diet, while 2 respondents specifically also exclude eggs and another 2 specifically exclude dairy products. For example, in the interview, Participant 12 further explained their variation of vegetarian diet and how that could vary depending on the availability of food.

“So, I would say that I am an ovo-vegetarian, if that's the correct term, but I don't eat any type of meat, like no fish, no beef, no chicken, and I also don't eat any type of dairy products. But I do eat eggs, although it depends. For example, in Europe, I would never eat eggs, because I was by myself. But now that I'm in Bolivia, and it's not so easy to find everything that I need, or at least, the food that I'm used to. It's easier if I go somewhere where they will not have a breakfast for me, and the only option would be eggs, for example, so I would eat that. But it's not something that I eat every day. It's something that I eat, just in case there's nothing else to eat.” --P12

Flexitarian, especially, is more flexible in definition and can be perceived in different ways and practised on various levels of strictness. Flexitarian can choose to exclude more or fewer animal products. For example, one of them only excludes red meat from their diet whereas another excludes eggs, dairy, red meat, and poultry. More commonly, the self-identified flexitarians choose to exclude mainly red meat, poultry and seafood, the categories directly derived from animal flesh. Not only does the specific selection of food groups excluded in a flexitarian diet vary on an individual and subjective basis, but the rules that flexitarians set for themselves regarding their dietary choices also differ. This may involve completely excluding one food category while still consuming other categories but in lower quantities or implementing rules to consume certain foods only on specific occasions. For instance, Participant 5 explained during the interview that they entirely exclude seafood from their diet while maintaining a reduced intake of meat.

“I would describe myself as flexitarian. I prefer not eating meat and animal products. And I have completely eliminated seafood from my diet five years ago.” --P5

Whereas Participant 6 has a different approach by prescribing themselves a rule to only eat meat when eating out during the weekends.

"I would say, [I am] a flexitarian. So, during the week, I'm a vegetarian. And during the weekend, when I eat out, I then I have an animal protein intake." --P6

Another subgroup of vegetarians that emerged among the sample of this study is the vegetarian/pescatarian type, characterised by a combination of dietary identities. Both respondents within this category described their typical diet as excluding red meat and poultry while still including seafood.

Furthermore, the choice of which dietary identity an individual relates to the most and the label they adopt for themselves is also subjective. One may choose a stricter or less strict dietary identity and label in relation to their usual dietary practice. Participant 4, for instance, expressed a preference for the label "vegetarian" despite following a mostly vegan diet and occasionally consuming meat dishes.

"I would probably call myself vegetarian with my diet. That's how I would describe it, even though at home I'm almost exclusively vegan and while I'm at my parents I do eat non-vegetarian food." -P4

On the contrary, Participant 15 shows more cautious about the use of the "vegetarian" label when they feel inadequate to keep their diet as strict as they prefer.

"Right now, I feel kind of bad claiming the vegetarian label because I'm not strict ...it kind of depends on I usually would tell people I'm vegetarian because I prefer to eat vegetarian but if I'm talking to other vegetarians then I don't claim that label because it feels fake."

A basic understanding of how individuals within different vegetarian categories perceive terms such as "vegetarian," "vegan," and "flexitarian" can be gleaned from their descriptions of typical eating patterns in survey responses. However, as previous studies have shown, a significant proportion of self-identified vegetarians occasionally consume meat and other animal products that they typically exclude (Jabs et al., 2000; Rosenfeld & Tomiyama, 2019; Markowski, 2022). Therefore, it is anticipated that vegetarians experience lapses in their dietary practices. These complications can only be revealed with further exploration of situations and contexts that challenge their dietary practice and force them to make compromises on their diets. This information that is more realistic is gathered via survey question 19 *"In what situations do you feel the most easy/ challenging to maintain your vegetarian diet (any type)? Why and how do you deal with challenging situations?"* and interview question 6 *"Can you describe some situations when you feel pressured to conform to non-vegetarian norms and compromise your diet? How do you feel and how do you respond in such situations?"* and 7 *"How do you navigate social situations where vegetarian options are limited or unavailable?"*. How vegetarians deal with these challenges and the compromises they make are further presented and discussed in Chapter 5.

4.2 Motivations

As suggested by earlier studies, the initial reasons that motivate one to convert to a vegetarian diet are likely to change and modified after keeping the diet for a long while (e.g., Fox & Ward, 2008; Ruby, 2012). To investigate the factors that initially motivate individuals to choose their current dietary pattern, as well as the motivations that help them stay on the trajectory and maintain their diet, it is important to differentiate between initial motivations and evolved motivations. This was achieved by posing two separate questions to the respondents:

1) What are your main reasons of choosing such a diet;

and

2) Have your reasons changed over time? If so, how have they changed? (e.g., I chose being vegetarian for my health, now I consider environmental benefits my main reason of maintaining it).

In instances where modifications in motivations were identified, the researcher asked follow-up questions to delve deeper into the factors that contributed to these changes. The analysis of the collected data has confirmed the findings of previous studies which suggested that motivations among vegetarians can evolve over time. A more in-depth discussion of these findings will be presented in subsequent sections of this chapter. Through the interviews, several common motivations for pursuing a vegetarian diet were observed among the participants. Drawing from the literature review in Chapter 2 these motivations were categorised as individual factors, social factors, and situational factors, based on the interpretations provided by the survey respondents and interview participants.

4.2.1 Individual factors

Health

Health considerations or benefits emerged as the third most prevalent motivation among respondents in selecting various types of vegetarian diets. This motivation encompasses the desire to address existing health issues, enhance overall well-being, or obtain specific health-related advantages. Out of the participants, 10 individuals expressed motivation from the health aspect of vegetarian diet variations, while 9 respondents reported that health benefits were a key factor in sustaining their respective diets. These health-related concerns and benefits are often derived from the knowledge of the adverse health effects associated with consuming animal products, as well as the recognised benefits of adopting a vegetarian diet one obtained.

This motivation can also arise from specific issues the individual is facing (e.g., a health problem or weight loss goals) that they attribute them to the intake of animal products (e.g., meat or dairy). For example, one participant noted the occurrence of bleeding gums when consuming beef, which led them to develop a dislike for meat.

"...when I have beef, suddenly my gums go bleeding. So, I also am not really fond of meat because of that." --P6

Similarly, another participant has observed that dairy products cause them issues and impair their physical performance, and that has caused the change in their dietary pattern.

"So, first I started with it because of health issues because I had a sour body and I felt like I couldn't do 100% in my sports as well. And therefore, I stopped eating dairies also because I had a lot of pain in my belly when I ate a lot of dairy products." --P10

Taste and sensory preferences

Two respondents in this study expressed their initial decision to adopt a vegetarian diet based on their dislike for the taste of animal products and their preference for the flavours of vegetarian food.

"I was always a picky eater, never enjoyed eating most meats, especially red meat..." –R30

"In the beginning it was mainly because I didn't like meat that much anyway..." --R27

While another participant in the study described their vegetarianism as a result of a combination of taste preferences, specifically not enjoying the taste of meat, and a preference for vegetarian alternatives such as soy and tofu. Additionally, they found it easier to describe their food preferences using the label of being vegetarian.

"I never really liked most meat. And then I had an experience abroad where I discovered, the protein substitute, like soy and tofu. And then I realised that I preferred those rather than meat. And it was just less of a hassle describing I don't like meat, and I don't like this and that. Then just say that I was a vegetarian. It was kind of like convenience for me at first." --P16

Similar to the dislike for taste, another participant in the study cited sensory dislike as a factor for leaning towards a more vegetarian diet. Specifically, they expressed a dislike for the tactile sensation associated with animal flesh, which further influenced their dietary choices.

"I don't like touching meat and fish. So, I prefer to only eat vegetables, and dairy products and eggs."—P6

Values and beliefs

Food choices have been suggested to reflect individuals' ideologies and life philosophies (Lindeman & Sirelius, 2001). And previous study by Fox & Ward (2008) also found that some ethical vegetarians integrate their motivations into a philosophical, ideological or spiritual framework. In this study, many respondents, particularly those who participated in interviews, also have indeed expressed and emphasised their intrinsic values and core beliefs that underpin their decision to adopt a vegetarian diet. These values and beliefs not only guide their dietary choices but also hold significant importance in shaping their personal ideologies. The findings of this study indicate that among these respondents, the most frequently cited motivations for vegetarianism are values and beliefs related to animal welfare/rights and ethics, followed by environmental concerns.

Exploring the values and beliefs underlying the adoption of a vegetarian diet provides insights into the underpinning values held by these vegetarians, which contribute to their commitment to their respective dietary choices. These values and beliefs are revealed through direct inquiries or by examining participants' aspirations and goals related to their dietary preferences (see Appendix 7, Interview Guide: Question 2).

Animal welfare/rights/ ethical

The predominant motive for respondents/participants in this study to adopt a vegetarian diet is rooted in ethical considerations, particularly concerns regarding animal welfare and rights. A total of 29 respondents identified ethical concerns about animal welfare/rights as their primary or one of the primary reasons for adopting a vegetarian, vegan, or flexitarian dietary approach. These concerns are expressed in various ways, in which the most central argument is the moral concerns about **animal rights** in general, questioning the idea of manipulating animal lives for food and expressing opposition to speciesism, the discriminatory treatment of animals based on their species.

“I chose this type of diet for animal rights reasons, I felt that it was wrong to eat animals and use their animal products.”—P3

“I really think that all species have a right to live freely and not be impacted by human.”—P9

Some participants express their ethical questioning of **animal agriculture**, the idea of farming animals for food and the related **animal cruelty** and **suffering** in the conventional meat and dairy industry.

“The ethics behind animal farming and how I find the idea of using animals as food...I find it a little bit abhorrent.”—P4

Intertwined with the questioning of animal agriculture, some also show to strongly hold the belief that humans **no longer need** to eat animals to survive.

“To not support a meat and dairy industry that's cruel to the animals and is unnecessary for a healthy life. I can manage perfectly fine without the extra cruelty.” --R15

“I am completely fine, and I can sustain myself without taking a life.” --P7

As a natural result of being against animal cruelty and suffering caused by animal agriculture, many respondents chose to retreat from supporting such industry. This wish to not participate in activities causing animal suffering leads to a shift to a vegetarian diet.

“...some documentaries on how the animals were being treated, their living conditions ... So, I'm not sure if I could participate in such cruelty. I want to go at least vegetarian” --P11

A belief in the sanctity of animal lives is observed to serve as a foundational and spiritual underpinning for individuals' concerns about animal welfare and rights, ultimately leading to reduced meat consumption in this study. Participant 9, a flexitarian, expressed that in addition to their general love for animals, they hold a non-religious spiritual belief in the sacredness of animal lives. This belief system has formed the basis for their choice to avoid consuming meat.

“But I also have some kind of spiritual beliefs, personal beliefs that sort of get into the sanctity or sacredness of all life.”—P9

“I really think that like all species have sort of a right to live freely and not be impacted by human activity. And so that's sort of my personal spiritual belief that guides my decision.”—P9

In this context, spiritual beliefs are not necessarily connected to any religion, as a matter of fact, only one respondent in this study referred to religious belief as their initial reason for adopting a vegetarian diet.

The prevalence of respondents citing ethical considerations related to animal welfare and rights as their primary motivation aligns with previous research, indicating that ethical concerns remain the most prominent reason for individuals to adopt a vegetarian diet (e.g., Fox & Ward et al., 2008; North et al., 2021).

Environmental Concerns

The environmental concerns surrounding animal agriculture and animal products is shown to be the second most common reason for respondents to change their diet towards less meat.

Respondents have shared their concern about climate change, the ecological footprint of animal agriculture such as the disruption of natural habitats and food chains, resource consumption (including land and water), ground water pollution introduced by fertilisers and GHG emissions.

While others also displayed concerns about the human-nature relationship in general, exemplified by the feeling that humans are losing connection with their environment.

“I think that the way that we consume food and meat in particular really exemplifies the loss of connection with our environment.” --P2

In previous studies, there were not adequate cases for vegetarians to cite environmental concerns as their primary reason to adopt a vegetarian diet (e.g., Fox & Ward, 2008). Environmental concerns were considered as subsequent and consequent of the act of having a vegetarian diet (Fox & Ward, 2008). That is, environmental motivations were not particularly thought to be the main cause of a vegetarian dietary choice. However, in this study, 24 out of 50 respondents (48%) cited environmental concerns as one of their initial motivations for them to adopt a vegetarian diet, on top of that, 16 respondents (32%) reported that concerns were subsequent to their dietary transition.

This phenomenon could be attributed to the advance of environmental and sustainability discourse in recent years, particularly in Sweden. Also, as the majority of respondents in this study are university students, it is notable that many demonstrated a comprehensive understanding of the environmental impacts and sometimes social implications associated with animal agriculture, surpassing superficial knowledge. This suggests a higher level of environmental awareness among these individuals could also influence the prevalence of environmental motivations as a primary cause. This tendency is consistent with an earlier study by North et al. (2021) in Australia, which reflected that environmental concerns were the second most predominant reason for vegetarians and vegans to choose their respective diets following animal welfare/rights.

Compassion and empathy

Many respondents/participants who are motivated by the above-mentioned animal-related ethical considerations have placed a strong emphasis on compassion and empathy, as a root for their concern for animal welfare or rights. Their commitment to animal welfare and rights is a manifestation of their underlying values of compassion and empathy. This perspective reflects their recognition of the pain and suffering experienced by sentient beings, encompassing both humans and other species, and their desire to prevent harm to others.

“So, I don't want to hurt others, at least [not] in a direct way...I don't want to because of somebody's pain.” --P13

“I think the animals have exactly the same ways that we do so, non-suffering and living its life.” -P10

For them, compassion and empathy to animals is also a reflection of those to other humans.

“These values of compassion also extend to other human beings.” --P11

"So, if I don't want to hurt animals, I probably don't want to hurt human beings too." --P13

One participant further expressed the belief that compassion is intertwined with love for all beings and the pursuit of living in harmony with nature. This individual integrated their ideology of living in harmony with nature and their value of compassion and empathy into their choice to follow a vegetarian diet.

"I feel that compassion goes hand in hand with love to every being in the world, and then also peace. I want to live in a world where we are in harmony with nature. So, we don't over exploit all the resources that we have." --P12

This observation is in line with previous studies by Lindeman & Sirelius (2001) and Fox & Ward (2008) that food choice reflects the philosophical, ideological or spiritual framework of vegetarians.

In addition to being evident in their concerns for animal welfare and rights, the value of compassion and empathy are also reflected in the respondents/participants' concerns for the environment and the well-being of individuals impacted by the adverse environmental consequences associated with animal agriculture.

"So that's [the reason behind being vegetarian] not only the environmental effect, but also in terms of values, a conscious eating and also valuing other people's life. Everyone has the same right to live and also indigenous communities that are threatened by deforestation..." --P10

Personal responsibility and challenge

Several respondents/participants in this study have emphasised that they view the undertaking of a vegetarian as part of personal responsibilities and challenge. This is also in close connection with their values and beliefs in animal welfare and the environment discussed above. These individuals perceive themselves as accountable for the suffering experienced by animals and the adverse environmental consequences associated with consuming animal products. By abstaining from such impactful products, they no longer contribute to animal suffering and simultaneously reduce their own environmental footprint. The moral of acting in alignment with their values, also as "doing the right thing", is a found to be a motivational factor among many ethically and environmentally-motivated vegetarians to adopt and stick to a more vegetarian diet.

This sense of responsibility is often expressed as a commitment to minimising personal impact on the world, as articulated by Participant 1 who stated, "*doing what you can to reduce your impact on the world.*" Similarly, Participant 15 emphasised the importance of personal effort, stating, "*just trying to do as much as I can.*" For some, this responsibility manifests as a dedication to aligning their actions with their ethical beliefs, as illustrated by Participant 12 who remarked, "*to be consistent with what I think is right for me.*" Alternatively, individuals may feel a specific duty to reduce their consumption of meat, as expressed by Respondent 31 who believed it was their responsibility to consume as little meat as possible due to access to viable alternatives. ("*I believe all life is sacred, and that it is my duty to consume as little meat as possible because I have the access to healthy meat alternatives*" --R31). Engaging in these actions aligned with personal values can lead to a sense of self-gratification, as reported by Participant 13 who described the rewarding feeling derived from their belief in making a positive impact on the world ("*I believe that what I'm doing is better for the world. I do it, I get a sense of self-gratification*" --P13).

The broader concern among the participants regarding humanity's impact on the Earth and their sense of responsibility align with the findings of Fox and Ward (2008) in their study on

vegetarian motivations. It was observed that certain commitments were not exclusively related to diet or animal welfare but reflected a more general concern for reducing the negative impact on the planet, of which adopting a vegetarian diet was viewed as one component.

Additionally, for some individuals, maintaining a vegetarian diet serves as a personal motivation. They perceive abstaining from meat as a personal challenge and find satisfaction in adhering to a dietary choice that aligns with their values and beliefs. One participant expressed this sentiment, stating,

"I really like holding myself accountable and being like, I want to do this... I'm proud that I followed through with that goal. I think it makes me feel good about myself in that way" (P9).

Interestingly, this aspect of commitment as a motivating factor is not commonly addressed in existing literature on vegetarian motivations, as far as the author is aware.

Knowledge/Capability/Skills

Knowledge plays a foundational role in various vegetarian motivations, encompassing aspects such as animal welfare, environmental impact, social implications, and personal health effects related to animal agriculture and food consumption. The acquisition of knowledge serves as a catalyst for initiating dietary changes, and subsequent information gained along the way can further influence individuals to adopt stricter vegetarian diets.

For instance, Respondent 24 transitioned from an omnivorous diet to vegetarian and eventually vegan, attributing the latter change to "*a wider knowledge on food production.*" Respondent 47 became vegetarian upon learning about the pain experienced by marine animals, and later embraced veganism after discovering the suffering endured by animals in the dairy and egg industries. Similarly, Respondent 9 progressed from a pescatarian diet to vegetarianism and eventually veganism due to increased awareness of the environmental, moral, and ethical impacts associated with meat, dairy, and fishing industries. Respondent 27, motivated initially by taste and ethical considerations, delved into the environmental aspects of a vegetarian diet and found themselves leaning toward a vegan diet as a result.

Additionally, the acquisition of culinary skills and knowledge of vegetarian cooking techniques serves as a motivating factor for individuals embarking on a vegetarian diet. Learning recipes and exploring vegetarian alternatives provide encouragement and a sense of capability for new vegetarians, as expressed by Participant 9:

"I learned recipes and alternatives that I could eat. So that was kind of, for me, where I can actually do this." --P9

Media platforms, particularly documentaries and videos, emerge as the primary sources of information and knowledge for these respondents (R50, P5, P7, P11, P15, P16), followed by personal research endeavours (R19, P8). Participant 50 reflected on their experience:

"In that time, I started to get into the topic more, watching videos/documentaries about animal agriculture and realizing that it felt morally wrong to me to eat products from animals again." --R50

At the same time, this type of knowledge and skills can also be radiated by vegetarians themselves. For example, one vegan participant revealed their hidden agenda of promoting veganism through volunteer work in a vegan community kitchen. They aimed to showcase that

veganism can be accessible, affordable, and enjoyable, challenging common misconceptions surrounding its difficulty, expense, and taste.

“What I wanted was to show people that you can make [vegan food]. Because a lot of people are like, oh being vegan is hard, it's expensive or it's not tasty. So, I wanted to show that you can make these things vegan and you can be happy, you can be healthy, you can make great food.”—P13

Identity

The survey results indicate that a significant majority of respondents view their dietary identity, such as vegetarian, vegan, or flexitarian, as more than a mere dietary choice. Instead, they perceive it as a defining aspect of their personal identity (see Figure 4-1 below).

To what extent do you think your dietary identity is more than a dietary choice, it also defines who you are?

50 responses

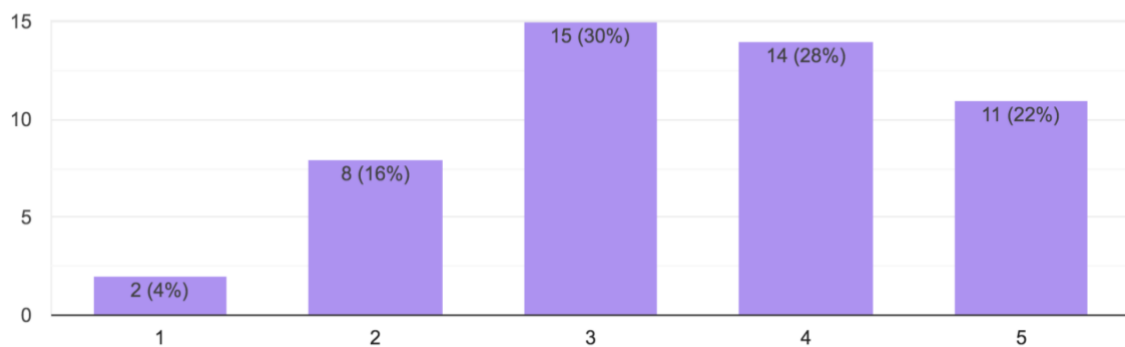


Figure 4-1. Responses to viewing vegetarian as an identity

For many respondents, being a vegetarian holds great significance in shaping their self-concept. This is attributed to the fact that their dietary identity aligns with their core values and beliefs, particularly those centred around compassion and empathy. They express that their dietary choices reflect their broader ideological framework and serve as a means to manifest their inner values externally. Participant 10, for instance, illustrates how their heightened awareness of the interconnectedness between their values and dietary choices has solidified their identity as a vegan. They have come to recognise the deep intertwining of their beliefs with their unwavering commitment to a vegan lifestyle, further reinforcing their conviction and establishing veganism as an integral component of their overall identity.

“At the beginning, I would not have said yes, but I think more and more it becomes like one of what a big part of my identity at the end, because the values that are connected to the dietary are at the end, my values.” --P10

The identification with a vegetarian identity (any type of vegetarian) can serve as a motivating factor for individuals to uphold their dietary choices, particularly when confronted with challenges or inquiries from others. Participants in the study express a strong attachment to their identity as vegetarians and feel the need to defend their dietary decisions or provide justifications when questioned.

One participant (P1) highlights that their identity as a vegetarian becomes more salient when someone challenges their dietary practices or questions their values associated with it.

"I don't think about it [being vegetarian as my identity] too much, but when someone challenges it, my way of eating and kind of my values surrounding it, then I tend to get quite defensive." --P1

This suggests that vegetarians often encounter inquiries or scepticism from non-vegetarians, leading them to defend their dietary choices. Participant 12 acknowledges being conscious of their "different" dietary choice and anticipates comments from others, emphasising the social awareness surrounding their vegetarian identity.

"When I'm with people, I'm super aware, super conscious. And I know that I'm always going to get a comment or something because I'm kind of like the different one and that makes me very conscious about being like that." --P12

Participant 14 emphasises that their connection to their vegetarian identity is most pronounced when actively seeking suitable food options for their diet, particularly in unfamiliar or meat-centric environments. They feel a stronger alignment with their vegetarian identity in situations where they need to be more attentive and cannot compromise on their dietary principles. Conversely, when they are in locations where vegetarian options are readily available, such as in Sweden, they may be less conscious of their vegetarian identity.

"I would say when I'm forced to find accommodations for myself. ...when travelled to other countries where there aren't as much options and accommodations, I realise how difficult it is sometimes and how much I need to pay attention to it and how I can't make a compromise and so. I would say that I feel most connected to it [my vegetarian identity] when I'm traveling to places that are very meat concentrated. I would say when I was in Germany, for example where there was a lot of meat. In Egypt as well...I'm forced to pay more attention to it than I would in Sweden, where I just buy whatever and if I go into any restaurant I know that they're going to have options I'm not necessarily paying attention to it as much." --P14

Alternatively, a vegan participant (P13) shares that their daily routines, such as meticulously checking ingredient lists when shopping, serve as constant reminders of their vegan identity. For them, being vegan is not only about dietary choices but also encompasses a broader set of ideologies and daily practices.

"I guess I can't think of myself without being this, because it is part of a whole set of ideology and in a way of living and things that I do as part of my routine every single day...as a vegan, you go to the shop, you buy a thing, you have to go through the list of ingredients." --P13

These findings align with prior research indicating that vegetarianism is often viewed as an identity (Plante et al., 2019; Romo & Donovan-Kicken, 2012; Rosenfeld & Burrow, 2017a). The identification with a vegetarian identity has been shown to positively influence dietary consistency, as supported by previous studies. When encountering obstacles such as limited vegetarian options or negative comments, participants in this study draw upon their vegetarian identity for support. This suggests that identity encompasses both social and personal aspects and is highly responsive to situational cues (Oyserman, 2009). In situations where vegetarians perceive themselves as different or in the minority, such as social events involving food, their vegetarian identity becomes more obvious.

When individuals feel a strong connection to their vegetarian identity, they may engage in behaviours that align with their perception of what is expected of a vegetarian. This can manifest in actions such as defending their vegetarian choice or avoiding confrontations. The congruence between their identity and their responses to challenges and questioning plays a vital role in their adherence to their diets, consistent with Oyserman's (2009) notion of identity-based motivation.

4.2.2 Social factors

The decision to adopt different types of vegetarian diets among the respondents is primarily influenced by individual factors. These personal considerations are central to their commitment to vegetarianism. However, social and situational factors also play a significant role in supporting and facilitating the maintenance of their dietary choices.

Social relationships

The presence of vegetarians or individuals who hold a positive view of vegetarianism can have a significant impact on the consistency of vegetarian diets. Family members, friends, or other individuals who follow a vegetarian lifestyle can serve as sources of motivation and may even initiate conversion experiences for some individuals. By being exposed to vegetarians and hearing their reasons for choosing vegetarianism, individuals can gain awareness and knowledge about the ethical and environmental aspects of animal agriculture, leading them to be more open to the idea of adopting a vegetarian diet.

In terms of maintaining a vegetarian diet, respondents generally found it easier when dining with others who share the same or similar dietary preferences. The presence of fellow vegetarians during meals, whether it be family members, friends, or acquaintances, reduces the perceived effort required to adhere to their dietary choices. Cooking meals together with like-minded individuals fosters a sense of ease.

“Certain people in my family are vegetarian and then when we get together and cook meals with friends and then most of us are vegetarian or at least they don't eat meat then it becomes easier to cook things together.” --P16

Similarly, for Respondent 9, they perceived the maintenance of their vegan diet on a day-to-day basis was easy because their partner they lived with was also vegan.

“It is very easy when cooking at home (me and my partner are both vegan and live together) or when hanging out in a friends' circle where everyone is vegan.” --R9

The influence of close social relationships on dietary choices can lead to a greater adherence to stricter vegetarian diets. Participant 15, who followed an ovo-lactovegetarian diet, noticed a tendency to align their dietary preferences with those of their social circle. In particular, being in the company of stricter vegetarians, such as vegans, heightened their sense of responsibility and accountability towards their own diet.

“I was with all these vegans... all my friends were vegans and so then I was eating more vegan.” -P15

Similarly, living with a vegan flatmate facilitated easier maintenance of a flexitarian diet for one respondent.

“I find it most easy when I'm at my flat in Lund; my flatmate is vegan, so we make delicious and nutritious vegan meals for each other, and when I want to eat meat/animal products is a deliberate choice - so it's easy to keep track” --R37

These findings align with prior research indicating the importance of social networks in supporting the adherence to a vegetarian diet (Jabs et al., 1998b). Moreover, the individuals with

whom they cohabit have a notable impact on the maintenance of their dietary choices (Menzies & Sheeshka, 2012).

Social identity motivation

The positive perception of other vegetarians who follow the same diet channels a sense of positive affiliation and subsequently motivates individuals to sustain their dietary choices. Among the 50 valid survey responses, 41 participants expressed varying degrees of positive attitudes towards fellow vegetarians who follow the same type of diet. Conversely, the remaining participants reported a neutral stance towards other vegetarians.

The common positive perceptions are shown as an **increased personal connection** (“*It’s lovely to know we already have something in common*” --R39), associated **shared values** (“*Usually like-minded people with whom I share similar values and worldview*” --R1), **positive characteristics** (“*I assume they are considerate people.*” --R8), and a **sense of camaraderie** (e.g., feeling at ease when eating together: “*It is also nice in large social gatherings to have someone with the same dietary patterns so that we can find options together.*” --R11)

Moreover, in general, these categories of vegetarians demonstrate admiration and respect for individuals who adhere to a more stringent diet, particularly those who closely align with a vegan diet. They perceive these individuals as being more committed to their dietary choices and hold them in high regard.

“I admire their commitment; a lot of vegetarians are a lot more strict than I am” --R31

A few expressed their desire to adopt a vegetarian lifestyle prior to having the opportunity to do so, such as when they gained the independence to live alone and prepare their own meals. Participant 14 serves as an example, as they had always aspired to be a vegetarian during their upbringing but were unable to follow through while residing with their family. However, upon moving out and attending university, they were finally able to embrace vegetarianism.

Previous research has indicated that, in accordance with social identity theory, a positive attitude towards vegetarianism can serve as a motivator for individuals who aspire to adopt this dietary pattern. This motivation stems from the desire to associate oneself with a social group that is perceived as positive, thereby enhancing one's self-esteem and potentially offering various advantages (Nezlek & Forestell, 2020). Additionally, the positive perception of other vegetarians, also referred to as “high private regard” by Rosenfeld & Burrow (2017a), can be considered a motivating factor for individuals to pursue a vegetarian diet. However, although this study observed a positive perception of various types of vegetarians, the explicit demonstration of social identity motivation was not evident from the collected data.

4.2.3 Situational factors

Availability

Previous research often highlights availability as a common barrier to adopting a vegetarian diet. However, the findings of this study indicate that increased vegetarian options can have a positive impact on supporting the maintenance of vegetarian diets and facilitating the transition to a new dietary pattern. One notable aspect of the sample in this study is that a majority of the respondents have international backgrounds and come from diverse cultural backgrounds. Many participants have compared the availability of vegetarian options in different countries,

particularly in relation to their previous country of residence and their current country of residence—Sweden.

Sweden is perceived as a country with high accessibility and availability of vegetarian food, including grocery stores and dining establishments (“*In Sweden it has been extremely easy to maintain my diet, since all restaurants have a vegetarian option, which is really nice.*” --R13), which may serve as a motivating factor for vegetarians to be consistent with their ideal diets.

4.2.4 Different motivations for excluding different food groups

It is noteworthy to observe that individuals may have specific reasons for excluding different food groups from their diets. For instance, a flexitarian participant expressed their decision to exclude seafood primarily based on environmental considerations, while also expressing ethical concerns regarding meat and other animal products. To the best of the researcher's knowledge, previous studies have not emphasised this level of differentiation in the attribution of motivations for excluding specific food groups.

*“The reason why I don't eat shellfish and fish is purely environmental. Whereas the reason why I'm limiting meat and animal product intake is a mixture of environmental and ethical reasons.”—
P5.*

4.2.5 Vegetarian process

During the interviews, a number of participants highlighted their motivations for adopting a vegetarian lifestyle as being linked to a significant “conversion experience.” This concept refers to a transformative event where individuals establish a sudden connection between animals and meat (Jabs et al., 1998a). Such connections can arise from personal experiences or persuasive interactions with others. Several participants vividly recalled their conversion experiences. For instance, Participant 13 distinctly recalled feeling repulsed when encountering a food item called “chicken popcorn” at a fast-food store, which served as a turning point that led them to transition to a vegan diet.

“I was so profoundly disgusted that you can transform an animal into something that you're calling like ‘popcorn’.” --P13.

Similarly, Participant 3 vividly recalled when they see human-like features in animals when they interacted with animals in a sanctuary.

“This is what encouraged me to become a vegan. At this animal sanctuary, they had lots of chickens and cows and pigs and stuff. So, animals that we classically deem as is okay for us to use them and exploit them. And I realised that they all have their own distinct personalities. You can see the value of them not just as products, but they have their own personalities and their own desires. And that was what changed it for me that I realised that there's a bit more to them than culture makes out.” --P3

Information concerning animal suffering, animal welfare, and the rights concerns surrounding animal agriculture, when shared by various individuals, including friends, family members, or even strangers can serve as a catalyst for a profound realisation and transformative experiences among certain individuals. Through the interview process, several participants recounted their own transformative experiences, wherein they underwent a shift in their dietary choices after being exposed to information about animal suffering, animal welfare, and animal rights. Such

information was acquired through diverse sources such as documentaries, discussions, and pamphlets that were introduced to them by people in their social circles.

“My sister went vegan first...She showed me some documentaries on how the animals were being treated, their living conditions and stuff. So I was like, wow, I'm not sure if I could participate in such cruelty. So I wanted to go at least vegetarian.” --P6

“I was going to this meditation group six years ago, and there was this woman... we were having compassion discussions, and she would say that she was vegetarian, because animals have a lot of suffering and everything. I never thought about that until that day, and then the idea just staked in my head. And at some point it made sense, and I tried to inform myself a lot about it, and one day it just clicked.” --P12

“My friend showed me a pamphlet like a tiny little magazine and it was about animal rights.” --P15

While a conversion experience holds the potential to bring about a transformative shift towards a stricter vegetarian diet variety for certain individuals, it is important to note that not all participants in the study reported such profound events that established a direct association between meat and animals. For some participants, the transition into a vegetarian diet variety occurred more naturally, driven by their personal taste preferences rather than a specific conversion experience.

Others have reported **certain incidents** in life unrelated to the animal-food connection that nudged them to start a vegetarian diet variety. These reported incidents are change of living conditions such as being on their own and starting to cook their own meals, as mentioned by Participant 14:

“Growing up I kind of always wanted to be vegetarian, but it wasn't until I went to college where I cook for myself that I was able to really be vegetarian. My mom, for example, would always make me fish, chicken things. So it wasn't really conducive to living with a family. And then once I left to college and I cook for myself. I make my own choices. I buy my own groceries. I was able to make the choice and then now, years later she does make accommodations whenever I go home to visit. But in the beginning maybe wasn't so supportive.” --P14

For Participant 9, visiting a country where vegetarian food is predominant conditioned them to a meatless diet.

“I went to India. And for two months, I didn't eat any meat, because the people I was staying with are Hindu, and they don't eat meat at all.” --P9

The combination of life changes and pre-existing motivations or experienced benefits of adopting a vegetarian diet amplifies individuals' motivations to embrace this dietary choice. Continuing the same example, Participant 9 underwent a transformative experience after personally experimenting with vegetarian diets, leading them to develop a positive attitude towards this dietary approach. Through this first-hand exploration, they became convinced of the viability and nutritional adequacy of a vegetarian diet.

“And I think I realised that it's really okay to not eat meat. I could survive, I felt good.” --P9

Beardsworth and Keil (1991) have previously identified a similar association between conversion experiences and the sudden adoption of a vegetarian diet. A dramatic or traumatic

incident–conversion experience triggers an abrupt change in diet. The reported experiences from the interview participants in this study indicate a partial alignment with this observation, although it is important to recognise the influence of other values or motivational factors in the decision to transition to a vegetarian diet. These findings partially support the findings of previous studies that have highlighted the simultaneous occurrence of significant life changes, such as relocation, entering university, or undergoing a divorce, alongside the adoption of an ethically-motivated vegetarian diet (Jabs et al., 1998a). Participant 14's account aligns with this pattern. This trend has been interpreted as a means for individuals to assert control over their lives (Jabs et al., 1998a), although this specific interpretation could not be confirmed due to limited representation in the present study.

4.2.6 Motivation evolutions

It is evident that many participants and respondents have experienced shifts in their motivations over time. The reasons they initially adopted a vegetarian diet may differ from the reasons they continue to maintain it. Notably, while environmental concerns may not have been the primary catalyst for their initial transition, some individuals have mentioned its significance in sustaining their diet over time.

Among the survey respondents, 17 individuals reported that their motivations have remained unchanged over time. However, some participants acknowledged that while their main reasons for choosing and maintaining a vegetarian diet have remained consistent, they have become more aware of additional reasons and benefits associated with their dietary choices. For example, an ex-flexitarian and current vegan cited that their main motivation is that they “*don't want animals to suffer*” and animal cruelty has always been their main reason while “*environmental and health reasons have always been secondary*”. Where another vegetarian respondent who went vegetarian to reduce harm on the environment claims that their reason has not changed over time, however, they are “*now more conscious of the unethical practises within large scale animal product production*”.

The majority of respondents reported changes in their motivations over time, which varied in direction. Some participants indicated that their main motivations have shifted over time. For example, several respondents in this study initially adopted a vegetarian diet due to animal welfare concerns, but their continued motivation has been influenced by the health and environmental benefits associated with the diet.

“...at first it was mostly for animal welfare concerns and then as I sustained it throughout the years, it's mostly for like environment and health.” --P11.

Initially, individuals may embrace a vegetarian diet for a variety of reasons. However, as time progresses, one of these reasons can acquire greater significance and emerge as the primary motivation for sustaining their dietary choice.

“I chose to eat less meat partly due to ecological, health and financial reasons. It gradually shifted to ecological reasons being the main reason, but health is obviously still a reason I wouldn't return to a pure vegetarian diet or even adding meat again.” --R45

Conversely, certain individuals observe their motivations expanding, wherein the initial reasons for adopting a vegetarian diet persist while new motivations are incorporated over time. For example, adding environmental concerns, and health aspects to their initial motivations.

“Over time, I have become more interested in the ecological benefit to eating a plant based diet, rather than just the ethical question of the treatment of animals.” --R2.

“In the beginning I only did it for the environment, but now I also include health aspects as important.” --R8.

“My reasons have only expanded. Later I did more research on the health benefits and environmental benefits it also makes me feel good to eat this way.” --R19

This phenomenon is also observed in a study by Fox and Ward (2008), in which the researchers hypothesise that the expansion of motivations among vegetarians is driven by their status as a dietary minority, leading them to constantly seek additional justifications for their dietary choice. However, this hypothesis was not confirmed with the findings of this study.

The process of adopting a vegetarian diet is described by the participants as a journey of learning and practice. Regardless of their initial motivations, engaging in a vegetarian diet exposes individuals to new information and insights regarding its benefits. For instance, one flexitarian participant initially reduced meat consumption for financial reasons, but gradually became more aware of the ethical concerns surrounding the meat industry, which then became their primary motivation.

“But for the meat, first, I started not eating as much or as little as possible for an economic reason, because it's a very expensive thing to buy. And then as I learned about the meat industry, it became more ethical based. First it was purely practical, then it also became ethical.”—P5.

The acquisition of knowledge and the emergence of new motivations also foster the exclusion of more animal products. This can be observed in the case of Respondent 47, who described a progressive shift in their dietary choices from being pescatarian to vegetarian and eventually to vegan. This transformation was motivated by the participant's exposure to new information about animal welfare, which influenced their decision to exclude more animal-derived products from their diet.

“I didn't realise that marine animals also experience pain because I couldn't relate to them as much, then I learned and became vegetarian, but I didn't acknowledge that the dairy and egg industry is evil and it's a cause of tremendous amount of suffering - I did not have the knowledge because we are indoctrinated to not think about it. Then I learned and became vegan.” --R47

Among individuals who have embarked on a vegetarian journey, a prominent and widely reported outcome is the acquisition of knowledge regarding the environmental benefits associated with a vegetarian diet. This newfound awareness has consistently emerged as a primary source of motivation for maintaining their dietary choices over an extended period. For instance, one participant emphasised that their decision to adopt a vegan diet, initially driven by concerns for animal welfare, linked to an active seek for new information and an increased consciousness regarding environmental issues.

“...shortly after watching these documentaries, I started trying to learn more about the vegan diet and then usually that's (environmental impact) one of the main things that you talk about when you talk about the vegan diet.” --P10

This is consistent with what was found in previous studies that the acknowledgement of environmental benefits and enhanced environmental concerns are subsequential to the adoption of a vegetarian diet (Fox & Ward, 2008).

Experienced benefits such as improved health condition are reported by some participants as an additional motivation that assists the sustain of their diets. For example, Participant 14 have ascribed their good health to their vegetarian diet.

“I also am a lot healthier than other people. My health statistics are much better I have good blood pressure and cholesterol levels sodium.” --P14

Taste preference can also be a subsequent factor to keep vegetarians away from consuming meat. Over time, many individuals following a plant-based diet have noted changes in their taste preferences, particularly in their reduced acceptance of the taste and texture of meat after abstaining from it for an extended period. This change in taste makes it challenging for them to consider compromising their diet, even occasionally. However, such changes in taste were not consistently observed among vegans in relation to dairy and eggs, the primary food groups they avoid to differentiate themselves from ovo-lactovegetarians. One possible explanation for this distinction is that vegans may be more inclined to make compromises with eggs and dairy products, if they make such compromises at all, compared to animal flesh. Additionally, the fact that dairy and eggs do not necessarily require the killing of animals for human consumption may contribute to a lower psychological barrier for vegans when considering compromises in relation to these products.

Initial motivation	Example	Count
Ethical concerns for Animal welfare/rights	Animal suffering, animal cruelty, animal welfare, animal rights	29
Environmental concerns	Climate change, climate crisis, sustainability, environmental impact of animal agriculture	24
Health considerations	Personal health	10
Taste preferences	Meat disgust preferred the taste of vegetarian food	5
Family members	Vegetarian family members	2
Personal	Personal responsibility, personal challenge	2
Cultural	Religious beliefs of the family	1
Financial	Price of vegetarian and animal product	1
Food safety	Safety of cooking animal product	1

Table 4-2. Initial motivations (from survey responses). What each motivation entails is provided in the example. The number of respondents who cited each motivation is reflected in the Count column

Added motivation	Example	Count
Environmental concerns	Climate change, climate crisis, sustainability, environmental impact of animal agriculture	16
Ethical concerns for animal welfare/rights	Animal suffering, animal cruelty, animal welfare, animal rights	12
Health considerations	Personal health	9
Financial benefits	Financial benefits of cutting out meat	2

Added motivation	Example	Count
Taste preferences	preferred the taste of vegetarian food	1
Easiness to prepare	More variety and easy to cook vegetarian food	1
Availability	Abundant and cheap vegetarian options	1

Table 4-3. Added motivations (from survey responses). What each motivation entails is provided in the example. The number of respondents who cited each motivation is reflected in the Count column.

4.3 Barriers

Many challenges to sustaining various types of vegetarian diets are evident in the responses provided by the interviewees. These barriers are derived from the difficult situations described by the participants and can also be inferred from their suggestions for improvements when asked about ways to enhance the accessibility and ease of maintaining their respective diets.

4.3.1 Individual factors

The following factors have been identified as barriers to adopting or maintaining a vegetarian diet, based on the responses provided by the interview participants and survey respondents.

Taste preferences

The hedonic aspect of taste enjoyment serves as one reason for flexitarians and other types of vegetarians to occasionally consume meat or other animal products. This may involve a particular type of food, such as dairy or fish, a specific dish that holds personal significance, or even intense cravings. Participant 16 exemplified this by expressing their occasional consumption of a special dish prepared by their grandmother, driven by the enjoyment derived from its taste.

“When my grandma cooks a very specific dish that has meat...I want to eat this thing that my grandma cooks from time to time. I just like the taste of it. It's chicken breast. She cooks it in a way that's very particular her own recipe, so whenever she cooks it and then I take one bite. It's not my full meal, but I just take one bite because I want to taste it again.” --P16

Engaging in such exceptions can induce feelings of guilt among certain participants. Ethically and environmentally motivated vegetarians often recognise that consuming meat and dairy products contradicts their personal values, leading to internal conflict when they find themselves consuming these foods.

“Even though according to the ethical model I have in my head, I should limit myself to vegan food. But vegetarian is where I have decided to draw my practical line.” --P4

Two participants disclosed their practice of using animal products they enjoy but do not regularly consume as a form of indulgence on special occasions like holidays or birthdays. Participant 4, who predominantly follows a vegan/vegetarian diet at home, mentioned using meat as a personal reward on their birthday. Similarly, flexitarian Participant 9 occasionally treats themselves to their favourite salmon.

“And thinking of it as a treat in a way, even though I know it's probably not that good...It did come from an animal, which I find very sad. But in those moments, I don't really think of that. And more think of it as, ‘I've been able to survive a year without deciding to eat meat for myself’. And so it's kind of a reward in that sense. Even though it doesn't work out with my personal beliefs.” --P4.

“For a holiday, I would buy salmon or like, once in a while a treat” --P9

Certain food items can present greater challenges when it comes to letting go of them. Among these, cheese has been identified as particularly difficult to resist. Participant 4 expressed their strong fondness for cheese and acknowledged the conflict between their ethical beliefs and the temptation of cheese. Despite this conflict, they admitted that they would still choose to consume cheese.

“When I’m eating outside, it’s not necessarily a pressure from society, but just a want for cheese. Cheese is so hard to resist that I decide to buy a hamburger with cheese or pizza with normal cheese.” --P4

In the same boat, Respondent 42, who is currently a vegetarian and gradually reducing dairy consumption, also faces challenges when it comes to reducing their intake of cheese.

“...but cheese, you know, so hard” --R42

The availability of satisfying vegetarian options can serve as a determining factor for individuals choosing meat over vegetarian alternatives. A participant, who primarily follows a vegetarian diet, mentioned that they would opt for meat if they find the vegetarian options unsuitable for their taste preferences.

“If I was on a menu and there were a couple vegetarian options, but they were really not very interesting or not good or I didn’t like them. And then there was a meat option. I might choose the meat option.” --P15

In short, taste enjoyment, including personal attachment, indulgences, and the availability of satisfying vegetarian options can influence the occasional consumption of meat and animal products among flexitarians and other vegetarians. Ethical conflicts and the temptation of certain foods pose challenges to maintaining a strict vegetarian diet.

Health

Health conceptions have shown influence among the participants in this study. Despite a higher degree of awareness among vegetarians concerning the health benefits of a plant-based diet, health concerns can still pose obstacles to fully embracing a meat-free vegetarian diet. In this context, the maintenance of a healthy diet and the avoidance of nutrient deficiencies, such as anaemia, were identified as shared reasons among two interviewed flexitarians for keeping meat in their diet.

“I do eat meat like once a week, because I have anaemia. So I just feel very tired unless I have iron. So I will never go fully vegetarian or vegan.” --P5

“I was a vegetarian back in undergrad. But then, there was one or two times when I got an anaemia reaction in my body, and I passed out in the train because I didn’t have sufficient iron. So I had iron deficiency, that I started to eat meat again, but only not as frequent as usual people. So only one or two times a week.” --P6

However, health concerns do not necessarily constrain individuals from pursuing a vegetarian diet. Notably, one participant has resorted to the use of supplements as a means of mitigating the health risks associated with a vegetarian diet, despite their doctor's recommendation to consume meat.

“There have been quite a number of doctors over the years who have challenged my way of eating because I have low iron and so they all think I need to eat meat to get that. I just ignored them, pretty much, or I would ask for supplements.” --P1

This finding aligns with previous research indicating that ethically-motivated vegetarians often prioritize the welfare of others over their own health and well-being (Fox & Ward, 2008). However, it is important to note that not all vegetarians share this perspective, as some individuals may prioritise their own health when confronted with internal moral conflicts.

“If I find myself somewhere where I really need to eat and there's nothing else to eat, I would put my health over this because I'm not going to die. I was like a hero saying I'm not going to be a martyr, I'm not going to die over my beliefs. I'm not going to go unhealthy because of my beliefs. I don't think that's logic from my point of view.” --P12

While health concerns can pose obstacles to fully embracing a meat-free vegetarian diet, participants in this study showed different approaches. Flexitarians can include meat in their diet to avoid nutrient deficiencies where vegetarians can also choose to take supplements to address these health risks. The latter aligns with previous research highlighting that ethically-motivated vegetarians may prioritise the welfare of others over their own health. However, individual perspectives vary, and some vegetarians prioritise personal health when faced with moral conflicts.

Knowledge/capability/skills

Given that this study encompasses various types of vegetarians, it is notable that they possess a substantial understanding of animal products, which reinforces their decision to reduce meat consumption. The only capability barrier observed here is the lack of financial capability and time to purchase vegetarian alternatives. This was expressed by a participant residing in an area where plant-based protein is costly. Consequently, this participant acknowledged occasionally consuming non-vegetarian meals despite their values.

“If I had the money and the time...in Spain there's not as many cheap easy vegetarian [substitutes] like fake meats and stuff. So, I think if I had more access, my values tell me I should be vegan.” --P15

This finding aligns with the results of a previous study conducted by Menzies and Sheeshka (2012) on the factors contributing to exiting vegetarianism. When individuals perceive the maintenance of their vegetarian diet as a hassle, such as due to too much work and too expensive, they may revert back to consuming meat.

4.3.2 Social factors

Social norms and relationships

Relationships with family and friends can also influence the adherence to vegetarian diets. Among the survey respondents, 30 individuals reported experiencing challenges when eating with others, particularly family members and friends. The main challenge reported by most vegetarians is the pressure they face in food-related social situations with non-vegetarians. This pressure often manifests in various forms, including others making fun of vegetarians (jokes), receiving concerns about health (worries), receiving doubt or disapproval of diet (arguments), and not being accommodated when dining out (lack of accommodation).

Traditional family dinners during holidays are often highlighted as situations where these pressures arise. Relationships with family members who do not comprehend the reasons behind the vegetarians' dietary choices or do not share the same values are frequently identified as sources of pressure.

“Whenever I'm back to my homeland which is very traditional and where meat occupies a crucial place in the cultural identity. I am clearly positioned as an outcast, typically during family dinners, where jokes and nasty comments are systematically made” --R1

“During family gatherings like Christmas for example. In France, we eat a lot of meat and fishes for Christmas, and as I don't want to impose my diet to the family, or I don't really know what kind of alternative I could use, then I would have some meat or fish (even though I feel like I don't even like it anymore).” --R4

“I would say my relatives are a bit more sceptical about it [meat avoidance], because they're an older generation, they have different set of values and a different understanding of sustainability and the importance of individual choice...It's kind of annoying to hear that, when I'm here with my family, it's kind of like an uphill battle. “--P5

These examples highlight the influence of cultural values associated with food. The respondents/participants' statements reveal a connection between family dinners featuring traditional foods and their cultural backgrounds. These backgrounds, in turn, shape prevalent values and can create a conflict between traditional values (e.g., cultural identity) and vegetarian values such as environmentalism and dietary individualism (the value that dietary choices are personal matter, Warde, 1997; as cited in Jabs et al. 2000). This tension experienced with family members during food-related gatherings supports previous research by Jabs et al. (2000), which suggested that vegetarians who reject symbolic foods may challenge family identity and create tension. Additionally, the adoption of a vegetarian diet by one family member can impact family relationships and lead to decreased interactions. However, while some participants in this study choose to remain consistent with their diets, others opt to make exceptions during family events as a means of avoiding tension.

“And in fact, I'm considering doing it [eating meat] next time. So, next Christmas dinner, I think I will eat meat, and everyone will be happy. “--P2

Furthermore, despite the potential understanding of others regarding their dietary choices, many respondents/participants expressed the perception that their dietary preferences inconvenience non-vegetarians during shared meals, whether at someone else's home or in restaurants. This sentiment is particularly pronounced when individuals are dining with hosts whom they are not well acquainted with or when they are the only ones with dietary restrictions.

“I've had social instances (twice or three times tops) where I've been in a group who all been served something with meat, and I don't know the host well enough to mention at the time. I will often mention after but not say anything during the meal as so not to disrupt the atmosphere or inconvenience/stress the host.” --R18

“I just check the menus beforehand, but it can be very inconvenient, especially if I'm getting food with someone else. In that case, I feel bad, as though I'm causing a fuss.” --R2

In social situations, to avoid inconveniencing others and argument around vegetarianism, many vegetarians report being more likely to bend their rules and compromise their diet due to social pressure. For example, one vegan participant would compromise on dairy when cooking with friends.

"If they cook with dairy, then I sometimes eat it because I also don't want to put too much effort on others if it's a group." --P10.

Another vegan respondent chose to follow an ovo-lactovegetarian diet when travelling to accommodate non-vegan friends' need.

"I don't want to be an inconvenience to others (I don't want them to pass every restaurant because there's nothing vegan on the menu). In general, when I'm traveling I follow a vegetarian diet." --R16

Likewise, certain participants have indicated that they prioritise the happiness of others over their own dietary preferences in social settings. This willingness to compromise is evident among both self-identified flexitarians and vegetarians. Examples of such compromises may arise when someone prepares food specifically for the them.

"I don't feel bad if I sometimes eat it when friends cook or when once a year my mom wants to do the special cake, then I give her the pleasure of doing it. It's okay." --P10

Similar to the findings of Jabs et al. (2000), individuals following a vegetarian diet may refrain from announcing their dietary identities when they anticipate a negative response from omnivores. This study also supports the notion that vegetarians may opt to conceal their vegetarian identity to avoid conflicts or arguments stemming from negative perceptions from those around them.

"I'm very careful to never say out loud, 'by the way, I don't eat meat' or stuff like this. I try to like tone it down." --P2

Nonetheless, despite the pressure exerted by social relationships, vegetarians maintain a steadfast self-perception and do not readily compromise on their dietary choices. In this type of situation, many participants choose to modify their vegetarian identity by using a more accepted reason such as health issues or allergies as reasons to maintain their diet in social situations. This approach serves to avoid conflicts and maintain social harmony.

"So if they invite me, I say I don't eat nuts and seafood. And to be honest, it's really sad, because people are more accepting of it, if they assume it's an allergy." --P5

This finding is consistent with previous research conducted by Greenebaum (2012), which similarly proposed that vegetarians strategically choose health-focused motivations in anticipation or in response to low public regard. This strategic modification serves as a means to manage social affiliations with non-vegetarians and minimise potential conflicts caused by moral discussions (Greenebaum, 2012). Furthermore, a study by MacInnis and Hodson (2015) supports this notion by indicating that omnivores tend to view vegetarians due to health motivations more favourably compared to those motivated by ethical considerations. Rosenfeld and Burrow (2017a) further suggest that the impact of low public regard on the discrepancy between in-group and out-group labels, influencing how individuals present their identities to fellow vegetarians and non-vegetarians.

Cultural context

In Western cultures, such as Sweden, vegetarianism is commonly regarded as a voluntary choice (Beardsworth & Keil, 1991), whereas in certain other regions, it can be associated with poverty and limited access to food. The prevalence of voluntary vegetarianism in these areas is lower, and the motivations behind it are not as well understood by the public. In these contexts, meat holds cultural significance, and its provision to guests serves as a display of hospitality by hosts.

Several participants in this study shared their experiences where the cultural value attributed to meat led them to make exceptions to their vegetarian diets. Notably, two participants recounted their encounters while volunteering in regions where meat was scarce and highly prized by the local population. In one instance, a vegetarian participant consciously deviated from their dietary restrictions in order to assist individuals who highly valued meat but lacked the means to afford it.

“In Malawi when we were living with host families, you could either and the peace corps would give the host families food to compensate them. You could either tell them you're pescatarian, you're vegetarian, you could tell them if there was a diet that you wanted. I started off being vegetarian because that's just what I was. But then one of my fellow volunteers pointed out that, hey look, this is like one of the few times that they'll get meat. so why not say you eat meat so that your family can have access to that meat. So later on I switched and I told them I wasn't vegetarian, so that I could have that meat brought into my to my host family. And so that was kind of a pressure because it was I think I was acknowledging the kind of cultural value of meat in that context.” --P15

Similarly, another vegetarian participant also shared a situation where they were offered meat as hospitality of their host family, and they argued that it would be against their value of compassion to not respect this cultural difference.

“And the place I would stay in, it was with one of the families, and these families, they are extremely poor...and they were giving me a bed, and they were feeding me. Like, these people, they don't have anything, and they were giving me food. And of course, the food that they were giving me was the typical Costa Rican thing, which is rice, beans, pasta, salad, and meat. And this meat and all of this, you know, food is something that cost a lot of money and a lot of effort for these people. So, how in the world would I just say no and just throw away food and just make it, you know. If I'm talking about compassion and I'm talking about all these things, that just doesn't align with me, like that wouldn't make sense.” --P12

Although these types of experience is not typical among most of the respondents/participants, they serve as a reminder of the varying perspectives on meat across cultures. They emphasise the existence of cultural differences and the significance placed on meat as a cultural symbol. For instance, an Indonesian participant shared that adopting a vegetarian diet for environmental reasons is uncommon in their culture due to the perception of meat consumption as a privilege reserved for the fortunate.

“I don't think many people in Indonesia really realise about the environmental aspect of being vegan or vegetarian, because most of the staples are basically vegetables and only the wealthy people who can't afford eating beef every single day.” --P6

On the other hand, regardless of the prevalence of vegetarianism in the countries and novel vegetarian accommodations are made in many dining places, traditional dishes remain a considerable barrier for vegetarians who are travelling. Many participants in this study have reflected that they had to skip some traditional meat-centred dishes although they would like to experience the culture they bear. This also connects to the availability that will be discussed in the next section. This social and cultural barrier is closely connected to the situational barrier of vegetarian option availability.

Stereotyping/stigma

Vegan and vegetarian stereotypes are shown to be a concern shared among several participants as they respond to the question of *what they wish to be changed to make being vegetarian easier* (Question 10). This refers to the perception and assumptions non-vegetarians hold about vegans and vegetarians

regarding political inclination and other stereotyped behaviours. From their own experience, a participant found themselves in a situation where others link their food choice to political stance.

“...a lot of times when you say you're vegan when you say you're vegetarian, people assume that you're left-wing, people assume that you are environmentalists, and they assume that you have another set of a whole set of values that goes with it” --P5

Another participant mentions that they become cautious when others challenge their vegetarian identity because they do not want to act as the stereotype where vegetarians force their values and beliefs on others.

“Where I'm more cautious is when people, don't like when vegetarians or vegans impose it on them I think that that is a big stereotype, is that we force it on other people.” --P15

From a different perspective, another participant displays resistance to the label *vegetarian* for the same reason.

“That's why sometimes when I stopped eating meat, I didn't like to think that I was vegetarian because I thought that people would immediately put me in a box.” --P12

Previous studies have shown that anticipated vegetarian stigma discourages omnivores from adopting a vegetarian diet because of the associated negative characteristics such as being unhealthy, weak, insane and freak (Markowski & Roxburgh, 2019) .

Conversely, in this study, many respondents/participants have also reported occasional negative emotions associated with their vegetarianism. However, these sentiments did not stem from regretting their decision to abstain from meat; rather, they were primarily rooted in the perceived trade-offs and sacrifices made, particularly when engaging with cultural experiences through food.

“I've always felt almost sad. I didn't get to try more foods before I became vegan.” --P11

This can also be observed in other social occasions when participants wish to share the same food with other or they feel that their dietary choice is burdening other people.

“The most challenging situation is having dinner with friends and wishing I could eat the same thing.” --R12

“It could feel like I am asking a lot of people I don't know well or who don't know much about my diet. I don't want to be a burden or cause anyone extra work just, so I can eat too.” --R39

This evidence is supporting the observation found in previous research that vegetarians are facing embitterment, the feeling of bitterness and upset about their dietary choice (Reuber & Muschalla, 2022). However, neither the embitterment nor the negative stereotypes are seen as a significant barrier to the maintenance of vegetarian diets in this study.

4.3.3 Situational factors

Availability

Respondents/participants generally do not find it challenging to find vegetarian options in most places even when eating out in Sweden.

"In Sweden I have never had any major challenges finding vegetarian options when eating out." --R11

However, participants in the study expressed additional concerns regarding the visibility, quality, and nutritional value of vegetarian options. One participant highlighted the issue of vegetarian options not being displayed on the menu, even though certain cafes do provide them upon request.

"They have sandwiches on display, but they will make you a vegan sandwich if you ask. But that's not listed anywhere. You would have to just know to ask." --P1

At the same time, several participants have experienced encountering limited vegetarian options, such as being offered only side dishes such as salad and fries, when dining at non-vegetarian establishments with others. The inadequate quality and nutritional value of these available options often result in frustration among vegetarians.

"And then I find that then it's very hard and it's annoying because I want to be out with my friends all the time and it's like I eat green salad and then I can eat some French fries." --P7;

"I like to try new foods and so when I see opportunities to try new foods from different cultures or something, I am tempted to try it. Also, when there are bad substitutes (for example, vegan baked goods are hard to find). I don't think I deal with it very well, hence the flexitarian label." --R33;

"I mean you can always find vegetarian food. I can eat a salad but how much really nutritional value does that have? Very little." --P14.

This aligns with what was reported by Mullee et al. (2017) that the lack of appealing and nutritious vegetarian alternatives hinders semi-vegetarians and omnivores to move towards less meat consumption.

Contrary to the perceived ease of finding vegetarian options in Sweden, participants face difficulties in maintaining their diet when in their home countries or traveling abroad to places where meat is a significant component of the traditional cuisine. Another challenge arises when participants struggle to reconcile their dietary choices with their desire to immerse themselves in the local food culture or fear of missing out. A vegan participant expressed a sense of sadness for not being able to explore a wider range of foods before adopting a vegan lifestyle. This dilemma is further compounded by the pressure from meat-eating peers, as vegetarians must justify their choices and counter others' expectations of them feeling deprived.

"I've always felt almost sad. I didn't get to try more foods before I became vegan." --P6.

This dilemma is further intensified by the pressure from meat-eating peers, as vegetarians must justify their choices and counter others' expectations of them feeling deprived.

"They feel bad about letting people down or feel bad about not experiencing the food about not experiencing it, sometimes okay especially if it's a very famous or very popular dish then I would feel kind of annoyed that I don't get to experience it or that they haven't made an accommodation that's vegetarian." --P14

The cost of vegetarian alternatives is less frequently cited as a barrier among the respondents and participants in this study. Many have noted the ease of finding vegetarian options in Sweden.

"Because I've honestly yet to be at a restaurant where a vegetarian choice doesn't exist. I find it very easy to find at least one or two choices that are vegetarian." --P4

However, the availability of vegan options, in particular, poses a constraint for those seeking to align more closely with their moral and environmental values. For some participants, price becomes a hindrance to fully embracing a vegan lifestyle, as vegan alternatives for ice creams and chocolate are either unsatisfying in taste or too expensive for them.

I want to be vegan. But I also really like chocolate and ice cream. So I often when I buy things now as a vegetarian. If I buy something with dairy in it, or I buy something with eggs in it, then I feel very conflicted and I feel like I shouldn't be getting this.--P1

Another concern raised is the pricing fairness of vegetarian options in certain restaurants. One participant expressed dissatisfaction with being charged the same price for a modified vegetarian dish, where the animal-based component was omitted, perceiving this as an unfair practice.

"I mean if it's a small piece of the dish and they left it out okay fine that's not a big deal, but if it was the main thing and all they're serving me now is vegetables that costs you close to nothing, so it makes no sense to charge me the same amount" --P14

The availability barrier usually does not hinder the maintenance of the participants' vegetarian diets when they choose where to eat. The problem comes when they have no control over where they have their meals, for example, when they need to accommodate other people or receiving work lunch or other meals due to work arrangements.

"During our shifts, it was required that we were given food. One day, they only had an option with meat. And if I didn't eat the meat, there was literally nothing." --P2

Factor	Count
Situational factors	
Availability	16
Eat out (e.g., in restaurants)	10
Unfamiliar environments (e.g., travelling in other countries)	16
Social	
Social relationships (e.g., eating with other people, especially family and friends)	30
Tradition (e.g., transitional meat-based food in homeland, holidays)	10
Individual	
Cravings	3
Allergy & intolerance	2
Information on food (ingredient)	1
Nutritional intake	1

Table 4-4. Barriers to the maintenance of vegetarian diets. The numbers of respondents mentioning each factor is under the Count column

4.4 Overview of the result of the study

Factor	Literature	This study	Unique findings/comments
Individual factors			
Health	+/-	+/-	
Taste preferences	+/-	+/-	<ul style="list-style-type: none"> ● Dislike of the taste of meat and/or the preference of plant-based food is reported to be an initial motivation/reason ● Sensory dislike of meat and fish
Meat attachment	-	Not observed	*Due to the sample being different types of vegetarians
Knowledge, capabilities/skills	+/-	+/-	
Values and beliefs	+	+	The commitment of a vegetarian diet is considered a personal challenge and responsibility
Animal welfare/rights/ethics	+	+	
Environmental concerns	+	+	More significant than previous studies as many cite environmental concerns as their primary motivation
Compassion and empathy	N/A	+	<ul style="list-style-type: none"> ● In previous studies, the value of compassion and empathy is usually categorised within animal welfare concerns and not considered as a value independently. ● This finding suggests that animal welfare and environmental concerns are the

			<p>envisionment of compassion.</p> <ul style="list-style-type: none"> ● Compassion and empathy should be considered as an independent value that motivates the adoption of a vegetarian diet variety.
Personal responsibility and challenge	N/A	+	Seeing the commitment and discipline side of vegetarianism was found to be a motivation
Identity	+	+	
Social factors			
Social norm	-	-	
Social relationships	+/-	+/-	
Stereotyping/stigma	-	Not confirmed	Stereotyping and stigma was only reported to be influential to the claim of vegetarian labels, but not undermining the commitment to the diets
Situational factors			
Availability	+/-	+/-	<ul style="list-style-type: none"> ● The quality including taste and nutritional value of vegetarian options is emphasised ● The price fairness between meat options and vegetarian options is reported to be discouraging but not significant enough for them to compromise their diet

Table 4-5. Overall result of the study

+: the factor is found to be motivating (motivation); -: the factor is found to be inhibiting (barrier);

+/-: the factor is ambivalent. It can be both motivating and inhibiting depending on the contextual situation

5 Discussion

The study contributes to current literature on the motivational and inhibiting factors of the adoption and maintenance of different vegetarian diets (from stricter vegan diets, to ovo-lacto vegetarian diets, to pescatarian diets and to flexitarian diets). With a focus on a young, international (or under international influence) population, this study explored the commonality of motivations across cultural backgrounds, such as the value of compassion towards both animals and humans, the belief that one should take responsibility for reducing one's impact on the planet and so forth, and categorised the barriers attributing to personal perceptions, social contexts and situational contexts.

5.1 Reflection on results

This research contributes to the existing body of literature on the motivations and barriers of vegetarianism. By offering more qualitative empirical evidence of a unique population, this study presents a fresh perspective that adds depth and insight to the understanding of this topic.

First and foremost, this study contributes to the discourse of vegetarianism by investigating the motivations and barriers with regard to various factors. It has provided a different lens to re-examining the motivations and barriers identified in previous research and explores new ones, emphasising the crucial influence of individual factors in driving the adoption and sustainability of vegetarian diets. Additionally, it highlights the supportive role played by social and situational factors in the maintenance of such diets across various types of vegetarians.

Secondly, it shows a clear distinction in the popularity of environmental motivations behind vegetarian choices. In contrast to the findings of previous studies, which predominantly indicated that environmental concerns tend to be of secondary or subsequent importance, the present study offers compelling evidence suggesting a potential rise in the prominence of environmental concerns as primary or initial motivations for individuals in their adoption and adherence to vegetarian diets.

Lastly, this study unveiled the intrinsic values and beliefs that underlie vegetarian choices, deviating from the conventional categorisation of motivations into broad categories such as health-ethical and indicating similarities in values and beliefs among vegetarians across these categories. This finding suggests that gaining a comprehensive understanding of these values can provide valuable insights for developing effective strategies to enhance the acceptability of vegetarian diets among the general public and promote greater willingness among individuals to adopt them.

5.2 Reflection on research design

5.2.1 A qualitative approach

This study has employed a qualitative approach to investigate the motivations and barriers to the adoption and maintenance of various types of vegetarian diets. By doing so, it seeks to shed light on the broader issue of slow growth in the vegetarian population and the inconsistent adherence to vegetarianism. Additionally, the study aims to compare a distinct subset of the population, namely young vegetarians residing in Sweden who are influenced by international factors, in relation to the existing factors of motivation and barriers identified in the literature. The selection of this approach is deemed appropriate by the researcher due to the contextual nature of motivations and barriers, as they are often contingent on individual cultural and social contexts one has been exposed to that shape behavioural patterns.

5.2.2 Three categories of motivations and barriers

This study has explored the various motivational and inhibiting factors of the adoption and maintenance of a vegetarian diet using the individual-social-situational categorisation method. Previous research has predominantly employed the ethical-health framework, sometimes incorporating environmental motivations within the ethical category, to investigate the drivers of vegetarianism (Rosenfeld & Burrow, 2017b). However, recent studies have increasingly recognised environmental motivations as a distinct and independent factor separate from ethical and health considerations (e.g., Fox & Ward, 2008; North et. al, 2021). In departure from previous categorisation approaches, this study adopted a more flexible approach to go beyond general categories and attempted to reveal underlying ideologies. Consequently, it contributes empirical evidence highlighting the significance of environmental concerns in promoting the adoption and maintenance of various vegetarian diets.

Individual factors were identified as crucial in the initial adoption and the practice of vegetarian diets, for example, the shift to a stricter diet with fewer animal-derived products. On the other hand, the study revealed the importance of social and situational factors in influencing the strictness and consistency of vegetarian dietary practices. When these factors conflict with the maintenance of an “ideal diet”, vegetarians may experience negative emotions towards their dining experiences or companions and may be compelled to compromise their dietary preferences.

Such a method of categorising motivations and barriers presents notable advantages. By distinguishing individual factors, such as intrinsic values and beliefs, from social influences and situational opportunities or constraints, it provides a comprehensive understanding that acknowledges the combined effect of all three factors on the outcomes of a vegetarian dietary practice. This framework illustrates the complex nature of the motivations often cited by vegetarians, unveiling underlying ideologies that might otherwise be overlooked. By separating inhibiting factors in the same manner, it becomes evident that the challenges involved in maintaining various vegetarian diets are multifaceted and complicated. Nonetheless, it is important to recognise that this categorisation approach also has its limitations. For instance, individual factors such as values, beliefs, and knowledge are closely intertwined with social influences, as individuals gain ideas and information from the people with whom they interact.

5.2.3 Aversions and constraints

It can be argued that certain factors such as dislike of the taste or texture of meat, health issues associated with consuming animal products, or financial constraints that limit access to animal products are better characterised as aversions and constraints rather than motivations. Aversions and constraints are distinct from other motivations as they impede the freedom of food choice and do not reflect individuals' intrinsic desires and prospective goals when making dietary decisions (Rosenfeld & Burrow, 2017b).

This study has chosen to encompass factors that encourage individuals to adopt or maintain a vegetarian diet, including aversions and constraints as motivations. This is because further separating aversions and constraints from the rest would not yield additional benefits in exploring motivations and barriers. Moreover, these aversions and constraints are closely connected to other motivations as they often serve as a starting point for some respondents/participants to be receptive to the idea of vegetarianism. This could possibly be explained as these vegetarians are attempting the rationalisation of their minority dietary choice by seeking for additional reasons (Fox & Ward, 2008). Or this might also be attributed to the

way they derive their attitudes towards vegetarianism from their existing dietary practices, which are already predominantly devoid of meat (as explained by Bem's Self-Perception Theory, 1972).

As discussed in Chapters 2 and 4, vegetarian motivations often undergo modifications, expansions, and evolution over time. Stronger and more salient reasons and motivations gradually emerge from these initial aversions and constraints. Thus, factors such as taste preferences, health considerations, and financial limitations can also be regarded as motivations, as they motivate individuals to, for instance, explore vegetarian recipes and foster a more positive attitude towards vegetarian diets. Although it may appear that some individuals lack freedom of choice due to aversions and constraints, the respondents/participants in this study have demonstrated motivation and willingly identify as different types of vegetarians.

5.2.4 Population

Despite efforts to include participants from diverse cultural backgrounds, this study has certain limitations in sampling. Although the survey respondents and the interviewees represent 22 and 12 different countries each, it is important to note that the sample size is insufficient to effectively represent the vegetarian population or allow for generalisation of the findings within their respective cultural and social contexts. Furthermore, it is crucial to acknowledge the potential bias introduced by the study's context, Sweden. Many respondents/participants recognised the fact that the environmental benefits associated with vegetarian diets or vegetarian food choices are well-regarded in Sweden. According to them, the social and cultural environment in Sweden and the availability of vegetarian products are generally favourable towards vegetarianism, as indicated by their comparisons to other countries they have lived in or visited. This more supportive environment may influence how vegetarians from different countries approach the maintenance of their diets and potentially encourage more individuals to explore vegetarianism. While this study does not extensively explore the mechanisms behind this social and cultural influence, it briefly notes that some respondents/participants reported experiencing greater social acceptance of their vegetarianism in Sweden, where they faced less questioning or felt less like outsiders within a group. However, investigating whether being in an rather supportive environment like Sweden could serve as a motivating factor for non-vegetarians to adopt various types of vegetarian diets could be an interesting avenue for future research.

5.3 Other Observations and Considerations

During the course of this research, several additional observations and findings emerged, which, although not directly aligned with the research questions or central to the analysis, still worth some reflection. These topics present hints for future research to further expand and explore the discourse surrounding vegetarianism. In the following sections, a selection of these observations and findings is presented and discussed.

5.3.1 Values and beliefs

The findings regarding individual motivational factors highlight the fundamental role of values and beliefs behind ethical-health-environmental motivations. The centrality of values and beliefs in maintaining consistency in vegetarian dietary practices aligns with cognitive consistency theories, which propose that humans are motivated to address inconsistencies and strive for harmony (Colman, 2015). Festinger's (1957) cognitive dissonance theory, for instance, suggests that when an individual's beliefs and behaviours conflict, a state of discomfort arises due to the inconsistency. To alleviate or eliminate this discomfort, individuals may opt to either adjust their behaviour to align with their beliefs or modify their beliefs to rationalise their behaviour. This

might help explain why some participants express heightened commitment to their diets when confronted with challenges. In an effort to resolve cognitive dissonance, vegetarians may choose to align their eating practices with their vegetarian values. However, when behavioural change proves unfeasible, they may seek alternative methods to reduce dissonance, such as modifying their beliefs surrounding meat consumption. The latter tendency was not observed in this study, however, a prioritisation of other values and beliefs for instance, maintaining social harmony and good relationships, to justify the inconsistency in eating habits as reported in this study.

5.3.2 Vegetarian approaches and strategies to deal with challenges

The participants reported having various responses both emotions and actions towards challenging situations as mentioned in the social and situational barriers, especially when they are forced to conform to non-vegetarian social norms. The accumulation of such experience can result in vegetarians changing their approaches or forming strategies to maintain their respective diets. Some common approaches and strategies reported by the participants are below.

1. Being open to exceptions and eating what is available

This approach is commonly employed when an individual's vegetarian dietary practices come into conflict with their other beliefs or when limited food options are available.

Several participants have disclosed their flexibility in adhering to their vegetarian diets and making occasional exceptions, particularly in social settings. As discussed in Chapter 4, many participants encounter challenges in maintaining their vegetarian diets during social gatherings due to a lack of understanding, the desire to avoid inconveniencing others, and the intention to demonstrate politeness, preserve social harmony, and express gratitude to the host. Those who adopt this strategy also explicitly emphasise that their alterations in eating behaviour do not compromise their underlying beliefs and values that initially motivated them to become vegetarians.

Another circumstance in which flexibility arises regards food waste. A few participants put significant importance on acknowledging the environmental impact of food production and minimizing food waste. Consequently, environmentally-motivated vegetarians may consider various factors, including the environmental consequences, when deciding whether to consume specific foods. They make choices based on their assessment of which option would generate the least environmental impact while remaining committed to their beliefs and values guiding their vegetarian choices.

Travelling can present challenges for vegetarians if the destination lacks suitable food options that align with their dietary requirements. Some individuals have reported temporarily relaxing their dietary restrictions while travelling to avoid hunger or causing inconvenience to their travel companions. Similarly, when visiting families who do not accommodate their vegetarian needs, some vegetarians may opt to consume whatever food is available to avoid initiating conflicts or arguments.

2. Lowering overall dietary criteria and changing dietary identity

Another strategy involves adjusting one's self-perception to align with a "less strict" version of vegetarian diet when individuals feel that they are unable to adhere to their previous or ideal standards for a "stricter" dietary identity.

Certain participants expressed a perception of not meeting the strictness of their previous dietary identities, despite still predominantly adhering to their previous dietary practices. For instance, one participant identified themselves as a vegetarian while acknowledging that they are "*primarily mostly vegan,*" but include dairy and eggs occasionally, which is why they consider themselves as (ovo-lacto) vegetarian (P1). Similarly, another participant described themselves as flexitarian, as they occasionally consume meat in certain social or cultural contexts yet estimate that their diet is approximately 95% vegetarian (P15).

3. Maintaining dietary commitment regardless of the availability preferred food

A common response is the determination to adhere to one's dietary principles, even if it means sacrificing food enjoyment or compromising on meal quality. When suitable accommodations are unavailable, vegetarians may choose to selectively consume only the permissible components of a meal, thereby relinquishing the expectation of a fully enjoyable dining experience. Some individuals have learned to be prepared by bringing their own food when dining out, anticipating situations where suitable food options may be limited and ensuring their dietary preferences are met.

Similar approaches and strategies adopted by vegetarians were also observed by previous research. A study by Rosenfeld & Tomiyama (2019) has investigated the occasions where vegetarians violate their diets. Their result shows that the effort to avoid uncomfortable social interactions the most common reason behind the lapses and many vegetarians approach their diets with flexibility rather than a strict rule. The same observation is also found in this study.

5.3.3 Vegetarian process

The transition to a vegetarian diet can occur either abruptly or gradually, as evidenced by the experiences shared by many respondents/participants in this study. Prior research has shown that "conversion experiences", incidents that elucidate the link between meat consumption and animals, often lead to sudden dietary transitions, particularly among young individuals (children and young adults), while a more gradual process is commonly observed among older people (Jabs et al., 1998a). These two patterns are also apparent in the current study. Additionally, the findings confirm that a distinct conversion experience serves as a significant motivational factor for dietary change. Previous studies have identified various influences on the transition between different types of vegetarian diets, including physical aversions, life transitions, and access to information (Jabs et al., 1998a).

In previous research, dietary changes, such as adopting a vegetarian diet, have been reported as a means for individuals to regain control over their lives during significant life transitions (Jabs et al., 1998a). However, in this study, participants did not explicitly mention the intention to take control of their lives when they adopted a particular vegetarian diet variety, such as when they moved away from their families (e.g., going to university) or experienced changes in their working conditions due to the pandemic (e.g., working from home). Notably, several participants did express physical aversions, such as feeling repulsed by animal products. These individuals reported that prolonged abstinence from meat had resulted in a dislike for its taste or smell, and some even experienced feelings of nausea when witnessing others consume meat.

"But if it [a wrong order given at a restaurant] does have meat in it, it's really hard for me to have it.... because my palate has changed a lot. It's almost like it doesn't feel like food anymore. Or the taste is just so strong, so different. I couldn't have it anymore." --P10

“After so many years the taste [of meat] is just so gross to me. Even if I’m too close to someone that’s eating something I can feel nauseous.” --P14

The observed physical aversion may not solely stem from participants becoming unaccustomed to the taste of meat over time; it may also result from their association of the taste or smell of meat with activities and ideologies they find disagreeable of animal agriculture. For instance, one participant found popcorn chicken (breaded and deep-fried chicken bits) “*ideologically disgusting*” (P13). This connection becomes more pronounced as participants acquire additional information on this subject. Notably, the increase in information regarding animal suffering and environmental consequences emerges as an influential factor driving various types of vegetarians to further exclude animal-based products from their diets.

5.4 Vegetarian Identity

This study originally attempted to include vegetarian identity as one parameter to investigate vegetarian dietary practice. However, studying vegetarian identity requires a rather quantitative approach to test various factors. For example, Rosenfeld & Burrow (2017a)’s Unified Model of Vegetarian Identity, a comprehensive conceptual model for investigating vegetarian identity, is largely based on quantitative data. Nonetheless, this study has provided additional evidence of the crucial role of both personal identity and social identity in motivating the adoption of vegetarian diets. Further research utilising a quantitative approach could be beneficial to test how the other factors especially social and situational factors interact and influence the motivating effect of vegetarian identity.

5.5 The complexity of Sustainability Solutions

While this study builds upon the extensive scientific evidence highlighting the benefits of vegetarian diets and aims to promote their wider adoption in order to contribute to sustainability goals, it is important to recognise that vegetarianism is not the sole solution. Sustainability is a complex and context-dependent subject. As highlighted by one participant who shared their experience of residing in a region where animal farming practices were relatively primitive, certain farming methods may be more sustainable compared to the prevailing practices of industrialised animal agriculture. However, further evidence is required to substantiate this claim, which falls beyond the scope of this research, and thus no conclusive statement can be made on this matter.

Additionally, it is crucial to acknowledge the significance of context-specific adaptations when advocating for vegetarian diets. Vegetarian diets require careful planning to ensure adequate intake of nutrition for anticipated health and sustainability benefits. The availability of food resources can impact the efficacy of such diets. Furthermore, food production, particularly crop cultivation, varies across regions. Prescribing overly generalised dietary recommendations can pose challenges, as the environmental impact of transporting imported food may counteract the intended reduction of environmental harm through vegetarian diets. According to a 2022 study, food-miles—the carbon footprint of transporting food across the globe, counts for 19% of emissions across the food system. And especially the transport of fruit and vegetables contributes to 36% of food miles emissions, which is almost twice of those from production (Li et al., 2022). Therefore, when promoting vegetarian diets, careful consideration should be given to the specific region and the environmental impact of different food choices within that locality.

6 Conclusion

6.1 Two research questions

Despite the growing scientific evidence showing the importance of dietary changes towards vegetarian diets on lowering the environmental impact of food consumption and our food system itself, there has been no significant trend of shifting towards varieties of vegetarian diets. At the same time, there are many difficulties for all types of vegetarians to maintain their ideal diet at all times, such as the limited availability of vegetarian alternatives. To address this issue and to promote vegetarian diets in a wider population, an understanding of why people choose to be vegetarians and what exact difficulties they are facing is required. Although many previous studies have researched such a topic, a deeper dive into the underlying ideology of vegetarian motivations beyond the simple categorisation of the ethical-health-environmental framework is lacking. This study aims to gain a deeper understanding of vegetarian motivations, including the underlying goals and ideology individual vegetarians possess, and to investigate what individual, social and situational factors encourage or discourage the adoption and maintenance of their diets, in order to provide insights and hints for vegetarian diets promoters, organisations, campaigners, practitioners of vegetarian diets and policymakers to promote and make vegetarian diets more accessible and sustainable.

To attempt to achieve this goal, the following two research questions are investigated in this study.

RQ1: What are the motivations for individuals to choose and maintain a vegetarian diet?

This research question aimed to investigate the motivational factors for individuals to initially adopt and continuously maintain a vegetarian diet.

And RQ2: What are the barriers that hinder the consistent practice of a vegetarian diet?

This research question aimed to investigate the factors that inhibit the adoption and maintenance of vegetarian diets.

Both research questions were answered with three factor categories—individual, social and situational. The first category entails the factors that are unique to the individual, the second category contains factors in the social and cultural context of the individual, and the last category reflects the factors that directly influence vegetarian practice at the point of consumption.

Through the survey and individual interviews, the following factors are found to be influential to the adoption and maintenance of vegetarian diets.

Individual factors are (perceived or experienced) Health Benefits; Taste and Sensory Preferences (including the liking of vegetarian food and dislike of the taste and touch of meat); Values and Beliefs: animal welfare/rights/ethics; compassion and empathy; environmental concerns; personal responsibilities/challenges; Knowledge/Capability/Skills (on the benefits of vegetarianism and preparing a well-balanced diet for themselves); Vegetarian Identity (considering being a vegetarian part of one's self-concept)

Social factors are Supportive Social Relationships (including socialising with people with similar dietary preferences and generally open-minded people); Positive Vegetarian Social Identity (perceiving being vegetarian positive and being proud to be vegetarian).

The only **situational factor** found is the availability of vegetarian alternatives.

Based on the findings from the survey, individual factors emerge as the primary determinants influencing one's decision to adopt and maintain a vegetarian diet. Among the respondents in this study, ethical considerations regarding animal welfare/rights stand out as the most prevalent initial motivation for transitioning to a vegetarian diet, followed by environmental concerns and health considerations. As individuals progress on their vegetarian journey, environmental concerns become increasingly influential as an additional motivation, enabling them to persist in their dietary choices despite encountering obstacles, followed by ethical concerns as the second prevalent added motivation.

By going beyond the ethical-health-environmental framework and diving into the values and beliefs each vegetarian individual holds, we can observe that within ethical motivations, there are various values and beliefs that are core to the motivations. For example, the value of compassion and empathy that goes beyond caring for animals and extends to human beings was highlighted as a separate motivation from animal welfare/rights/ethical motivations. While similarly, Personal Responsibility and Challenge connect to both animal welfare/rights/ethical motivations and environmental motivations and hence a value that can be considered separately. Additionally, contrary to the previous studies where environmental motivations were considered secondary or subsequent, this study provided empirical evidence that environmental concerns are a primary and important motivation for adopting a vegetarian diet variety among this sample of young internationals in Sweden.

Factors that inhibit the adoption and maintenance of vegetarian diets are the following.

Individual factors are Health requirements (e.g., having health conditions such as having anaemia); Taste Preferences (including enjoying the taste of meat and certain dishes with meat); Knowledge/Capability/Skills (financial capability of purchasing vegetarian protein alternatives).

Social factors are Social Norms and Relationships (including meat-centred traditions and people embracing traditional values); Cultural Context (e.g., when visiting a country with different cultures and traditions about meat).

The only **situational factor** found here is the low availability of quality and affordable vegetarian options.

Among the identified inhibiting factors, social and situational factors emerged as particularly significant, with social relationships in eating situations being the most prominent concern. This was followed by the availability of satisfying vegetarian options and the challenges posed by unfamiliar environments.

While negative stereotyping/stigma is often cited as a resistance to the commitment to a vegetarian diet (e.g., Markowski and Roxburgh, 2019), in this study, it was not found among the respondents/participants to be a barrier to their commitment to their respective vegetarian diets.

6.2 Recommendations for practitioners

Based on the findings pertaining to motivational and inhibitory factors, as well as the recommendations provided by the participants regarding the facilitation of vegetarian diet maintenance, it becomes evident that there are certain challenges which can be effectively addressed in order to promote the adoption and sustainability of vegetarian diets. In this section, some recommendations and potential solutions for vegetarian practitioners are presented.

6.2.1 Increase Information

Firstly, it is crucial to disseminate knowledge regarding vegetarian diets among the general public. Although a considerable number of respondents/participants exhibit a rather high level of awareness concerning animal welfare/rights and the environmental ramifications associated with animal product consumption, many have reported encountering difficulties in social interactions with individuals who lack the same level of understanding. These individuals often feel compelled to educate some non-vegetarians as a means to justify their dietary choices. Such challenges hinder the maintenance of vegetarian diets within certain social contexts. Simultaneously, increasing public awareness regarding vegetarianism, including its inherent benefits, represents an effective approach to encouraging greater adoption of such dietary practices. Thus, initiatives aimed at heightening public consciousness of the impact of meat production and the advantages of transitioning towards vegetarian eating habits should be pursued through educational programs, information campaigns, and policy measures. These efforts hold significant importance for vegetarian advocates and policy-makers seeking to promote the adoption of more sustainable diets.

At the same time, increasing information on how to substitute with vegetarian alternatives is also recommended to both vegetarian food promoters and food providers. This added information can alleviate the challenges associated with cooking unfamiliar ingredients for both those who intend to try out vegetarian options and those who intend to accommodate vegetarian guests.

However, practitioners should also note that information can be a double-edged sword. An overwhelming amount of information can possibly confuse consumers. Hence, it is important to make sure the information is relatable and digestible and customised to their targeted consumer group. Some vegetarians have suggested that compared to emphasising the environmental impact of animal agriculture, they found that animal suffering and cruelty are more relatable. And as a matter of fact, animal welfare/rights/ethics-related motivations are the most prevalent reason for all types of vegetarians to adopt their diet in this study. From the individual motivational factors found in this study, messages focusing on, for example, greater empathy and personal responsibility can also be used to target audiences that possess such salient values.

6.2.2 Better Options

For restaurants and other food providers who aim to accommodate better different types of vegetarian diets, this study recommends they increase the availability of vegetarian options, by for example, creating more vegetarian varieties (that accommodate various types of vegetarians, not only ovo-lacto vegetarians) that have the same quality as non-vegetarian options, or introducing more naturally vegetarian cuisines. Naturally, taste and nutritional value should also be considered.

Simultaneously, it is important to give due attention to vegetarianised versions of traditional dishes. As articulated by many respondents/participants in this study, travelling to foreign countries where meat plays a central role in the traditional diet poses significant challenges for vegetarians. They express difficulties in finding vegetarian alternatives, both in general and particularly for traditional cuisine. Moreover, they note that vegetarian options in restaurants only rarely replicate the essence and authenticity of traditional dishes. Therefore, a concerted effort to develop high-quality vegetarian adaptations of traditional cuisines would encourage travelling vegetarians to embrace the cultural experience without compromising their nutritional intake, violating their dietary principles, or forsaking their values.

A similar approach should be taken regarding naturally vegetarian dishes. Some participants have pointed out that their options are usually limited to the use of vegetarian alternatives, which are frequently perceived as highly processed and raise concerns about their health and nutritional value. Consequently, incorporating more naturally vegetarian dishes that utilise minimally processed ingredients could serve as a means to meet the requirements of health-conscious vegetarians.

6.2.3 Fair Prices

Another important aspect is ensuring that vegetarian options are reasonably priced. This recommendation stems from a participant's observation of the issue of unfair pricing for vegetarian meals of lower quality. The participant noted instances in certain restaurants where vegetarian options were simply meatless versions of dishes yet were priced the same as their meat counterparts. In light of this, adjusting the pricing to make vegetarian options more affordable compared to meat-based options can not only promote fairness for vegetarians but also offer a financial incentive for a wider audience to opt for vegetarian food.

6.3 Further research suggestions

The findings of this study suggest several promising avenues for future research.

There has been a number of studies focusing on health and ethical vegetarians, including a comparison of the process of dietary change (e.g., Jabs & Sobal, 1998a), the strength of beliefs, dietary duration, restrictions, nutrition knowledge (e.g., Hoffman et. al, 2013) etc., yet environmentally-motivated vegetarians are less studied as their own category. This present study has recognised that environmentally-motivated vegetarians are growing in significance and popularity compared to previous evidence. This distinct category embraces values and beliefs that are separate from those rooted in health or ethically motivated ones. Therefore, investigating the characteristics and behaviours of environmentally-motivated vegetarians could yield valuable insights.

Another area worthy of investigation is how vegetarians navigate conflicts in their values and beliefs. This study revealed that vegetarians employ unique strategies to address challenging situations, often involving a negotiation of their underlying principles. However, the precise functioning of this negotiation process was not explored in depth. A closer examination of this aspect could provide deeper understanding of the decision-making processes and potential solutions that facilitate the transition to a more vegetarian dietary choice.

Furthermore, it is recommended to expand the study's sample to encompass greater cultural diversity in order to assess the generalisability of the findings. Although efforts were made to include participants from diverse cultural backgrounds, which indeed allowed the exploration of the shared characteristics of vegetarians with different backgrounds, it failed to represent a

wider population. The respondents/participants are mostly from more economically developed countries and mostly Europe, and hence lack broader representation across different social and cultural contexts. Therefore, to establish the broader applicability of the findings, a larger sample with greater diversity in cultural backgrounds should be considered.

Moreover, examining a larger sample of the study population—young internationals residing in Sweden could provide additional insights into how changing cultural and social environments influence vegetarian choices. This particular population, which has experienced cultural transitions by moving to Sweden from their home countries, offers an interesting perspective. Investigating how these changing contexts shape their values, beliefs, and vegetarian practices would contribute to understanding the most influential factors driving dietary behavioural changes.

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Appendix

Appendix 1. Research Plan

Research Plan		January					February				March				April			May			
TASK	Calendar Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 Research Design and Planning																					
1.1	Scope down research topic																				
1.2	Finalise research questions and research aim																				
1.3	Develop research design																				
1.4	Write thesis proposal																				
1.5	Draft methodology																				
2 Literature review																					
2.1	Gather relevant literature																				
2.2	Synthesise information into themes (using synthesis matrix)																				
2.3	Draft literature review																				
3 Data collection																					
3.1	Develop survey																				
3.2	Develop interview guide																				
3.3	Interview																				
3.3.1	Draft data collection part of methodology																				
4 Data Analysis																					
4.1	Prepare data for analysis (transcribe and organise)																				
4.2	Analyse data (select codes and code with NVivo)																				
4.3	Synthesise findings																				
4.4	Draft analysis and findings																				
5 Writing up																					
5.1	Write introduction																				
5.2	Write conclusion and discussion																				
5.3	Review draft with supervisors																				
5.4	Peer review																				
5.5	Editing and formatting																				
5.6	Final submission																				

Appendix 2. Supervision Plan

The supervision is based on weekly meetings with my supervisor, and written emails on demand to check in on progress and discuss new ideas.

Appendix 3. Survey on vegetarian identity (for all types of vegetarians and former-vegetarians)

This survey is part of my master’s thesis project for the Environmental Management and Policy programme at Lund University. The aim of the study is to explore how vegetarian identities are managed and shifted over time due to different situations.

You will also get a chance to win a 200 sek Coop gift card*!

* the winner will be drawn randomly from the participants. The email address you enter will only be used for the lottery and for contacting purposes if you agree to participate in an interview (more information in the end of the survey). All personal information will be secured and deleted after the study.

Thank you for participating!

All the best,

Ziyue

No.	Question	Options
1	Tell me about your age.	<20 20~29 30~39 40~50 >50
2	Tell me about your gender	Male Female Non-binary Others Prefer not to say
3	Where do you consider as your homeland?	
4	Where do you currently live?	
5	In general, which animal-derived products do you exclude from your diet? (Please select all that apply)	Egg Dairy Red meat Poultry Seafood
6	Which dietary identity do you relate to the most at the moment? (e.g., vegan, vegetarian, flexitarian etc.)	
7	How long have you been following this dietary pattern?	
8	To what extend do you think your dietary identity is more than a dietary choice, it also defines who you are?	Not at all to Very much (scale 1 to 5)
9	Has your dietary identity changed over time? (eg. vegetarian to vegan, vegetarian to flexitarian) If so, how and why did it change?	
10	What are your main reasons for choosing such a diet?	
11	Have your reasons changed over time? If so, how have they changed? (e.g., I chose being vegetarian for my health, now I consider environmental benefits my main reason of maintaining it)	
12	How do you think of others who follow the same dietary pattern as you?	
13	How do you think of others that do not follow the same dietary pattern?	
14	How others react to you being this type of dieter?	
15	How important is it for others to acknowledge your dietary identity?	Not important at all to Very important (scale 1

		to 5)
16	How strict are you in following your vegetarian diet (any type)?	Not strict at all to Very Strict (scale 1 to 5)
17	How difficult do you feel to maintain your vegetarian dietary pattern? (If you are a former vegetarian, how difficult did you feel when you were vegetarian?)	Very easy to Very difficult (scale 1 to 5)
18	Have you ever compromised your dietary choice?	Yes No I don't remember
19	In what situations do you feel the most easy/challenging to maintain your vegetarian diet (any type)? Why and how do you deal with challenging situations?	
20	Would you help make a change by participating in a short interview (30 minutes)? <i>The interviews will take place in March. More information will be sent to your email address.</i> Would you like to be in a short online interview on your vegetarian story? I will make you a vegan muffin (if you are in Lund or Malmö), or buy you a coffee in return!	Yes, sign me up! No, but I wish you good luck!

Appendix 4. Interview invitation email

Good morning,

Thank you for signing up for the interview!

Here you can find more information about what to expect and how to book a time for the interview.

First and foremost, I would like to introduce myself and my research project.

My name is Ziyue Wang, and I am currently a second-year student in the MSc. in Environmental Management and Policy (EMP) at Lund University. My thesis project is about how vegetarians perceive and manage their vegetarian identities and behaviour, and how these identities shift over time, especially under challenging situations. The goal of the project is to help narrow the attitude-behaviour gap in choosing a vegetarian diet.

What to expect 🗣️

The interview will be approx. 30 minutes and takes place via Zoom. It shall be recorded unless explicitly requested otherwise.

As a thank you, I will make you a vegan muffin if you live in Lund or Malmö, or buy you a coffee! The practicalities will be communicated via email after the interview.

Before you book an interview slot, I would like to reiterate the purpose of the interview and clarify the data confidentiality in this research project.

The purpose of the interviews is to gather empirical data for the abovementioned thesis project.

Participation in the interviews is voluntary.

All the participants of the interviews shall be kept anonymous.

All the demographical information disclosed by interviewees shall be confidential and used only in data analysis.

If I shall quote your response directly in the final work, I will inform you and ask for your permission before publishing.

The interviews shall be recorded and transcribed for data analysis purposes only. All data will only be available to the researcher and shall be destroyed after the research project is completed.

By booking a time for an interview, you are acknowledging the above terms.

How to book a time

To book a time for the interview, please use the following Calendly link to book an interview slot:

<https://calendly.com/ziyuewang9803/30min>

You will get the link to the interview Zoom room after a successful registration.

If the timeslots on this page do not suit your schedule, you are more than welcome to contact me and suggest a time that works for you.

If you have any questions, please let me know by replying to this email. I will get back to you as soon as possible.

Thank you again for your contribution! I look forward to talking to you soon.

Best regards,

Ziyue

Appendix 5. Profile of survey respondents

Respondent no.	Dietary identity	Respondent no.	Dietary identity
1	Vegetarian	26	Vegetarian
2	Vegetarian	27	Vegetarian
3	Vegan	28	Vegetarian
4	Vegetarian	29	Flexitarian

5	Vegan	30	Vegetarian
6	Vegan	31	Flexitarian
7	Vegetarian	32	Vegan
8	Flexitarian	33	Vegetarian/flexitarian
9	Vegan	34	Vegetarian
10	Vegan	35	Vegan/flexitarian
11	Vegetarian	36	Flexitarian
12	Flexitarian	37	Flexitarian
13	Vegetarian	38	Vegan
14	Vegetarian	39	Vegan
15	Vegan	40	Vegan
16	Vegan	41	Vegan
17	Vegetarian/Pescetarian	42	Vegetarian
18	Vegetarian	43	Vegan
19	Vegetarian	44	Vegan
20	Semi-vegetarian/flexitarian	45	Freegan
21	Vegetarian	46	Vegan
22	Vegetarian	47	Vegan
23	Pescatarian-flexitarian	48	Vegan
24	Vegan	49	Vegan/vegetarian
25	Vegetarian/Pescatarian	50	Vegan

Appendix 6. Profile of interview participants

Participant no.	Dietary identity	Diet duration	Country
1	Vegetarian	1 year vegetarian (but vegan/vegetarian for 9 years)	Canada

2	Vegetarian	6 years	France
3	Vegan	6 years	UK
4	Vegetarian	3 years	Sweden
5	Flexitarian	5 years	Italy
6	Flexitarian	3 years	Indonesia
7	Vegan	2 years	Sweden
8	Vegan	2 years	Lithuania
9	Flexitarian	3 years	US
10	Vegan	3 years	Germany
11	Vegan	5 years	Singapore
12	Vegetarian	6 years	Costa Rica
13	Vegan	8 years	Italy
14	Vegetarian	5 years	US
15	Flexitarian	vegetarian/vegan for 12 years, flexitarian (less strict) for about a year	US
16	Vegetarian	5 years	Dominican Republic

Appendix 7 Interview guide

Interview questions

1. How do you describe your current dietary pattern and why do you choose such a diet?
2. What are your **personal values and beliefs** behind making the decision of choosing such a diet? What do you want to **achieve** through having a vegetarian diet? It can be for yourself, for society or for other people.
3. Have any of these **changed** over time? If so, how and what caused the change?
 - Did you expand your reasoning through being vegetarian/vegan/pescatarian/flexitarian, e.g., learned more reasons to maintain the diet or go stricter?
4. Do you think being vegetarian is part of your **self-concept**? If so how **important** is it?
 - Can be rephrased as: “Being vegetarian shapes who you are, or when you describe yourself you think that you are a vegetarian”
 - Are there any other aspects of your identity that can contradict your veg identity? Other things you value that can sometimes hinder your vegetarian diet? If so, what

5. How does your **social and cultural environment** influence your vegetarian identity?
 - How have your **social relationships** such as with **family** and friends influenced your vegetarian identity?
 - How have the **perceptions of others** shaped your vegetarian identity?
 - How do you perceive your vegetarian identity when others or the environment challenge your identity?
6. Can you describe some **situations** when you feel **pressured to conform** to non-vegetarian norms and **compromise** your diet? How do you **feel** and how do you **respond** in such situations?
7. How do you navigate **social situations** where vegetarian options are limited or unavailable? (For example, dining out)
 - How do you feel and what do you do?
8. Have you experienced **internal conflict** about your vegetarian identity? Such as feeling uncertain about your decision to be vegetarian, or not living up to your ideal way of eating.
 - Are there any other aspects of your self-concept that you find conflicting with your vegetarian identity?
 - Have you ever felt bad about being vegetarian in certain situations?
9. How do these challenges change your **approach** to maintaining your diet?
10. What do you think should be addressed to make shifting to and maintaining a vegetarian diet easier?
 - what do you wish could be changed in your surroundings to make maintaining your diet easier?
11. Is it okay to ask follow-up questions via email if needed later in the research?