How do edible insects fly among Swedish consumers?

Exploring consumers’ evaluation of edible insects as a meat substitute
Abstract

Purpose: The purpose of this qualitative research paper was to explore how consumers with an environmental identity evaluate new, environmentally friendly substitutes for meat, with edible insects given as an example.

Problem: An increasing number of Swedish consumers show an overall negative attitude towards consuming meat, mainly due to environmental concerns, and express this by identifying themselves as vegetarians or flexitarian. Edible insects possess the potential to become an environmentally friendly, nutritious and innovative meat substitute in Sweden. Although the demand for new environmentally friendly meat substitutes is high, the intentions of consuming edible insects are low in Western societies. This causes researchers to ask why this conflict is.

Methodology: In order to fulfill the purpose and to answer the research question, a qualitative research approach was adopted. Eight semi-structured interviews were used in the empirical data collection process. The chosen target group was vegetarians and flexitarians of Generation Y, and the sample was chosen through judgmental sampling.

Findings: This empirical study examines an extensive confusion and conflicted standpoints among consumers when evaluating edible insects. However, the authors examine a high willingness and positive attitude towards consuming edible insects. Five key factors that influence the evaluation of edible as a meat substitute have been identified: the animalistic qualities of insects, if insects are perceived as meat or vegetarian, if edible insects are ‘green’, proof and facts, and what product category edible insects belong to.
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Thank you all very moth.

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1. Introduction

This chapter will begin by giving an overview of the current state of literature concerning the research topic, which will be followed by the problem formulation, research question and purpose. Lastly, delimitations as well as key definitions will be presented.

As the world is getting wealthier, an increased population growth that demands an increased use of land resources can be witnessed (Jansson and Berggren, 2015; UN, 2017). An extensive part of these land resources is used to produce animalistic products, mainly meat, since an increased population growth results in a rising demand of human food (van Huis, van Itterbeeck, Klunder, Mertens, Halloran, Muir, and Vantomme, 2013). However, as the process of breeding livestock requires one-third of the world’s fresh water, covers 40 percent of the world’s land surface and is responsible for about 51 percent of human-caused greenhouse gases (Goodland and Anhang, 2009), it is classified as a significant contributor to the major environmental challenge of the twenty-first century: climate change (Jansson and Berggren, 2015). In order to prevent the environmental damage caused by animal agriculture, existing research recognizes the importance of more environmentally friendly and innovative solutions to substitute meat (Goodland and Anhang, 2009).

One solution that is discussed as ‘the future of food’ in Western societies is edible insects, due to its low environmental impact and high nutrition value (Dobermann, Swift and Field, 2017). Edible insects have been a natural part of food consumption for approximately two billion people in Asia, Africa and South America for a long time (van Huis et al., 2013). However, there is a stigma surrounding insects as food in Western societies (Jansson and Berggren, 2015). To consume edible insects do not currently endorse cultural or societal expectations in Western societies, but are argued amongst researchers to possess the potential to be incorporated in Western consumers’ diet as a more environmentally friendly substitute for meat (Caparros Megido, Gierts, Blecker, Brostaux, Haubruege, Alabi, and Francis, 2016; Aspholmer and Gellerbrandt, 2014; Dobermann et al., 2017; Klas, 2016).
1.1 Background

The awareness concerning how human actions and consumption practices affect the climate has increased in Western societies during the last decades (Sawitri, Hadiyanto, and Hadi, 2015). As a result, an increasing number of Western consumers are willing to engage in green consumerism, which means to consume products and services that are considered more environmentally friendly than other alternatives. Examples can be seen in a wide range of areas including recycling, transportation and boycotts of products that are damaging for the environment, such as consuming meat and other animalistic products (Klas, 2016).

The action of carefully choosing how and what to consume becomes a way for consumers to take a stance on social and environmental issues. It is also a way for consumers to express their identity, as consumer no longer identify themselves based on their work titles but rather by what they consume (Bauman, 2000; Peltonen, 2013; Sowden and Grimmer, 2009). Therefore, identity becomes a central concept to take into consideration in order to understand why people engage in certain consumption practices, and the concept of environmental identity, which means consumers that highly value the natural environment, becomes even more central to investigate if green consumption practices are studied (Klas, 2016).

McFerran, Dahl, Fitzsimons, and Morales (2010) further argue that our consumption practices bring symbolic meanings that go beyond functional satisfaction. These symbolic meanings help consumers to either differentiate themselves from dissociative reference group, consisting of people they wish to avoid, or to get closer to aspirational groups, with desirable people they wish to be associated with. In regards to food consumption, Brillat-Savarin, one of the pioneers of French gastronomy, once stated that “tell me what you eat, and I will tell you what you are” and in today’s society, this quote demonstrates that the type of food consumers choose to consume entail indicators of their status, belongingness to a group, or identity construction (Mansvelt, 2011).

To boycott the consumption of meat and other animalistic products was previously mentioned as a green consumption practice, and during 2017, Sweden, which is
considered a Western society, reduced its average meat consumption with 2.6 percent. This is the country’s largest yearly reduction since 1990. Åsa Lannhard Öbers, spokesperson for the Swedish Board of Agriculture, states that the increased awareness of the environmental damage caused by animal agriculture, and the trend of vegetarianism, are two of the strongest reasons behind the reduction of meat consumption among Swedish consumers (Swedish Board of Agriculture, 2018). 10 percent of the Swedish population identify themselves as vegetarians and 33 percent identify themselves as flexitarians, which means that consumers actively choose to decrease their meat consumption and instead consume products that substitute for meat (Demoskop, 2014; TNS-Sifo, 2015). The increased consumption of meat substitutes is confirmed when reviewing the sales number for two of Sweden’s largest grocery chains: ICA and Axfood reported a 20 respective 30 percent sales increase of meat substitutes in 2017 (Axfood, 2017). Meat substitutes are less environmentally damaging than meat, often produced of soy, tofu or legumes, but the products still contain a sufficient amount of protein that meets similar nutritional requirements as meat (Ahlgren, Noelli and Svensson, 2016). That Sweden shows a significant decrease in meat consumption simultaneously as the consumption of meat substitutes increase, indicates a long-term change in consumption patterns rather than a short-term trend (Nordberg, 2017; Fredén, 2017).

That Swedish consumers are demanding a broader variety of products that can substitute for meat need to be met through an increase in supply, and existing research suggest edible insects as a new, environmentally friendly meat substitute (Caparros Megido et al., 2016). More than 1900 species of insects are reported to be edible and highly nutritious as they contain protein, fat, minerals, vitamins and fiber (van Huis et al., 2013). In comparison to traditional breeding livestock such as cattle, pigs and broiler chickens, edible insects require a significantly less amount of feed and water in order to produce an equal amount of protein (Dobermann et al., 2017; FAO, 2017). This means that edible insects emit less greenhouse gas and pollutants compared to traditional livestock breeds (van Huis et al., 2013).
1.2 Problem formulation and research question

Edible insects possess the potential to become an environmentally friendly, nutritious and innovative meat substitute in Sweden (Jansson and Berggren, 2015). However, two barriers currently exist in regards to implementing edible insects as an alternative source of protein on the Swedish market.

Firstly, Western consumers generally have a low willingness to consume insect-based alternatives, mainly because insects are associated with disgust and a primitive behavior (Jansson and Berggren, 2015). Previous research has been conducted in order to understand and overcome the barrier, and findings suggest that consumer acceptance increases if insects are not served intact. The presentation of edible insects should look, taste, and smell similar to what consumers are familiar with (Dobermann et al., 2017; Caparros Megido et al., 2016). In addition to familiarity, food choice motives, neophobia and attitudes toward meat are three other identified influences when evaluating consumers’ attitudes towards consuming edible insects (Aspholmer and Gellerbrandt, 2014; Verbeke, 2015).

Secondly, edible insects are classified as so-called novel food within the European Union (EU), meaning that research is currently being conducted on whether insects can provoke allergies, poisons, and infections (Livsmedelsverket, 2018). The production and marketing of edible insects are governed by the EU Novel Food legislation, and therefore require authorization before being placed on the EU market. However, the legislation has been ambiguous and the tolerance towards edible insects differs between the EU member states (ipiff.org, 2018). Sweden's National Food Agency made a reassessment of whether to approve or prohibit edible insects on the Swedish market in December 2017, and the decision that has been in force for the last 20 years will remain unchanged: selling edible insects on the Swedish market is still prohibited. To clarify, it is allowed to import edible insects to Swedish consumers due to the EU free trade agreement, but prohibited to sell products that contain insects in grocery stores (Livsmedelsverket, 2018).

Despite the current prohibition, nine Swedish organizations that work on insects-based products have formed an industry association, which collaborates with Sweden's
National Food Agency in order to lay the foundation for edible insects to become an alternative source of protein in Sweden. The collaboration suggests that edible insects possess high potential to be implemented in Sweden within a near future (Emilson, 2017).

Overall, Western consumers possess extensive knowledge regarding the environmental impact caused by the food they choose to consume, and often adjust their consumption practices thereafter (Klas, 2016; Freed, 2015). An increasing number of Swedish consumers show an overall negative attitude towards consuming meat, mainly due to environmental concerns, and express this by identifying themselves as vegetarians or flexitarians (Demoskop, 2014; TNS-Sifo, 2015). By doing so, they replace meat with meat substitutes, which demonstrate that consumption practices are guided by how consumers choose to identify themselves. This suggests that an environmental identity construction possess a vital role when evaluating Western consumers’ attitudes towards consuming edible insects as a meat substitute, which has not yet, to the authors’ best knowledge, been taken into consideration in existing research.

A conflict is identified when Western consumers’, who possess high environmental awareness, express a low willingness to consume edible insects as an alternative source of protein, despite that insects-based food is proven to be environmentally friendly (Jensen and Lieberoth, 2018; Runnö and Norell, 2017). Therefore, this study will explore how Swedish consumers with an environmental identity, hence strongly predictive of green consumption practices (Klas, 2016), evaluate edible insects as a meat substitute. Consumers in Sweden are presented as a context in order to explore how environmental-conscious consumers in Western societies evaluate new, environmentally friendly substitutes for meat, with edible insects given as an example. The following question has been constructed to address the conflict:

How do consumers with an environmental identity evaluate edible insects as a meat substitute?

In order to gain a deep insight into the research topic, it is vital to first and foremost get a general understanding of how environmentally friendly food products, so-called
‘green’ products, and meat substitutes are evaluated before addressing the primary research question.

1.3 Purpose

Considering that a Swedish industry association for edible insects is currently working on implementing insects as an alternative source of protein on the Swedish market (Emilson, 2017), it is of high importance to understand how Swedish consumers evaluate edible insects. Furthermore, it is also vital to understand how identity constructions affect consumers’ attitudes towards consuming edible insects, considering that consumers identify themselves based on what they consume (Bauman, 2000). By building on existing research, the purpose of this study is to gain a deeper insight into how environmental identities influence the type of green consumption practices consumers choose to participate in, and narrow it down to explore how individuals evaluate meat substitute, with edible insects given as an example. This insight will help established organizations and start-ups that are currently, or planning to start, working on innovative meat substitutes, including edible insects, to understand how Western consumers with an environmental identity make certain choices in terms of avoiding or consuming particular meat substitutes.

1.4 Delimitations

To generate findings and analysis of high quality, this study is narrowed down to explicitly investigate individuals with an environmental identity, in which decreasing meat consumption is a central part of their green consumption practices. As this study seeks to gain an in-depth understanding of how specific consumers evaluate insects as a meat substitute, in relation to their environmental identity, the focus is on individuals who identify themselves as vegetarians or flexitarians and that consume animalistic products to a limited extent. Therefore, individuals with other identity constructions are ignored. In the context of food, edible insects have been introduced as both human food and animal feed, but this study will only focus on edible insects as human food since the aim is to gain a broader knowledge within the field of consumer culture. It should also be clarified that the informants in this qualitative study are Swedish citizens, and therefore the study is limited to the boundary of Sweden as geographical location.
1.5 Definitions

Identity construction
The formation of the identity in terms of ideologies, values, membership of social groups etc. (Klas, 2016).

Environmental identity
The part of an individual’s identity that arises from their personal sense of connection to the nonhuman natural environment. Individuals with an environmental identity strongly care for the environment and often engage in green consumerism as a way to express their environmental identity (Clayton, 2003; Clayton and Myers, 2015).

Social environmental identity
The part of one’s environmental identity that is derived from psychologically meaningful social group memberships. These social groups are often extremely fluid and highly politicized because its defining feature is the shared ideology of protection for the natural environment (Klas, 2017).

Vegetarian
A person who does not eat meat or fish, hence sometimes consume other animalistic products such as egg and milk. The general reason of identifying as a ‘Vegetarian’ are due to moral, environmental, or health reasons (De Backer and Hudders, 2015)

Flexitarian
A person who has a primarily vegetarian diet, meaning a diet which excludes meat, but occasionally eats meat or fish (De Backer and Hudders, 2015).

Green consumption
The tendency for individuals or groups to engage in consumption behaviors that attempts to conserve the natural environment, which includes the purchase, use and disposal of products and services that are perceived to be ‘green’, in other terms environmentally friendly (Klas, 2017).
Meat substitute
Products that substitute for meat. According to a Ahlgren, Noelli and Svensson (2016), the market is currently segmented accordingly to what type of source the substitute are produced of, as for example soy, wheat and mycoprotein, but also accordingly to product types such as textured vegetable protein, tofu, tempeh, quorn, seitan, and others. It can be purchased in different shapes and as either refrigerated or frozen.

Insects
According to a scientific definition, any animal of the class ‘Insecta’ comprise small, air-breathing arthropods having the body divided into three parts (head, thorax, and abdomen), and having three pairs of legs and usually two pairs of wings (Putnam, 2018).

Stereotyping
The basic cognitive process in stereotyping are categorization, the composition of sense data by grouping persons, objects and events (or their selected qualities) as being similar to one another in their relevance to an individual's intentions, actions or characteristics (Tajfel, 1972)

Political consumption
The action of boycotts where consumers refuse to buy or shift their purchase patterns due to ethical and political assessments (Baek, 2010).
2 Frame of Reference

In this chapter, the authors will explain the theoretical foundations used to analyze the empirical findings in chapter 4. In order to understand consumers’ identity construction and relation to substitutes for meat, the postmodern theory is covered in order to grasp an understanding of how consumers socialize in our contemporary consumer society. Secondly, the postmodern perspective is connected with theories concerned with identity construction and environmental issues such as green consumerism. Finally, environmental identities are presented, in order to understand how the identity project is connected to a societal development towards green consumption.

2.1 Postmodernity: the current state of society

An increase in digitalization, globalization and awareness has developed a newly defined cultural compass during the last centuries, which has drastically changed consumers’ behaviors (Klasson, 2017). Postmodernism is explained as the movement from the modern society, with an optimistic and liberal worldview, to a new era defined with an apocalyptic sense of anxiety (Brown, 2006). The modernity of the past was once characterized by the intent to make the world structured and organized through the creation of categories and definitions that were seen as equally solid and unchanging (Jacobsen and Poder, 2008).

However, an extension of postmodern literature presents that society is a fluid reality in constant change, which results in a present of confusion, lack of structure and endless choices. The idea that society is continuously moving forward and changing in nature lays the basics for the sociologist Zygmunt Bauman’s theory of liquid modernity (2000).

2.1.1 Liquid modernity

Whilst some theories of Postmodernism argue in a negative sense that society is no longer modern, that it is something different, Bauman (2000) comments that these theories fail to suggest the positive aspects of how society is different, and what these differences are. He breaks down three fundamentals. Firstly, the postmodern society is
uncertain, and people try to avoid risks by using calculations even though risks are not always countable. Secondly, truths of today can be a lie tomorrow, considering that the postmodern society is full of surprises (Bauman, 2000). Lastly, credibility and reliability are mobile, meaning that although insects are associated with disgust today (Jansson and Berggren, 2015), they could end up at our dinner table tomorrow (Bauman, 2000).

According to Bauman’s concept of liquid modernity, society may appear as a state of loose social structures that creates diversity and individuality through various commercial products in the marketplace, which pursue people to compete for identity positions and status (Klasson, 2017). It is argued that early modern philosophers drew similar deductions about the emergence of the individual as an entity with morals, spirit and independence from its community, rather than as a legal of civic entity (Klas, 2016). As Smith (2010) states, Bauman’s intellectual arena shifts from security to freedom, the inescapability of anxiety and uncertainty, the connection with identity, and then finally onto conditions of globalization and consumerism. Identity is rather consumed than produced, meaning that individuals’ identity no longer is set through their choice of work but rather through their choice of consumption. The two sociologists Giddens (1999) and Beck (1998) further explain that individuals are exploited to an increased amount of choices, which help them to break free from traditional structures and express feelings, identity and personal standpoints. An example of Giddens (1999) and Becks (1998) implications in the postmodern society is the increasing amount of individuals that aim to take a stance towards environmental damage, by for example identifying themselves as vegetarians or flexitarians (Demoskop, 2014; TNS-Sifo, 2015).

To clarify, since the identity is reliant upon what individuals consume, the society has developed a consumer culture in which the possibilities of choices are incessant and poorly regulated, with the only impossibility of not to choose (Singh, 2010; Klasson, 2017). Consumer researchers address the term symbolic consumption as postmodern consumers’ motivation to consume beyond the utilization value. This means that individuals choose to consume, use, and display products to convey symbolic meanings from goods that match with their identity construction (Firat, Kutucuoglu, Arikan, and
Tuncel, 2013; Mansvelt, 2011; Elliott and Wattanasuwan, 1998). Symbolic consumption could explain the connection between identity and environmentally friendly consumption practices, for example that individuals with an environmental identity are more likely to consume ‘green’ products (Peltonen, 2013).

### 2.1.2 A society in constant risk

Bauman states that the society is uncertain and consists of people that try to avoid risks by using calculations, even though risks are not always countable (Bauman, 2000). This statement is strengthened by the sociologist Beck (1998) and his theory of the risk society, which is a theory that indicates that nowadays, people are apparent to risks to a larger extent than previously. Although humans have been exposed to risk from various diseases or natural catastrophes throughout all decades, risks are no longer limited to a certain geographical area due to globalization and the increased mobility of people. This means that individuals can be affected by events that occur on the other side of the world as well.

The uncertainty of when and where the risk will hit have made individuals develop various needs for precautions, avoidance and critical thinking in order to escape them. Therefore, society becomes increasingly reliant upon experts and scientists who state facts by defining and solving risks (Beck, 1998). Due to the human liberation from given structures and the traditional modernity, people are expected to take a stance in societal concerns, for example politics or ethics, as well as taking responsibility for their action and choices (Giddens, 1999). The theory of risk society can assist in understanding how Western consumers evaluate edible insects, as critical thinking and analyzing risks is part of the evaluation process when taking decisions (Beck, 1998).

### 2.2 To construct an identity

The fact that consumers are presented with an endless amount of choices in the postmodern society (Bauman, 2000) results in that they become more uncertain, critical and careful in their decision-making, foremost in order to avoid the risk of choosing the ‘wrong’ practice (Beck, 1998). As individuals’ consumption practices symbolize their identity (Elliott and Wattanasuwan, 1998), Giddens (1999) further argues that individuals want to behave and consume truthfully accordingly to their identity.
Therefore, how individuals choose to identify themselves becomes an essential foundation to take into consideration when studying how individuals evaluate various consumption practices, such as consuming insects (Klasson, 2017).

The term *identity* refers to the content of an individual in respect to social, cultural and political beliefs, as well as basic values and characteristics that are viewed as socially consequential and close to unchangeable (Fearon, 1997). According to several consumers researchers, identity is presented as multilayered and modifying, where the core of the identity includes various components: the individual’s personality and beliefs, values, self-image and fulfillments extended by an outer layer which is formed through social groups, culture and possessions (Mittal, 2006; Belk, 1988; Shankar and Fitchett, 2002). How social groups help individuals to form their identity will be presented in depth in section 2.4.1.

As the core of the identity includes various components, Giddens (1999) highlights the importance of including components that reflect who the individuals desire to be when constructing their identity and writing their life story. Therefore, to keep a balance in life, it becomes utterly important to build a truthful life story. If an individual’s life story would somehow be artificial, meaning that the personal behavior or consumption practices do not correlate with the story, it could result in an existential questioning, which often is connected with anxiety. For example, to consume meat would be considered wrong and artificial for vegetarians.

The magnitude of choices of what to include in one’s identity create ambivalences and insecurity of what identity to choose, and as a result, individuals often adopt multiple identities that together constitute the full identity (Klasson, 2017). The fact that it exists various options of identities to choose between creates a need for guidance in the selection process, in order to eliminate the risk of choosing a somewhat artificial identity (Giddens, 1999; Tajfel, 1972). Critical thinking and reliance upon experts were presented in section 2.1.2 as two precautions that individuals take in order to avoid risks (Beck, 1998). An additional precaution is stereotyping, which helps individuals to identify and avoid risks by simplifying and systemizing information. This is done by categorizing people, objects and events that are similar to one another, based on selected
qualities, in their relevance to individuals’ intentions, actions or identity. In relation to objects, stereotyping helps consumers to categorize products to easier evaluate whether or not they correspond to their identity and can be consumed (Tajfel, 1972).

2.3 Green consumerism

The transformation towards a consumer society has resulted in mass consumerism in which people not only consume for needs but also for identity, status and pleasure (Bauman, 2000). As a result, excessive consumerism has become one of several components that cause environmental problems and climate changes. Human-caused emissions of carbon dioxide and greenhouse gases have been a major player in the negative destruction of the natural environment. In order to mitigate the environmental damage, society and researchers are aspiring green consumerism, which relates to activities and consumption practices that symbolize protection of the earth from damage (Klas, 2016). To take the bus as transportation instead of the car, to buy clothes made of eco-friendly cotton and to decrease meat consumption are examples of consumption practices that are defined as ‘green’ (Lim, 2013).

Products and services that are ‘green’ are produced or executed in an environmentally friendly way with low carbon footprint (Klas, 2016). Given that the term ‘green’ indicates protection and care of the environment, whilst the term ‘consumerism’ involves the exceed in use of natural resources, the construct of green consumerism is perceived as ambiguous amongst existing research (Peattie, 2010; Reisch and Thøgersen, 2015; Thøgersen, and Ölander, 2003). According to Klas (2016), green consumerism has been debated to simply justify Western consumerist and capitalist ideologies. Therefore, several researchers have questioned if green consumerism actually qualify as a long-term benefit to the environment (Akenji, 2014; Dauvergne and Lister, 2010; Muldoon, 2006). However, the stand taken in this research is consistent with the majority of researchers, which advocate green consumerism as an effective element in decreasing unsustainable consumption habits overall (Jackson, 2005; Peattie, 2010; Reisch and Thøgersen, 2015).

Furthermore, Fisher, Bashyal, and Bachman (2012) and Griskevicius, Tybur, and van den Bergh (2010) argue that green consumerism is an individual purchasing phase.
However, Barr and Gilg (2006), Grønhøj (2006) and Peattie (2010) suggest that green consumerism goes beyond the individual purchasing phase, and include the use and disposal of products and services that are viewed as ‘green’. The latter suggestion is consistent with the perspective of marketing and consumer studies, which state that consumption includes all behaviors that follow the supply chain of a product or service (Jacoby, 2001; Balderjahn, Peyer, and Paulseen, 2013).

Although green consumerism is attached to individual consumption practices, existing research states that various collective actions affect the extent of green consumerism and the purchase of ‘green’ products and services amongst consumers (Klas, 2016). The collective actions are to be taken by a group of individuals that collectively and consistently choose to engage in activities that will assist in achieving a common objective (Peattie, 2010). That is, green consumerism is more effective when collectively employed in regards to decreasing environmental problems in the long run; the larger the group, the larger the positive impact (Chander and Muthukrishnan, 2007).

2.3.1 The urge of green consumerism in the food industry

Existing research that are concerned with the causes of climate change and pollution foremost discuss fossil fuels such as oil, natural gas and coal (Barbir, Veziroglu and Plassjr, 1990; Goodland, 1995; Jorgensen, 2006). However, the environmental damage caused by animal agriculture is, in recent studies, argued to be more pestiferous than once thought (Rojas-Downing, Nejadhashemi, Harrigan and Woznicki, 2017; Garnett, 2009). Evidence shows that there may be no other single human activity that has a bigger impact on the planet than the breeding of livestock (Steinfield, 2006). The process requires one-third of the world’s fresh water, covers 40 percent the use of the world’s land surface and is responsible for about 51 percent of human-caused greenhouse gases (Goodland and Anhang, 2009).

The increased awareness of the environmental damage caused by the animal agriculture sector has resulted in that green consumerism through food, meaning that people execute more ‘green’ choices in their food consumption, has increased in Western societies during the last couple of years. As a result, the food industry has been forced to supply more ‘green’ alternatives to animalistic products in order to meet the rising
demand from society (Goodland and Anhang, 2009). Additionally, the environmental damage caused by the animal agriculture sector has resulted in that consumers boycott animalistic products, such as meat (De Backer and Hudders, 2015).

The action of boycotts, in which consumers refuse to buy or shift their consumption practices due to ethical and political assessments, is presented as political consumption. The phenomenon of political consumption becomes a way for consumers to take a stance on social and environmental issues (Baek, 2010). To consume ‘green’ food, and to engage in political consumerism, have become a choice of lifestyle amongst many Western consumers and are included as a natural part of their identity construction (Rosenfeld, 2017).

2.4 Adopting an environmental identity

Due to the increased environmental awareness in Western societies, adopting an environmental identity have been found to be strongly predictive of green consumerism (Klas, 2016). The term environmental identity relates to the part of an individual’s identity that arises from their connection to the nonhuman natural environment (Clayton, 2003; Clayton and Myers, 2015). By adopting an environmental identity, hence identifying as ‘environmentalists’, individuals endorse the personal relationship to the environment as a central part of who they are, and behave accordingly (Klas, 2016).

2.4.1 Social environmental identity

The willingness to identify as an ‘environmentalist’ could also be derived from social identity (Tajfel and Turner, 1979), which refers to individuals’ perception of themselves based on their group memberships (Klas, 2016). Social groups are the outer-layer that includes family, friends, social class, sports team etcetera, which provide individuals with a feeling of belonging to the social world through their membership to specific social groups (Tajfel and Turner, 1979). Therefore, existing research emphasizes that social groups contribute to individuals’ behavior and identity construction (Abrams and Hogg, 1990; Hornsey, 2008; Turner, Hogg, Oakes, Reicher and Wetherell, 1987).
Section 2.2 included a presentation of stereotyping, and how simplifying and systemizing information help individuals to avoid risks. Tajfel (1972) further emphasizes the use of stereotyping in relation to how social groups form identities. By categorizing people with similar qualities, individuals can either differentiate themselves from dissociative reference group, consisting of people they wish to avoid, or get closer to aspirational groups with desirable people they wish to be associated with (McFerran et al., 2010). To stereotype people based on social groups, individuals can more easily find a social context that is consistent with how they wish to identify themselves, which decreases the risk of choosing the ‘wrong’ social context (Tajfel, 1972).

Social groups can be formed based on shared ideologies that can be both social and political, with some recognized examples such as feminism, liberalism and environmentalism (Bliuc et al., 2007; McGarty et al., 2009). As green consumerism through food has increased (Goodland and Anhang, 2009), social groups that promote political consumerism by boycotting consumption of animalistic products, foremost meat, have been formed. Vegetarians and flexitarians are two examples of these social groups, and its members are often well-educated, responsive and information-seeking (De Backer and Hudders, 2015; Baek, 2010).
3 Methodology

This chapter will make the reader familiarized with the chosen methodology of this research. How the literature search was conducted will be presented, and the philosophy, approaches and strategy will be justified. Lastly, the methods for collecting and analyzing data will be discussed, as well as how the sample of this study was selected and the trustworthiness of data.

3.1 Literature search

A comprehensive literature search was conducted to establish a better understanding of the research topic, to attain valuable information and to identify a gap in existing literature that this research aims to fill (Collis and Hussey, 2014). Literature has been collected through the use of Jönköping University's database, Primo, together with other electronic databases such as Emerald Insight, ScienceDirect and Scopus where peer-reviewed articles have been selected. To ensure that articles of high quality and reliability were used, the numbers of citations have been taken into consideration. Moreover, due to the newness of the research topic, some information has been gathered from recently conducted reports. When the literature has been searched for, keywords such as ‘edible insects’, ‘postmodernism’, ‘environmental identity’, ‘green consumerism’, ‘meat substitutes’, ‘flexitarian’ and ‘vegetarian’ have been frequently used. Literature concerning identity and postmodernism in general, as well as green consumerism, has built up to the established frame of references.

3.2 Research philosophy

The research philosophy is a fundamental component when conducting a research. As this study is within the field of consumer culture, the reality that is studied is socially constructed (Bauman, 2000), and the authors therefore adhered to the ontological approach of interpretivism in order to understand the nature of social entities (Saunders, Lewis, and Thornhill, 2016). The epistemological approach was drawn from the ontological reality, in which knowledge is derived from subjective interpretations of the informants rather than objectively determined (Collis and Hussey, 2014). To clarify,
multiple realities are taken into consideration when drawing conclusions, which are extracted from the informants’ lived experiences, rather than abstract generalizations based on one “true” reality (Hurworth, 2017).

That reality is objectively given lays the basis for positivism, which is stated amongst researchers to be close related to interpretivism. Positivism implies that the observations made in this study would be described by measurable properties, in other terms be mathematically defensible (Collis and Hussey, 2014). By using the interpretivism paradigm, the study is instead based on subjective interpretations and understandings of the social reality (Saunders, Lewis and Thornhill, 2009) Therefore, it was possible to gain a deeper understanding of social actors, namely consumers with an environmental identity, and how these consumers evaluate edible insects as a meat substitute.

3.3 Research approach

Within the field of research, the approach is split into quantitative or qualitative research. A quantitative research is an approach for testing hypothesis by examining the relationship amongst variables and it is common to use large sample sizes to generalize a population and draw conclusions (Saunders et al., 2009). Whilst a quantitative research stems from positivism, a qualitative research is associated with interpretivism (Collis and Hussey, 2014).

A qualitative research indicates a more exploratory approach, and open-ended questions are used for the aim of gaining a deeper understanding of motivations, reasons and actions taken by the selected sample (Byrne, 2001). As this study attempts to explore how consumers evaluate insects as meat substitute, in relation to their environmental identity, a qualitative research approach was chosen. This approach made it possible to discover patterns amongst the informants and to identify common themes that could be further analyzed and discussed, as compared to a quantitative research approach that includes numerical data and lacks insight into underlying motivations and reasoning (Saunders et al., 2009).

Three methodological approaches exist within research: deductive, inductive, and abductive. The deductive approach is foremost used in a quantitative research as it
collects information from academic sources in order to design a research strategy that is tested by empirical observations (Collis and Hussey, 2014). Considering that a qualitative research approach was chosen for this study, a deductive approach with focus on scientific research and testing theory is argued to be an inadequate approach. An inductive approach, which is commonly used in a qualitative research, was chosen. This approach generally starts by collecting data, which is used to identify themes in order to investigate and analyze social phenomena (Saunders et al., 2016). To clarify, the idea is to generate new conceptual frameworks from the observations of empirical reality; that is, a reality that can be studied and proved with sufficient evidence (Collis and Hussey, 2014).

The third approach, abductive, is a combination of deductive and inductive. The approach indicates that researchers explore a phenomenon on the basis of information that is known, and is foremost used in order to generate the best predictions when surprising implications have been observed throughout the process of collecting data (Bryman and Bell, 2015). Although the inductive approach can be argued to be very limited, considering that a generalization is made in a very diverse world based on a specific observation, it fuels exploration (Saunders et al., 2016). As the purpose of this research is to gain a deeper insight into how consumers with an environmental identity evaluate meat substitute, and edible insects as an alternative source of protein, the authors adhered to the philosophical position that the reality is a social construction with subjective interpretations (Collis and Hussey, 2014). Therefore, by aiming to conduct a qualitative research with an inductive approach, patterns and themes are observed during the empirical studies, which help to draw general conclusions of the phenomenon that is being studied: to consume insects as a meat substitute (Saunders et al., 2016).

3.4 Research strategy

This research aims to investigate a phenomenon within consumer culture in the attempt to explore how certain consumers evaluate insects as a meat substitute. In order to successfully carry out the aim, the authors chose to apply action research (AR) as the research strategy. The fundamental assumption of the strategy suggests that the social world is in constant change, where both researcher and informants are a part of that
change (Saunders et al., 2009). Furthermore, the characteristics of this strategic approach are to solve a problem and contribute to science through identifying a research objective, execute a literature review and lastly collect and analyze the findings to present a result. Ideally, these results lead to reflections of ideas for redefinitions, improvement and further studies (Collis and Hussey, 2014).

Literature suggests that AR strategy are suitable for ‘how’ concerns and the investigation of change in social contexts which correlates to the research question of this thesis (Saunders et al., 2009). Furthermore, to involve informants who directly have experienced the social contexts that are studied are of importance in order to create reflection and adjust information throughout the study. This, in turn, will help the researcher to find new areas of inquiry for the purpose to achieve more accurate results (Collis and Hussey, 2014). A strength of AR is the focus on development and change, which allow the researcher to learn from mistakes and implement improvement along the research process (Nørgaard and Sørensen, 2016). On the other hand, the approach has received skepticism from several theorists meaning that results tend to be laden with subjectivity, showing a tendency from the researcher to bias the analysis in personal aspects (Kock, 2005). Another criticism towards AR is that the methodology could result in ‘fuzzy’ answers without clear structure due to its redefinitions throughout the process, which also could be very time consuming (Walter, 2009). The criticism was considered when conducting the interviews and analyzing the empirical findings, for example by identifying themes in order to properly structure the informants’ answers.

### 3.5 Methods for Data Collection

For this research, the data was collected through primary data due to limitations within existing research regarding the phenomenon of consuming insects. Primary data is collected for a specific purpose and classified as a first-hand source of data, and the empirical data were retrieved from eight semi-structured interviews (Collis and Hussey, 2014; Wengraf, 2001).

#### 3.5.1 Pilot interview

A pilot interview was conducted before the main interviews, in order to ensure the validity and quality of the designed interview questions. The pilot interview was held in
Jönköping, Sweden, with a 21-year-old male who identify himself as a vegetarian, and the interview lasted for 30 minutes and 14 seconds. The pilot interview gave insights into whether or not the questions were easy for the informants to understand, and made it possible to evaluate the relevance of the questions and answers in relation to the research purpose. By redesigning some questions, the quality of the questions could be improved before conducting the main interviews.

3.5.2 Semi-Structured Interviews

According to Saunders, Lewis and Thornhill (2014), two types of interviews are viewed as ‘non-standardized’ and suggested as suitable in qualitative studies, namely semi-structured and unstructured interviews. The unstructured interview technique lacks predetermined questions, and is mainly used when investigating individuals’ most significant experiences, issues and lessons of a lifetime (Saunders et al., 2009). These aspects often emerge in the course of spending time, and listening, to the informants’ life stories. Considering the time constraint of this study, and that the informality of unstructured interviews could violate the relevance and accuracy of the interviews (Brinkmann, 2014), the authors conducted the interviews with a semi-structured interview technique.

A total of 27 predetermined questions were formed in order to explore the informants’ motivations, reasons, and feelings toward the research topic (Saunders et al., 2009). The predetermined questions are presented in appendix 1. In order to assure the relevance of the predetermined questions, in relation to the purpose of the research, they were grounded upon the research question and the theoretical foundations that are presented in chapter 2. Furthermore, open-ended questions were used and depending on the given answers, follow-up questions such as “why” and “how” were asked in order to explore key points in depth. Although the flexibility of open-ended questions may lessen reliability and that honesty of the informants is not guaranteed, closed-ended questions are likely to generate short answers such as “yes” and “no”, which could result in limited interpretations or biased answers (Collis and Hussey, 2014).
3.5.3 Interview Outline

The semi-structured interviews were carried out face-to-face in Jönköping, Sweden. Eight informants were individually interviewed, and the interviews varied between 40-60 minutes. With consent from the informants, the eight interviews were recorded and timed. As all the informants have Swedish as their native language, the interviews were held in Swedish. This removed potential language barriers that may occur when speaking a second language.

During the interviews, one author led the interview, while the second author observed and took notes of the given answers. The documentation made it possible to identify key points throughout the interview, and to identify gaps that could assist the author, who lead the interview, with additional follow-up questions.

In order to get a general understanding of the informants, the first 5 questions focused on their identity construction and environmental concerns. In the following 7 questions, the informants were asked about their food consumption and what they perceive to be green products, and why. Based on these 12 questions, the focus shifted towards exploring the informants’ motivations, reasons and feelings towards consuming meat substitutes in general and edible insects as an alternative source of protein, in relation to their environmental identity. Towards the end of the interviews, the informants were asked if they wanted to add any further comments. Considering that a semi-structured interview technique was used, follow-up questions were asked, which are not included in the predetermined questions, in order to help the informants to reflect more freely.

3.6 Sampling Method

When recruiting informants to a study, the first decision to take is whether to use a probability sampling method or a non-probability sampling method. In a probability sampling method, individuals are randomly selected and each member of the population possesses the same possibility to be selected, whereas in a non-probability sampling method, individuals are not randomly selected (Saunders et al., 2016). In order to retrieve a sample with Swedish individuals who identify themselves as ‘environmentalists’, and due to the given timeframe of the research, a non-probability
sampling technique was chosen, with focus on judgmental sampling (Saunders et al., 2016).

Convenience-, snowball-, and theoretical sampling are other examples of non-probability sampling methods. A convenience sampling, meaning that the sample population is chosen based on availability and accessibility, was conducted for the pilot interview (Collis and Hussey, 2014). However, this sampling method was not chosen for the main interviews, as the authors believe that picking informants based on convenience would interfere with the trustworthiness of data.

Judgmental sampling is practiced when the sample population is handpicked based on the knowledge and judgments of the authors, under the influence of the pre-selected criteria that are required to be met (Collis and Hussey, 2014). Considering that the informants are handpicked, rather than randomized, it is important to keep in mind that the judgmental sampling method can interfere with the reliability and cause misrepresentation of the population (Saunders et al., 2016).

3.6.1 Informants

The sample consists of eight informants, including both genders, which were selected based on four conditions. Since the authors investigate the geographical area of Sweden, the informants were required to possess a fluency in Swedish, which constituted the first condition. Secondly, only individuals within generation Y were chosen (Viswanathan and Jain, 2013). An in-depth presentation of generation Y and its relevance to this research is further elaborated in section 3.6.2. The third condition assures a more diverse and representative sample by limiting the selection to students in Jönköping who origins from various geographical areas around Sweden. The fourth condition applies a central element of the research question: to select individuals with an environmental identity that show willingness to consume meat substitutes. Therefore, the selected informants were required to identify themselves as vegetarian or flexitarian, with environmental concerns as their main motivator.

Vegetarians and flexitarians are likely to include meat substitutes in their everyday diet, as it becomes possible to avoid meat while receiving comparable portions of protein (De
Backer and Hudders, 2015). Individuals that identify themselves as vegetarian do not consume meat or fish, but sometimes consume other animalistic products such as egg and milk (De Backer and Hudders, 2015). The scientific definition label edible insects as an animalistic product (Putnam, 2018) and therefore the selected vegetarians were required to include some animalistic products in their diet. The second group, consisting of flexitarians, does primarily consume a vegetarian diet but occasionally consume meat and fish. Another example of a similar social group is vegans. However, these individuals boycott all animalistic products, and they were therefore excluded from this study (De Backer and Hudders, 2015).

3.6.2 Generation Y

Although no consensus on specific cut-off dates exist, generation Y is commonly discussed to include individuals born between 1980-2000 (Viswanathan and Jain, 2013). There exist three main characteristics that lay the basis for why this generation is relevant to study when investigating how consumers evaluate insects as a new and environmentally friendly meat substitute, in relation to their environmental identity. Firstly, this generation grew up during an era of environmental consciousness, and is argued amongst existing research to be highly motivated to engage in green consumerism (Muposhi, Dhurup and Surujlal, 2015). Secondly, individuals within generation Y are well-educated and receptive towards new innovations (Viswanathan and Jain, 2013). Lastly, mass consumption is perceived as a lifestyle and they express their identity through brands that they perceive as “cool” and distinctive (Valentine and Powers, 2013). Extensive research, within a number of different fields, has been conducted on individuals from generation Y. However, limited research exists on individuals with an environmental identity, in particular vegetarians and flexitarians, and how they evaluate various meat substitutes and edible insects as a meat substitute.

3.7 Data analysis

According to Miles and Huberman (1994), the process of analyzing data is a gradual process. Considering that an relatively extensive amount of data was collected from the eight interviews, the data was reviewed and reduced after the authors had transcribed the recorded interviews. Direct translation from Swedish to English was applied during the transcription. Although it can cause misinterpretations, as the meanings can differ
depending on the language, it was found to be the most suitable approach considering
the resource constraints such as the given timeframe (Saunders et al., 2009).

During the process of reviewing the transcribed data, meaningful quotes, phrases and
keywords were identified and used to find connections between the informants. This
enabled the authors to identify themes that, in combination with the theoretical
foundations, to make it possible to draw conclusions of the phenomenon that is being
studied (Miles and Huberman, 1994). In the discussion section, the authors have
extracted the most central findings of each theme and related these findings to the
overarching problem formulation and research question.

### 3.8 Quality of data

The accuracy of the findings cannot be fully guaranteed by the authors, although four
strategies have been implemented in order to ensure the trustworthiness and level of
objectivity of this qualitative research: credibility, transferability, dependability, and
confirmability (Collis and Hussey, 2014). When the informants' opinions are truthfully
and objectively presented, in other terms when the truth is represented, the research is
believed to be credible (Shenton, 2004). During the interviews, the informants were
informed that their names would be changed when the empirical findings were
discussed. The reason behind using anonymous names was to encourage the informants
to speak freely and truthfully, as the risk of being identified by the reader decreases
(Shenton, 2004). During the process of analyzing data, the authors individually studied
the collected data before comparing results and interpretations together, in order to
avoid being affected by each other’s thoughts and opinions.

While credibility focuses on internal validity, transferability focuses on external validity
and the fact that the findings of this study should be transferable to other researchers or
situations (Shenton, 2004). Although the main focus of this research is how consumers
with an environmental identity evaluate edible insects as a meat substitute, the authors
believe that the empirical findings can be generalized for industries in Western societies
that deal with products that substitute animalistic products such as meat, milk, cheese
and yoghurt. However, considering that a qualitative research indicate smaller sample
sizes, it could be misleading to generalize the findings.
Dependability address the issue of reliability, and focuses on whether the research can be repeated by an external party, in other terms generate similar findings and conclusions if testing the collected data (Collis and Hussey, 2014).

Lastly, confirmability covers the effects that human factors and perception can have on objectivity. A research is argued to be confirmable when the presentation of the collected data and conclusions are unbiased. The risk that human factors influenced this study exists, but it was minimized considering the fact that it was performed by two authors instead of one (Shenton, 2004).
4 Empirical findings and Analysis

This chapter will present the empirical findings extracted from the conducted interviews. The findings are analyzed using a qualitative analyzing technique and supported by using central theories presented in chapter 2. The informants are presented in table 1, and their collected thoughts will be presented through various themes, which were identified by the investigation of key interpretations and recurring comments from the informants.

Table 1 presents the informants of this study, which were equally divided between males and females, and vegetarians and flexitarians.

Table 1.

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Age</th>
<th>Vegetarian/Flexitarian</th>
<th>Date</th>
<th>Duration (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia</td>
<td>Female</td>
<td>25 years old</td>
<td>Vegetarian</td>
<td>April 14th 2018</td>
<td>44:27</td>
</tr>
<tr>
<td>Sandra</td>
<td>Female</td>
<td>23 years old</td>
<td>Vegetarian</td>
<td>April 16th 2018</td>
<td>41:12</td>
</tr>
<tr>
<td>Richard</td>
<td>Male</td>
<td>24 years old</td>
<td>Vegetarian</td>
<td>April 12th 2018</td>
<td>45:49</td>
</tr>
<tr>
<td>Harold</td>
<td>Male</td>
<td>21 years old</td>
<td>Vegetarian</td>
<td>April 16th 2018</td>
<td>42:56</td>
</tr>
<tr>
<td>Ingrid</td>
<td>Female</td>
<td>22 years old</td>
<td>Flexitarian</td>
<td>April 12th 2018</td>
<td>49:14</td>
</tr>
<tr>
<td>Ellen</td>
<td>Female</td>
<td>25 years old</td>
<td>Flexitarian</td>
<td>April 14th 2018</td>
<td>46:56</td>
</tr>
<tr>
<td>Oliver</td>
<td>Male</td>
<td>22 years old</td>
<td>Flexitarian</td>
<td>April 13th 2018</td>
<td>59:16</td>
</tr>
<tr>
<td>Patrick</td>
<td>Male</td>
<td>22 years old</td>
<td>Flexitarian</td>
<td>April 13th 2018</td>
<td>45:21</td>
</tr>
</tbody>
</table>

4.1 “Me, myself and my environmental concerns”

This section will present how the informants evaluate their identity construction, and how their identity construction and environmental concerns affect their consumption
practices. Considering that postmodern consumers identify themselves based on what they consume (Bauman, 2000), identity is a central concept to take into consideration when investigating motivations, reasons and actions taken by the informants.

The informants’ willingness to care for the environment became noticeable throughout all the conducted interviews, which means that environmental concerns are highly valued. However, several informants point out that their environmental identity only constitutes as one, among multiple, components of their identity construction. This finding is supported by the study conducted by Klasson (2017), who describes that the postmodern society causes ambivalence and uncertainty of what identity to choose, and as a consequence, individuals often adopt multiple identities (Klasson, 2017). Julia describes how her identity is constructed out of several components, not only her environmental concerns:

Julia: “My environmental concerns are a part of who I am, but I would not say that it is who I am.”

The informants discuss that their environmental concerns origin from a sense of personal responsibility towards the world and future generations. Ingrid describes an overwhelming feeling combined with anxiety towards this responsibility, and her concerns were commonly shared with several informants. A bad conscience often arises when Ingrid, who identify as flexitarian, consumes meat, in which she explains by confirming her awareness of its environmental damage. The sense of anxiety may be explained by Giddens (1998), who states that consumption practices need to be consistent with the identity construction and if not, a feeling of existential questioning could arise, which often generate anxiety. Therefore, it can be argued that the informants aim to be truthful to their environmental identity and to take care of the personal responsibility they feel towards the world and future generations. However, the magnitude of the responsibility and an attached social pressure may be perceived as overwhelming, which can lead to the anxiety that Ingrid and the other informants discussed. Ingrid describes her feelings in the following statement:

Ingrid: “Sometimes, the responsibility [of caring about the environment] is very overwhelming, and it is a lot of anxiety attached to it for me. I
know how bad it is for the environment to eat meat, so I do not want to do it. I want to become better. But sometimes it just happens, and it makes me feel so bad.”

Sandra explains how her identity as a vegetarian is founded in her willingness to do the 'right' thing, and the majority of the informants express similar implications. Patrick argues that it exists a demand from society and our social surroundings that one should take a stance towards environmental concerns. His feeling is consistent with Beck (2000) and Giddens (1999), who explain that individuals in today’s society are expected to take a stance in societal concerns, and take responsibility for their action and choices. Patrick explains that his choice to identify as a flexitarian becomes an easy solution for him in order to meet those demands and to do the 'right' thing:

Patrick: “I feel like society demands you to take a stance towards environmental issues (...) it does not feel right to eat meat and to become a flexitarian is an easy solution to actually do something good for the environment.”

When Sandra and Patrick, together with three other informants, describe how their choice to identify as vegetarians and flexitarians partly origins from a desire to do the 'right' thing, Tajfel's (1972) concept of stereotyping and Beck's (1998) theory of risk society can assist in understanding the underlying reasons. By using stereotyping, which means categorizing people with similar qualities, individuals can more easily find a social context that is consistent with how they wish to identify themselves (Tajfel, 1972), which decrease the risk of choosing the ‘wrong’ social context (Beck, 1998). It can therefore be argued that the informants identify as vegetarians and flexitarians because they assume that it automatically place them into a category of people that protect, rather than harm, the environment. This argument is strengthened when Harold states that he identifies himself as a vegetarian because it symbolizes that he cares about the environment:

Harold: “I like calling myself a vegetarian because it tells others that you care for the environment, which feels good.”
The majority of informants express that their environmental identity affect how they consume to some extent, but not always. Oliver and Ingrid state that convenience, other interests and income sometimes oppose their willingness to consume ‘green’. Due to the choice of becoming vegetarian and flexitarian, all the informants try to consume ‘green’ food and eat less meat, but argue that they fail to engage in green consumerism in some other areas. Oliver explains that he often travels by flight and expresses that he is aware of the environmental damage the flight cause. This implies that Oliver’s consumption practices are not only guided by his environmental concerns, which can also be grounded in the idea that people possess multiple identities (Klasson, 2017) that are multilayered and modifying (Mittal, 2006; Belk, 1988; Mittal, 2006; Shankar and Fitchett, 2002). Oliver states that:

Oliver: “I try to eat less meat, and consume green when it comes to food. But I am far from environmentally friendly in other areas.. Like for example, I travel by flight a lot, even though I know it is really bad for the environment.”

What can be examined from this section is that the main motives for the informants’ choice to become vegetarians or flexitarians are their environmental concerns, a sense of personal responsibility towards the world as well as the willingness to do the ‘right’ thing. It is observed that the informants consume green and care for the environment - to a certain extent. However, to consume truthfully in regards to food is more vital compared to other areas, such as traveling. The complexity of identity, with its multilayered and modifying function (Mittal, 2006; Belk, 1988; Mittal, 2006; Shankar and Fitchett, 2002), creates an inconsistency in how the informants choose to consume in relation to their environmental identity. To conclude, it can be observed that the environmental identity constitutes only a limited part of the identity, and can therefore only affect a limited part of individuals’ consumption practices.

4.2 “Insects are an Asian thing, right? It sounds foreign but interesting”

The informants indicate a willingness to care for the environment and express this by consuming green to certain extents. Edible insects are proven to be an environmentally
friendly source of protein (Dobermann et al., 2017), and the following paragraphs will therefore shift the focus to the informants’ motivations, reasons and feelings toward insects as food.

The interviews revealed that none of the informants have previously consumed edible insects. The general knowledge of the phenomenon of consuming insects is low amongst all the informants, and is described as a strange food tradition in Asia. The observation that insects are perceived as something strange and foreign, and therefore not a natural part of the Western culture, corresponds with previous studies concerning this topic (Jensen and Lieberoth, 2018; Runnò and Norell, 2017). Sandra pictures edible insects as something as strange that people try whilst traveling around Asia:

Sandra: “I know very little [about consuming insects]. I have seen that people try it out when they are traveling... I picture strange stuff at weird markets in Asia. I also think they could be dipped into chocolate, but that is basically what I know.”

Brown (2006) argues that digitalization and globalization are two extensive influences to how consumer socializes in the postmodern society. Six of the informants state that traveling is something they frequently do and highly value, and the portray that insects are “an Asian thing” is described to origin from personal traveling experiences and from media, which could be explained by the digital and globalized society. Harold explains that his perception of insects is based on what he has been exposed to on social media:

Harold: “I think about insects as grasshoppers that are grilled over an open fire at a food market in Southeast Asia (...) When people that travel in Asia try it, they always upload it on Instagram and Snapchat so it is hard to miss.”

Although all the informants feel unfamiliar with the phenomenon of consuming insects, they are aware that it exists and the majority expresses an overall positive, curious attitude towards it. Ellen and Patrick are both curious to try edible insects, although Ellen emphasizes that she is uncertain about the taste whilst Patrick, Oliver, Ingrid and
Sandra explain that they are uncertain of how insects could be consumed and cooked in Western societies. Ellen and Patrick state that:

Ellen: “Eating insects sound weird and strange... I mean how would it taste? But I am also interested in trying it... I actually think that I would want to try it.”

Patrick: “I saw that they cooked something with insects on a morning show on Swedish television, and I was like: ‘wow, that is weird but exciting, can you really eat insects like that?’ My next thought was the uncertainty of what to cook with insects here in Sweden... I mean how does it taste? I became curious to try it.”

In this section, we notice that insects are evaluated as something strange and foreign amongst the informants, and something that is not incorporated as a natural part of the Western culture (Jensen and Lieberoth, 2018; Runnö and Norell, 2017). A further implication is that globalization and digitalization (Bauman, 2000) have helped our informants to develop a positive and curious attitude towards edible insects, by providing basic information of what edible insects are and where they foremost are consumed. However, it still exists an uncertainty of how edible insects would be incorporated and consumed in Western societies.

4.3 “Insects are neither meat nor vegetarian”

As stated in the previous section, insects are perceived as something foreign and the knowledge concerning the topic is poor, which creates an uncertainty of how it could be consumed within Western societies. In this section, the focus will be on elaborating around the idea of what insects actually are. Contradictory ideas exist amongst the informants in regards to whether insects are defined as animals, and whether or not insects should be classified as vegetarian.

The informants express a broad variety of viewpoints regarding the first topic, if insects are evaluated as animals or not. The scientific definition of insects confirms that insects are classified as an animal (Putnam, 2018). However, Ingrid, Patrick, Ellen and Oliver
express that they would not classify insects as animals. Patrick explains it by comparing insects to a vermin whilst Ingrid classify insects as small creatures, as stated below:

   Ingrid: “It is the smallest animal on earth. I do not feel much about insects, I cannot really relate to them. It is an animal but we do not know much about their cognitive abilities as we do with for example cows. I would call it a small creature.”

Two other informants, Sandra and Richard, confirm that insects are animals to some extent, considering that they are living things, but that they are not considered ‘real animals’ and should therefore have its own classification. Sandra states that:

   Sandra: “Insects are living things, and technically animals, but at the same time, they are not real animals. I can relate more to a cow than an ant for example (...) Insects are somehow something else than animals, like for me, berries and fruits are similar to each other, but still different. They [berries and fruits] are in the same category, but have different sizes and are ‘picked’ in different ways.”

Harold summarizes the ambivalence towards the animalistic aspects of insects by arguing that insects are included in a grey zone with no clear boundaries. Despite that Ingrid and Sandra’s viewpoints regarding if insects are defined as animals or not differ, it is observed that both describe a lack of personal attachment towards insects; they can relate more to cows than ants. The struggle regarding the relatedness with insects is expressed by other informants as well, and the frequently stated reason is the lack of knowledge regarding their cognitive abilities, such as if insects can form thoughts or feel pain. In addition to the insecurity about insects’ cognitive abilities, size matters for the informants when evaluating if insects are animals or not. Julia compares insects with spiders, meaning that spiders are larger and more ‘meaty’, and that the size is a decisive factor in the classification of animals:

   Julia: “It is hard to define insects (...) I do not see it as an animal because I do not think they have any cognitive abilities, but it is exciting to know
where the limit is because I see big, ‘meaty’ spiders as animal. I think it is a matter of size.”

Six of the informants do not recognize insects as animals whilst Sandra and Richard acknowledge, to some extent, insects as animals. When discussing the second topic, whether or not insects are classified as vegetarian, Sandra and Richard are the only informants that classify insects as meat. An interesting observation is that Sandra and Richard are two of the informants that identify themselves as vegetarians. In order to avoid choosing the ‘wrong’ practice that interferes with one’s identity, Beck (1998) argues that today’s consumers are critical and careful in their decision-making. Based on that Sandra and Richard identify themselves as vegetarians, it can therefore be argued that vegetarians are more likely to define insects as animals, and therefore meat, to easily eliminate the risk of possibly consuming animals. Richard states that:

Richard: “I would say that insects are meat, I mean insects are an animal so it has to be meat.”

However, the six other informants do not automatically perceive insects as vegetarian, despite that they define insects as something else than animals. Harold states that insects are classified as a vegetarian option if he evaluates it as meat substitutes, while Patrick and Oliver argue that insects are neither meat nor vegetarian:

Harold: “A burger made of bugs is a meat substitute because somewhere when you are actually about to eat it, I feel that insects are as much alive as a mushroom (...) I see meat substitutes as vegetarian.”

Patrick: “Insects are something else: they are not vegetarian, and they are not meat.”

Oliver: “Insects are not vegetarian and not meat... insects should have an own category.”

The implications found in this section are that the informants express contradictory ideas about the animalistic qualities of insects, and what insects actually are. Bauman
(2000) would base this ambivalence on the ground that the phenomenon of consuming insects is uncertain amongst the informants, and where the search for security and relatedness is made by systemizing and categorizing various components of insects (Tajfel, 1972). However, the informants find it difficult to categorize insects by their animalistic qualities, and how to relate it to meat and vegetarian products. It can be argued that this difficulty is based on the limited knowledge amongst the informants, for example if insects can form thoughts or feel pain. It is therefore a challenge for the informants to calculate the risks attached with consuming, adopting or take a stand towards insects, which provoke further skepticism and avoidance (Beck, 1998).

To conclude, the small size and the uncertainty concerning the cognitive abilities of insects result in a lack of relatedness towards insects, and the informants struggle with systemizing the animalistic aspects of insects. Therefore, the majority of the informants evaluate insects as something else than a ‘real’ animal. Insects are foremost suggested to be a vegetarian option or something completely else; however, two informants classify insects as meat.

4.4 “A product is a meat substitute if it reminds me of meat”

As presented in the previous section, it exists extensive ambivalences whether insects are classified as animals or not, hence as meat or a vegetarian options, meaning that it exists confusion around if it should be considered a meat substitute. In the following section, the focus will be on discussing the characteristics that products need to obtain in order to be perceived as meat substitutes amongst the informants, and when edible insects qualify as a meat substitute.

A recurring statement made by all the informants is that products need to contain similar texture, taste, usage and appearance as meat, in order to be classified as meat substitutes. Ellen describes how she perceive meat substitutes as something that replace meat on her plate, hence still reminds her of meat products. She summarize her thoughts by the following words:

Ellen: “The first thing that comes to my mind when you say meat substitute is that I am standing in the grocery store, wanting to purchase a
Appearance and usage are frequently discussed amongst the informants when asked to evaluate when edible insects qualify as a meat substitute. Harold indicates that if a meat product is replaced with an insects-based product, it is important that the visually effect and functionality is not lost, similar to what Ellen described. Harold states:

Harold: “A product is a meat substitute if it visually reminds me of meat. If you would have presented a burger to me, where the beef had been replaced with grasshoppers, I would have considered it a meat substitute because you can put it where you normally put meat.”

The informants require that edible insects should be used, and look, like meat products in order to evaluate them as a meat substitute, which can be seen as a precaution in order to handle the uncertainty associated with edible insects. Especially when considering that none of the informants have previously tried edible insects and that they perceive it as something foreign, as presented in section 4.2. The need for connecting insects to something familiar is consistent with Tajfel (1972) and Beck (1998), who argues that individuals possess a need to develop precautions, for example by categorizing products based on selected qualities such as usage and appearance, when uncertainty arises.

Moving away from the characteristics of insects, which mainly concern the senses, the production process and ingredients are two characteristics that three of the informants find crucial when evaluating meat substitutes. Julia argues that a product is a meat substitute if it consists of several ingredients and has been processed to look like meat. She states:

Julia: “If something has grown by itself and kept its original appearance, it is not a meat substitute. For example, a Portobello mushroom on your burger is not a meat substitute, it is a plant that just happens to be in the same place as a beef burger.”
Due to the production process and the added ingredients, the same three informants as mentioned above, perceive meat substitutes as less natural and ‘clean’ compared to plant-based alternatives. That the three informants, who identify themselves as ‘environmentalists’, rather choose natural and ‘clean’ food is consistent with several consumer researchers that argue that it is important for postmodern consumers to consume truthfully and symbolically, accordingly to their identity (Giddens, 1999; Peltonen, 2013, 1998; Klas, 2016). Ellen and Sandra state that they rarely consume meat substitutes due to uncertainty concerning the ingredients. Sandra questions the production process while Ellen points out that she rather consumes products with fewer ingredients. The two informants describe these thoughts in the following words:

Ellen: “I only consume meat substitute when I am stressed and need food quickly. I am not against it but I am trying to consume more whole, clean food. The less ingredients in a product, the better.”

Sandra: “I do not consume meat substitutes on a regular basis because it feels like it is produced in a weird way, and that it only contains strange ingredients that is bad for me and for the environment.”

A conflict is observed when Julia, Ellen and Sandra, who perceive that meat substitute only include processed food, try to evaluate when to classify edible insects as meat substitutes. To only include processed food with added ingredients into the category of meat substitute suggest that a grasshopper burger will be evaluated as a meat substitute, since the grasshoppers are processed to get the appearance of a burger. On the other hand, edible insects are a diverse group of animals that ‘grow by themselves’ and can be consumed while maintaining its original appearance, which Julia previously stated as an argument to when not classifying a product as a meat substitute. This observation suggest than an ambivalence towards how to consume edible insects exists, and Julia simplify and systemize a complex situation, which Tajfel (1972) labels as stereotyping, as she refers back to that meat substitutes first and foremost need to possess similar appearance as meat. She discuss how the presentation of insects would affect how she would classify them, meaning that if insects were presented as a protein source, she would classify insects as a meat substitute. Julia states:
Julia: “In the end, it depends on how it is presented... if presented as a protein source made out of insects, I would classify it as a meat substitute.”

The level of protein is repeatedly discussed amongst six of the informants, as the informants associate meat with protein. That products only resemble the appearance of meat is considered insufficient, which indicate that products are required to substitute for the nutrition as well in order to be classified as meat substitutes. Oliver explains the importance of incorporate protein into his diet, while Patrick describe how he perceive insects to be a meat substitute due to their high level of protein. They explain their thoughts as following:

Oliver: “I never choose meat substitute instead of vegetables but I do need protein, so therefore I need the meat substitute as a complement in my diet.”

Patrick: "I perceive edible insects to be meat substitutes because I know that insects contains a lot of protein, and protein is what I associate meat with."

To conclude, when evaluating edible insects as meat substitutes, the informants put emphasis on texture, taste, usage, appearance, how ‘clean’ it feels, and the level of protein. As presented in section 4.3, the informants who identified insects as animals were more likely to perceive edible insects as meat. This observation suggest that in order to evaluate edible insects as a meat substitute, consumers will first and foremost have to identify insects as a living thing or something else; not an animal. Sandra confirms this observation when she states: “edible insects are not a meat substitute because insects are animals, and animals are meat”.
4.5 “If edible insects are not meat substitutes - what the flying f*ck is it?”

The informants define several characteristics that edible insects need to obtain in order to qualify as a meat substitute, and this section will focus on the observed ambivalence towards how to consume edible insects, if not as a meat substitute. Because the general reaction amongst the informants when trying to evaluate how to consume edible insects can be summarized into one sentence: “what the flying f*ck is it?” Conflicting feelings and confusions become inevitable amongst all the informants when asked what edible insects are, if not a meat substitute. Sandra express that she can picture edible insects both in the meat section and in the section with Asian products. She states:

Sandra: “Since I perceive insects to be an animal, I would say that you find it in the meat section in the grocery store, and that you consume it as meat... but that feels strange when I think about it... maybe together with the Asian products? This was difficult. I have to idea.”

In a society characterized by constant change, lack of structure and endless choices (Bauman, 2000), individuals need guidance in the selection process (Giddens, 1999). Tajfel (1972) explains that by categorizing products, it becomes easier for individuals to evaluate whether or not products correspond to their identity and can be consumed, which is observed amongst six of the informants. Because when asked what edible insects can be consumed as, if not as a meat substitute, these six informants put great emphasis on where in the grocery stores edible insects are placed and what they are presented as. Julia evaluates edible insects similar to nuts or beans if presented and found amongst the products you buy as supplements in salads. On the other hand, Harold accepts edible insects as an enriched alternative to flour, if processed to look like flour, and can be found in the flour section, whilst Ellen can picture it as crisp bread:

Julia: If presented as a can of larvae that you sprinkle on top of your salad, I would evaluate it as similar to nuts or beans... and expect to find it in the same section.”
Harold: "I think it comes down to what products you create with the insects. If you present flour made out of grasshoppers to me, that I will find in the section with flour, I will consider it an enriched alternative to flour and absolutely not as a meat substitute."

Ellen: "It depends on where in the grocery store I find it. If I would walk past the section with crisp bread, and see insects-based products there, I would think about edible insects as crisp bread."

That six of the informants' evaluation of edible insects are strongly dependent upon categorization suggest that products they are uncertain of, need to remind them of products they are certain of such as nuts, flour or crisp bread. This observation advocates that the informants indirectly prefer being told how to evaluate products. It could, therefore, be argued that the six informants avoid critical thinking in times of uncertainty and risk avoidance, as they automatically accept edible insects into different product categories without criticizing it. This standpoint contradicts the findings of Beck (1998) when he argues that individuals use critical thinking as guidance in the selection process.

The need to categorize edible insects into existing product categories is not recognized by Oliver and Patrick, who express contradictory standpoints compared to the six other informants. The same two informants stated in section 4.3 that insects are neither meat nor vegetarian, but rather something else. The same standpoints are expressed in this section, where Oliver states that edible insects should not be processed to look like other products, but instead be introduced as a completely new category, whilst Patrick find it difficult to categorize edible insects into an already existing product category. They state that:

Oliver: “It is something completely new, and should have its own category. Do not pretend that it is something else! Because if you try to imitate something else, then it is not for real: it would feel temporary.”
Patrick: “It would not be anything else than a meat substitute... or maybe something completely new? I actually find it hard to associate edible insects with products that already exist.”

That Oliver and Patrick show resistance toward introducing edible insects into an already existing product category suggest that they apply critical thinking when faced with uncertainty (Beck, 1998). To conclude, critical thinking and categorization are two precautions, in other terms techniques that individuals apply in times of uncertainty and risk avoidance (Giddens, 1999; Tajfel, 1972; Beck, 1998). The observation that all the informants actually apply a precaution when asked to evaluate edible insects, indicates that it exists a great uncertainty towards what edible insects are and how to consume them. It is therefore argued that edible insects are not automatically perceived as a meat substitute.

4.6 “I would be more motivated to consume insects if they are ‘green’”

Previous section focused on the observed ambivalence towards how to consume edible insects, where the presumption of insects as a meat substitute was questioned. This section will discuss how the informants define and evaluate the term ‘green’, how meat substitutes and edible insects are evaluated in terms of being ‘green’, and how that affects the informants’ motivation to consume edible insects as new, green products.

All the informants define green products as products that are less damaging to the environment, which is consistent with how existing research define green products (Peattie, 2010; Reisch and Thøgersen, 2015). None of the informants perceive meat to be a green product and instead, fruits, plants, and vegetables that are locally produced and organic are repeatedly stated as examples when the informants define and evaluate green products. Ellen, Julia and Harold develop it further by arguing that being locally produced or organic, alone, do not automatically qualify products as green. Ellen gives the example that organic tomatoes that are imported from Spain can be equally bad, or equally good, as Swedish produced tomatoes. Julia emphasizes to look beyond the 'obvious' by arguing that although processed food contains chemicals, it simultaneously
requires less energy than products that are organic or locally produced. Ellen and Julia state that:

Ellen: “My sister and I have discussed this: are organic tomatoes, imported from Spain, actually better than Swedish tomatoes? Sure, they are organic but the transport distance is long. On the other hand, the Swedish tomatoes have probably grown in a greenhouse that use diesel to keep the heat up.”

Julia: “At the first thought, processed food does not seem like a green product because it contains chemicals. However, it is an effective production compared to products that have to be locally or organic produced, because then you get less food with more energy.”

That Ellen, Julia and Harold find it insufficient to classify food products that are locally produced or organic, alone, as green indicate that they are critical towards information, and require proof and facts before making up their minds. Bauman (2000) explains that postmodern consumers are critical and careful in their decision-making because they are presented with endless amount of choices. As green consumerism through food has increased, a large number of products that are labeled as ‘green’ have been introduced to the market (Goodland and Anhang, 2009). It could therefore be argued that Ellen, Julia and Harold’s skeptical attitudes are based on the increasing number of choices in regards to ‘green’ products.

The skeptical attitudes toward green products can also be explained as a precaution to avoid the risk of choosing a ‘wrong’ consumption practice (Beck, 1998). Elliott and Wattanasuwan (1998) argue that individuals’ consumption practices symbolize their identity, and considering that the informants identify as environmentalist, a ‘wrong’ practice would be to consume products that are damaging for the environment (Beck, 1998). To illustrate, Harold highlights that not everyone knows that the production of soya milk, which is labeled as a cool organic plant-based milk, actually destroys rainforest:
Harold: "If you switch from 'normal' to organic plant-based milk, soya milk seems cool. But not everyone knows that rainforests get destroyed in the process of cultivating soybeans."

An interesting observation is that the informants’ skeptical attitudes do not apply to meat substitutes, which existing research commonly classify edible insects as (Aspholmer and Gellerbrandt, 2014). Meat substitutes are automatically perceived as green amongst the informants, despite having little knowledge about where and how the meat substitutes that they normally consume are produced. Julia explains that meat substitutes are vegetarian, and all vegetarian options are green because they are presented as a better alternative than meat:

Julia: "A meat substitute is a green product because it is a better alternative than meat, and because environment conscious people such as vegetarians consume it (...) I honestly have no idea how the production process for meat substitutes look."

Six of the informants argue that their motivation to consume edible insects would increase if proven to be green. Ingrid highlights that many people in the younger generation, in other words generation Y that this study focuses on, are concerned about the environment and act accordingly. Whether or not edible insects are green is a decisive factor for Ingrid, as acting in an environmentally friendly way corresponds to her identity:

Ingrid: “Many of us in the younger generation cares about environmental concerns. It is a lot of anxiety and remorse attached to it. So I think it is a decisive factor if insects are environmentally friendly, at least for me because caring about the environment is a very important part of my identity and my connection to my family.”

That the motivation amongst the informants increases if edible insects are proven to be green, strengthen the arguments made by Klas (2016) and Peltonen (2013): consumers with an environmental identity are strongly predictive of green consumption practices. Richard and Sandra, both vegetarians, possess a contradicting view compared to the
other informants when stating that they will only be motivated to consume edible insects if proven to be *more* environmentally friendly than what they currently consume, which is a plant-based diet. Richard states that:

Richard: "I would not consume insects at the moment, because I am happy with my diet. But maybe if I get proof that it is more environmentally friendly than my current diet."

When evaluating whether or not edible insects are green, all the informants put emphasis on how the production process look. This supports the view of Barr and Gilg (2006), Grønhøj (2006) and Peattie (2010), who did not limit the definition of ‘green’ to the end product, but rather to the whole supply chain. Ellen and Sandra argue that the production process is vital when evaluating how green edible insects are, and Sandra imagines that edible insects are greener than meat due to the production process. Ellen adds the transport distance into the evaluation process, and argues that imported insects from China would be a big no for her:

Ellen: “If the insects originate from China and are imported to Sweden, I would not see it as green because of the transport distance and that you have no idea about the production process.”

Sandra: “Without knowing too much, I would not classify edible insects as green but it is greener than meat because of the production process.”

To conclude, an interesting observation is made concerning that the informants are critical and careful in their decision-making when evaluating what constitutes a 'green' food product, and when edible insects qualify as green, however, meat substitutes are automatically perceived as green. An environmentally friendly production process is necessary for the informants for being able to evaluate edible insects as green, but not taken into consideration when evaluating meat substitutes as green. The informants states that meat substitutes are vegetarian as the underlying reason for this contradictory idea, which suggests that the consumers who perceive edible insects as vegetarian, not meat, are more likely to classify edible insects as ‘green’.
4.7 “We want proofs and facts”

An uncertainty exists amongst the informants when evaluating edible insects as a meat substitute, and various factors influence their evaluation process, such as whether or not insects are perceived to be animals. This section will focus on a recurring factor that is identified throughout the interviews: the need for proof and facts.

The stream of information about edible insects is essential for how the informants evaluate them overall, as well as, if and how insects can be consumed as a meat substitute. Proof and facts concerning the benefits, production processes and cognitive abilities of insects from sources such as experts, scientists and documentaries are demanded. Ingrid and Oliver describe how proof and facts, which would state that edible insects are ‘green’ and taste good, would affect them positively and create a higher receptivity to accept edible insects as a meat substitute, or food overall:

Ingrid: “If I see something new in the grocery store, I often use Google to find out facts about it. I want to dig into the topic to find proofs of why I should consume it (...) I trust reliable sources such as documentaries or experts in the subject. I also want to know if it tastes good."

Oliver: “I want to get the information from an academic place, like researchers and important people in the business world and in the specific industry, in order to know why I should consume it. I also want to hear reviews from friends who have tried insects, to know if it tastes good.”

Reviews from people that the informants rely upon, such as friends and family, also affect how the informants evaluate edible insects as a meat substitute, most specifically in regard to the taste. To get an insight into how insects taste from people that already tried it, helps the informant to evaluate if, how and to what extent edible insects can be consumed. That implications and opinions from the social sphere have an influence on the informants can be explained by previous research concerning the social identity, since it emphasize how groups and other social connections contribute to individuals’ behavior and identity construction (Abrams and Hogg, 1990; Hornsey, 2008; Tajfel and Turner, 1979; Turner, Hogg, Oakes, Reicher and Wetherell, 1987). Furthermore,
research who studies green consumerism shows that it is reliant upon large numbers of individuals acting in the same way – that is, that green consumerism is more effective when ‘collectively employed’ (Peattie, 2010).

The underlying skepticism and uncertainty concerning how to evaluate insects amongst the majority of informants have been consistent through all interviews and stated early on in the interview sessions. Julia demonstrates an overall positive standpoint towards insects, but it becomes clear how this standpoint depends upon the production process of insects and if insects are a ‘green’ product. Julia describes her thoughts as the following:

Julia: “I do not evaluate eating insects as something negative, but it depends of how it is produced and if it is environmentally friendly. Of course it is good if you can eat insects to get variation... I think that, overall, I am more positive than negative.”

Julia uses the term “it depends” several times throughout her interview, which she shares with all the other informants. Since the informants repeatedly point out that only some sources are trustworthy, and indicate that trust is an important component when retrieving and evaluating information, it may be argued that consumers possess a lack of trust towards their surroundings. This argument can be grounded in research conducted by Bauman (2000) when he suggests that credibility and reliability are mobile, meaning that society is full of surprises and uncertainty in which truths of today can be a lie tomorrow. As a result, consumers may lose trust in information since truths can drastically shift, which can explain why the informants foremost trust information from sources that possess extensive knowledge within the given area, such as academics or experts.

Furthermore, the informants are members of two social-groups, namely flexitarians and vegetarians, and are therefore argued amongst existing research to execute political consumerism by boycotting certain animalistic products, foremost meat (Baek, 2010; De Backer and Hudders, 2015). Baek (2010) argue that flexitarians and vegetarians are well-educated, responsive and information-seeking, which is a standpoint that is strengthen when the informants express a need of proof and facts from academic and
reliant sources in order to consume insects. By identifying as a flexitarian or vegetarian, the informants take a stance, which indicates that their actions have to be grounded in facts in order to eliminate the risk of doing ‘wrong’ and violating their identity (Beck, 1998).

To conclude, facts and information from people that the informants rely upon have an extensive impact on how the informants evaluate edible insects as a meat substitute. The informants demand information concerning the benefits of consuming insects, how the production process looks, the cognitive abilities of insects, how insects could be consumed, the taste of insects and how to categorize them.
5 Conclusion and Discussion

In this chapter, the key findings will be concluded and further discussed, followed by limitations, the contributions to existing research and suggestions for further research.

5.1 Conclusion

This research aims to understand how Swedish consumers with an environmental identity evaluate edible insects as a meat substitute, in which Sweden is presented as a context of Western societies. Eight semi-structured interviews were conducted with consumers that identify themselves as vegetarians or flexitarians, with environmental concern as one of their main motivators, in order to address the research question: how do consumers with an environmental identity evaluate edible insects as a meat substitute? Several identified themes were beyond the authors presumed assumptions, but contributed to many interesting findings.

This research was grounded in the conflict that Western consumers, although possessing a high environmental awareness, were stated by previous research to possess a low willingness to consume edible insects. When weighing the evidence of this study, it appears relatively more likely that the conflict is grounded in the cultural absence and the current prohibition of edible insects, rather than associations with disgust.

A high willingness and positive attitudes toward consuming edible insects were identified, which therefore contradicts previous research. However, the consumers expressed an extensive uncertainty and ambivalences concerning how edible insects could be consumed in Sweden. The presumed classification that edible insects are to be consumed as a meat substitute, which have been stated by previous research, were questioned amongst the informants.

Five key factors that influence the evaluation of edible insects as a meat substitute have been identified: the animalistic qualities of insects, if insects are perceived as meat or vegetarian, if edible insects are ‘green’, proof and facts, and what product category edible insects belong to. It is possible that the contrasting findings of this research, in relation to previous research, are grounded in that consumers with an environmental identity were studied.
5.2 Discussion

Through an in-depth analysis of eight consumers that identify as vegetarians or flexitarians, the identified motivations, reasons and actions toward consuming edible insects can be summarized into two words: it depends.

5.2.1 A high willingness and positive attitudes

The low willingness to consume edible insects is grounded in the argument that insects are associated with disgust (Jansson and Berggren, 2015). However, this research identify a high willingness and positive attitudes toward consuming insects; the phenomenon is rather associated as something foreign, explored while traveling, than disgusting. The informants’ interest in traveling, meaning to explore foreign traditions, may assist in explaining the positive attitudes. Yet, the authors argue that the initial association of insects as something foreign also creates a distance and lack of familiarity toward how insects could be consumed in Western societies. As a result, an overall confusion occurs when evaluating edible insects as food in Sweden.

5.2.2 Are insects meat or vegetarian?

The authors presumed that edible insects would automatically be classified as a meat substitute due to what existing literature indicates, but the findings showed that the classification of edible insects is rather complicated. Although the scientific definition of insects confirms that insects are animals, and therefore meat, the informants classify insects as both meat and vegetarian. Considering that insects are presented to cause less environmental damage than meat, the authors would like to suggest that the classification of insects as vegetarian derives from the association that vegetarian food products are more environmentally friendly than meat. An interesting observation is made when insects are somehow perceived as meat according to the scientific definition, but still possess the possibility to be classified as vegetarian due to the environmental aspects. The ambivalence towards if edible insects are meat or vegetarian, or both, indicates that the informants are unfamiliar with a third additional category, which could supplement the vegetarian and meat category. Therefore elucidating the impression that the confusion around what insects are, and the
difficulties concerning the categorization of insects, would decrease if edible insects were to be presented as a third category.

5.2.3 Are insects ‘green’?

When asked to further elaborate on what falls into the vegetarian category, the informants refer to plant-based products, which again creates an ambivalence considering that insects are not scientifically defined as plants. When the informants discuss what and when products qualify as ‘green’, fruit, vegetables and plants are brought up as suggestions, and it is argued as insufficient to classify products as ‘green’ on the basis that they are only organic or only locally produced. In order to classify edible insects as new, green products, the informants repeatedly emphasize the need to know that the whole supply chain is environmentally friendly. One can therefore assume that the same skepticism towards the production process is applied when evaluating meat substitutes, which edible insects are presented as by other researchers, as ‘green’. However, the opposite occurs: the informants automatically evaluate meat substitutes as ‘green’, based on the idea that all vegetarian products are environmentally friendly. This observation propose that edible insects are more likely to be classified as ‘green’ amongst the consumers that evaluate edible insects as vegetarian and accept it as a meat substitute.

The authors believe that the informants’ reasoning behind automatically evaluating meat substitutes as ‘green’, without criticizing it, can be grounded in the major assumption of this research: in regards to their food consumption, the informants consume in accordance to their environmental identity. Considering that the informants exclude meat from their diet to various extent, meat substitutes can fill missing nutrition gaps, such as the amount of protein. If meat substitutes would not be ‘green’ products, a conflict between identity and consumption practices would arise, which are stated to induce anxiety. Therefore, it may be argued that the informants avoid being critical toward how ‘green’ meat substitutes actually are, since it prevents the risk of consuming the ‘wrong’ type of products in relation to their identity. That insects are proven to be ‘green’ was noticed as significant in order for the informants to consume edible insects, which strengthen this observation.
5.2.4 What edible insects are? You tell me!

When the informants discuss *when* edible insects qualify as meat substitutes, and *how* to consume edible insects, if not as meat substitutes, they describe a strong influence of what others indirectly tells them. The informants have two reference points when evaluating edible insects: product placement and the similarity to other products, which they have categorized into product types beforehand. This finding is consistent with previous research when arguing that the presentation of edible insects should look, taste, and smell similar to what Western consumers are familiar with, in order to be consumed. Due to the strong uncertainty of what insects truly are; presenting edible insects as products that consumers are familiar with can assist during the process of evaluating edible insects. However, an interesting observation is that insects do not perfectly fit into any of the existing product categories, such as meat substitutes. The authors therefore argue that it exist a possibility to introduce edible insects as a third product category, while keeping similar characteristics as already existing products.

5.2.5 Vegetarians versus flexitarians

The authors presumed that several contradictions would be identified between the informants, considering that they possess various social environmental identities, namely vegetarian or flexitarian. However, only two contradictions were identified. Firstly, the only informants that classified insects as animal, and therefore meat, were two vegetarians. Secondly, all flexitarians were open-minded towards the idea of adapting edible insects into their everyday diet, meanwhile, only half of the vegetarians would. The reason behind the resistance of consuming edible insects were that they are pleased with their current plant-based diet, and need proof that insects are more environmentally friendly compared to what they currently consume, in order to start consuming edible insects. However, all informants express positive attitudes when introduced to the idea of introducing insects as new, innovative meat substitutes on the Swedish market. It can therefore be argued that it exists an overall demand for *new* meat substitutes, where edible insects could be an alternative. However, the consumers are skeptical and need to be carefully guided throughout the adoption process, in order for edible insects to fly among Swedish consumers.
5.3 Limitations

This research was a qualitative study conducted through eight semi-structured interviews. The sampling method resulted in a sample between the ages of 21 to 25. However, Generation Y ranges from 18 to 38, therefore it might be difficult to generalize the findings to the entire generation. Additionally, this sampling method could be perceived as biased since most of the participants had previous relations with the authors. However, by using the frame of references as support throughout the analysis and conducting a discussion containing the authors’ suggestions, beyond initial findings, the authors aimed towards diminishing the possible bias.

5.4 Contributions and Suggestions for Further Research

This research contributes within the field of consumer culture, and shows that consumers with an environmental identity, more specifically vegetarians and flexitarians, possess positive attitudes and high willingness towards consuming edible insects. This observation may serve as support for companies, currently or planning to launch edible insects within Western societies, when selecting their target audience. Due to the time limit, this research covers a smaller sample size, which suggests that further action research is needed. Thus, in order to generate a more comprehensive research of the interpretations, a larger sample size could be conducted with possibly larger geographical area and a broader, or different, age range.

The presumed categorization of edible insects as a meat substitute was observed to be rather complicated, and not automatically accepted by Western consumers. The research revealed that edible insects do not fully fit into any existing product category. The authors therefore suggest further research on the possibility of presenting edible insects as a new product category, in other terms to reinvent the phenomenon of consuming insects in Western societies.

Despite the uncertainty around what product category to place edible insects in, an overall positive attitude towards new ‘green’ meat substitutes was identified, which implies that further research is needed within the field of innovative and ‘green’ meat substitutes. Furthermore, meat substitutes are only one example of substitutes, and due to the increasing environmental awareness and willingness to consume ‘green’ in
Western societies, the authors would further suggest to research substitutes within other industries than meat, for example clothes or transport.

From a managerial perspective, the empirical findings of this study may serve as guidance for companies in the process of producing and marketing edible insects amongst Western consumers. A number of components affecting the evaluation towards edible insects as a meat substitute were identified in this research. It may be of interest for marketers and product developers to take these factors into account when penetrating the Western market, in order to offer an attractive product that consumers are likely to accept.
6 Reference List


Baek, Y. (2010) To buy or Not to Buy: Who are Political Consumers? What do they Think or How do they participate?. Political Studies, 58(5), pp. 1065-1086


Emilson, D. (2017). Nine Swedish insect companies take the first step towards an industry organization. *Livsmedelsforetagen.se* [online]. Available at:


Jensen, N. and Lieberoth, A. (in press) We will eat disgusting foods together - evidence of the cultural basis of Western entomophagy-disgust from an insect tasting, Food Quality and Preference.


Appendix 1

Interview guide

Intro: This interview aims to explore how Swedish consumers with an environmental identity, as for example vegetarians and flexitarians, evaluate edible insects as a meat substitute. We try to understand why certain meat substitutes are consumed, while others are not. The interview will consist of questions concerning how you identify yourself, your consumption practices, how you evaluate meat substitutes, and lastly how you evaluate edible insects as a meat substitute.

Is it ok for you if we record this interview?

Name:
Age:
Flexitarian/Vegetarian:

Introduction
1. Tell us a bit about yourself
   a. How would you describe yourself as a person?
   b. How would your friends describe you?
   c. What do you like to do on your spare time?

Environmental concerns
2. How important is saving the environment for you?
   a. Why is it important for you to care about the environment?
3. Would you say that an environmental concern affect your consumption practices?
   a. Why, why not?
Identity
4. Do you feel that purchasing environmentally friendly products symbolize and/or identify who you are?
   a. If yes, why? If no, why not?
5. Please tell us why you identify yourself as a vegetarian/flexitarian?
   a. What motivates you?

Food consumption
6. Please tell us about your food consumption
7. If you go into the food store, what does your basket consist of?
8. What do you find most important when purchasing food?
9. How influenced are you by others regarding the type of food you consume?
   a. Why are you influenced?
10. Please tell us about your upbringing and the way you consumed food
    a. Does your upbringing affect the type of food you consume?
    b. If yes, why? If no, why not?
11. Please describe what food you perceive to be green - why?
12. How do you react when new, green products are introduced to the market?
    Why?

Meat substitutes
13. Please describe what you perceive to be meat substitutes
    a. What are your feelings towards meat substitutes? Why?
14. What motivates you to purchase meat substitute?
15. How do you react when new meat substitutes are introduced to the market?
    Why?
16. Do you perceive meat substitute to be a green product?
    a. If yes, why? If no, why not?

Edible insects as a meat substitute
17. What do you know about edible insects?
    a. How did you come across this information/knowledge?
18. If you were to describe edible insects, what would it look like to you?
a. Where does this picture come from?
b. Is there a difference between insects and edible insects for you? Why?

19. What do you perceive edible insects to be? Why?
20. Where in the grocery stores would edible insects be placed?
21. Would you be interested in trying edible insects?
   a. If yes, why? If no, why not?
   b. Would you feel equally motivated to try intact insects such as fried crickets, or processed insects such as bug burgers? Why?

22. How would you incorporate edible insects into your food consumption?
23. What would be your motivation today to consume edible insects?
24. What would have to change for you to become even more motivated to consume edible insects?
25. Do you perceive edible insects to be a ‘green product’?
   a. If yes, why? If no, why?
26. Who do you think eat insects, is it certain people or groups? Why, why not?

Ending
27. Is there anything else that you want to note about these matters?