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Executive summary

This research will specify on the buying patterns of the Dutch market. And more specifically on the motives of young adults (18-35 years old) on purchasing meat substitutes. It is particularly interesting to research the Dutch meat substitute market, since the population of the Netherlands is the biggest consumer of meat substitutes in Europe (ProVeg, 2021).

The scientific relevance of this study is derived from the fact that multiple studies explain the intrinsic motives of changing a diet towards more plant-based alternatives (Janssen et al 2016, Hoek et al., 2011). But in the choice process of customers who look at features of the products, incentives come to play. A large amount of studies show that attributes play a big role on the choice behaviour of customers (Blakney and Sekely 1994). There is an exhausted list of literature about attribute influence on products, but not for the Dutch meat substitute market, focused on young adults.

Besides the scientific relevance, this research topic is also socially relevant. Plant based food as an alternative for meat production is a very sustainable food source and contributes to a healthy body and environment (Fehér et al. 2020). Thus, conducting research in order to further develop this industry could contribute to a more sustainable and healthy way of consuming food. This topic is currently urgent, given the increase in public debates about environmental issues and new policies to prevent the global warming and her effects to be irreversible.

Research in the most important attributes for meat substitutes is valuable for marketing purposes. Especially for companies that are currently targeting Dutch markets and are looking to gain more market share among young adults, or in general. Designing optimal positioning strategies for target segments is very important for a firm's existing brands (Green and Krieger 1991). The results of this study could have valuable information about the attributes for brands to improve their products.

Central research question and sub-questions

Research question: *What attributes are most important in the buying decision of meat substitutes for Dutch young adults?*

Empirical Sub-question 1: *What are meat substitutes and what is their origin?*

Empirical Sub-question 2: *What does the market for meat substitutes in the Netherlands look like?*

Empirical Sub-question 3: *Who are the biggest consumers of meat substitutes?*

Theoretical Sub-question 1: *What is the choice process of customers?*

Theoretical Sub-question 2: *How can marketers influence the choice process of customers?*

Theoretical Sub-question 3: *What are the motives of buying meat substitutes?*

Literature study outcome

What literature has shown is that the biggest consumers of meat substitutes in the Netherlands are young adults (18-35). Data shows that young adults have the highest share of total consumption of meat substitutes. This group also has the highest relative amount of vegetarians, flexitarians and vegans of the Dutch population.

The amount of meat substitute consumers in the Netherlands is growing, due to the global attention to environmental issues and animal-welfare concerns. Health concerns is also proved to be a motivator for eating plant-based alternatives to meat.

The total revenue of meat substitute sales in the Netherlands in 2018 is 97,6 million. This number is expected to grow 10% each year. From 2007 onwards, there has been a clear trend in the consumption of meat substitutes in the Netherlands.

The most popular products in the Netherlands are plant-based burgers, fake chicken pieces, and vegetarian minced meat. The most popular brands are Vegetarische Slager, Garden Gourmet, and the Albertheijn house brand.

Lastly, literature about heuristics could show that the anchoring- and framing effect could be interesting to influence the choice process of meat substitute consumers. These heuristics unconsciously affect the way that information is perceived and processed. Producers of meat substitutes could find an optimal way to provide information on their products in order to use these heuristics effectively.

Hypothesis 1 - Price

H0: Only price will have a significant effect on the willingness to pay for meat substitutes.

H1: Price will not be the only attribute with a significant effect on the willingness to pay for meat substitutes.

Hypothesis 2 – differences between segments

H0: The three segments will have the same attributes with significant effect on meat substitutes.

H1: One or more segments will have different attributes with significant effect on meat substitutes.

Methodology

This paper begins with qualitative research. This study will have ten interviews with representative interviewees. It is important to get a list of possible attributes that could have effect on the

willingness to pay for meat substitutes. The interviews are held in order to ask the representative interviewees about their decision making with regards to meat substitutes.

The list of attributes are then narrowed down by their importance for the respondents and the amount of times the attributes were mentioned. With the remaining important attributes left, the study will continue with a quantitative research. A conjoint analysis will be made in order to test the effect of the attributes on the utility, or willingness to pay of the product.

As the interviews will most likely generate more than six important attributes, a partial-profile conjoint will be made. For this type of conjoint, the amount of attributes can be much bigger. However, the amount of attributes shown on each choice set should be a portion of the total amount of attributes, otherwise the task is too much of a burden for respondents. Sawtoothsoftware (N.D.) explains that 2 to 4 attributes on each choice set is the optimal amount for a partial-profile design.

Research outcome

The qualitative research gave insights in the importance of different product attributes. The attributes that were believed to be most important in the decision between meat substitute alternatives were: *Price, Flavor, Texture, Appearance, Ingredients, Use of the product in a meal and Brand*. Additionally, literature suggested to include *Packaging material* as an important attribute.

The quantitative research was done in order to test the effect of the attributes on the willingness to pay for the target market. The data shows that *Texture, Packaging Material, Price, Use of the product in a meal, Ingredients, Flavor and Brand* have a significant effect on the willingness to pay for meat substitutes among Dutch young adults. This means that people in grocery stores potentially evaluate alternatives based on these attributes and their attribute levels.

In conclusion, to answer the central research question. All the attributes were tested with the Effect Marginals Test in order to compute the range and relative importance per attribute. The most important attributes in the buying decision of meat substitutes for Dutch young adults are: *Texture, Price and Packaging material*.

Hypotheses

Table 3 in Appendix D1 shows the Likelihood Ratio Test with the control variable *Motivation* added. The results show that multiple attributes, in addition to *price*, have significant effect on the utility of meat substitute consumers. Therefore, it could mean that H0 could be refuted. Meaning that it is possible that *Price* is not the only important attribute for people in their choice decision to buy a meat substitute.

Table 3 in Appendix D1 shows the Likelihood Ratio Test with the control variable *Motivation* added. The results show that there is one significant interaction effects, *Motivation*Brand*. However, this is not enough to state that there are differences between the importance of the attributes between the segments in *Motivation*. Therefore, H0 cannot be rejected, and there could be no differences within the three segments.

Recommendations

The most important recommendation for the market for meat substitutes is to improve the existing attributes of the meat substitute with regards to the preferences of the target market for Dutch young adults. This research has shown that *Texture, Price* and *Packaging material* are the most important attributes that Dutch young adults care for. Producers of meat substitutes could try to develop their products in such a way, that the attributes that yield the highest utility are optimized.

In order to expand this research, it could be interesting to look at different segments in the Dutch young adult market in the Netherlands. With only 170 respondents, it was not possible to find differences in preferences between the three segments of *motivation*. Though this could be something that producers or researchers benefit from, because more knowledge about the target market is essential for a good marketing strategy.

Furthermore, an optimal combination of key attributes could be researched for meat substitutes. This could be done for a specific target market, or for multiple target markets. This information could provide useful insights of the different target markets, in order to attract more market share for a producer.

Lastly, it could be useful to dive deeper in the important attributes stated in this study. For example, what is the best possible eco-friendly packaging for food products? Some research is done already to find the state-of-the-art package methods in order to assure food safety and sustainable solutions (Halonen et al. 2020). Information about the optimal use of materials could be beneficial for meat substitute producers.

Chapter 1: Introduction

“Not a single European eats as much **meat substitutes** as the Dutch”, as cited by Trouw (2021). The Dutch population is at the forefront of the shift towards a more plant-based protein diet. The growth of meat substitute sales is increasing each year, with 30% from 2019 to 2020 (VMT, 2020). “The Netherlands is the Walhalla of meat substitutes.” Parool (2021). The plant-based industry is flourishing in the Netherlands, and many foreign companies are currently moving their business to the Netherlands.

The reason that the Netherlands is so attractive for companies is that the Netherlands is at the forefront of research and development of meat substitutes (Lammers, 2020). Also, the Dutch government policies are considered favorable for companies that want to get into the plant-based economy. Companies like Kraft Heinz and Nestlé have been investing in the Dutch plant-based market for years. Additionally, there are numerous brands that try to expand their business to the Netherlands. Recently, Beyond Meat and Vion started producing in the Netherlands (investinHolland, 2020).

These examples show the upcoming trend of eating meat substitutes in the Netherlands, and the growing environmental awareness of her citizens. The awareness is also growing globally. For example, Sivamoorthy et al. (2013) focused on environmental awareness and practices of college students in India. The study showed that the growth in awareness started two decades ago and is increasing in India.

Another study states that animal welfare concerns has an increasingly important role in society (Horgan and Gavinelli, 2006). Animal welfare is perceived as an element of food quality and food safety. The World Organization for Animal Health has developed global animal welfare guidelines and standards that are now mandated by 167 countries worldwide.

In the Netherlands, there are also signs of increasing awareness among students. For example, multiple Dutch cities have introduced Vegan Student Associations. The first association started in 2019 and more cities are following this trend. The most noticeable one is in Wageningen, which is considered the best city to study sustainability and nutrition (Gelderlander, 2020). These associations debate about environmental issues, animal welfare and nutritional benefits of eating plant-based food.

This research will focus on the meat substitute market in the Netherlands, focused on young adults. But what factors play a big role for this target market? Which attributes of meat substitute products

need to be improved? These answers are not yet answered in existing literature, which is why this study will focus on this problem.

1.1 Introduction to the study

This research will specify on the buying patterns of the Dutch market. And more specifically on the motives of young adults (18-35 years old) on purchasing meat substitutes. It is particularly interesting to research the Dutch meat substitute market, since the population of the Netherlands is the biggest consumer of meat substitutes in Europe (ProVeg, 2021).

Furthermore, this study will specify on the buying behaviour of Dutch young adults to find the most important product characteristics for this group. Data shows that young adults are the leading share of consumers of the growing meat substitute market in the Netherlands (Statista 2021a, Statista 2021b). This group is the most important share of the growing meat substitute market, thus finding ways to promote products for this group is important to stimulate the meat substitute market.

Understanding the Dutch meat substitute market for young adults is the key objective for this research. This research will start with a literature study about the meat substitute market, and the population of interest. A deeper understanding of the decision making process is also needed in order to understand the choice process of Dutch young adults.

In order to do so, qualitative and quantitative research methods are used to find what the most important product attributes of meat substitutes are. These attributes will provide the most utility for Dutch young adults. With this information, meat substitute companies could improve their product features to maximize the willingness to pay of this target market.

1.2 Relevancy of the study

1.2.1 Scientific relevance

The scientific relevance of this study is derived from the fact that multiple studies explain the intrinsic motives of changing a diet towards more plant-based alternatives (Janssen et al 2016, Hoek et al., 2011). But in the choice process of customers who look at features of the products, incentives come to play. A large amount of studies show that attributes play a big role on the choice behaviour of customers (Blakney and Sekely 1994). There is an exhausted list of literature about attribute influence on products, but not for the Dutch meat substitute market, focused on young adults.

However, there are studies that show ways to influence the decision process of people in order to make them buy certain products. For example, Richard Thaler and Cass Sunstein (2008) discuss the use of nudges in order to alter people's behavior. "A nudge, as we will use the term, is any aspect of

the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives." (Thaler and Sunstein, 2008, p.6). For example, placing meat substitutes at eye level and highlighting this with spotlights is a way of nudging. Banning regular meat is not. Banning a product prevents people to choose freely, which is not in line with the liberty part of nudging. Nudging should only guide the choice process towards the most favorable direction, without limiting the free choice of consumers (Thaler and Sunstein, 2008).

1.2.2 Social relevance

Besides the scientific relevance, this research topic is also socially relevant. Plant based food as an alternative for meat production is a very sustainable food source and contributes to a healthy body and environment (Fehér et al. 2020). Thus, conducting research in order to further develop this industry could contribute to a more sustainable and healthy way of consuming food. This topic is currently urgent, given the increase in public debates about environmental issues and new policies to prevent the global warming and her effects to be irreversible.

1.2.3 Managerial relevance

Research in the most important attributes for meat substitutes is valuable for marketing purposes. Especially for companies that are currently targeting Dutch markets and are looking to gain more market share among young adults, or in general. Designing optimal positioning strategies for target segments is very important for a firm's existing brands (Green and Krieger 1991). The results of this study could have valuable information about the attributes for brands to improve their products.

1.3 Research question

The research question that follows from the introduction is as follows.

What attributes are most important in the buying decision of meat substitutes for Dutch young adults?

1.4 Empirical sub-questions

The research question will be supported by sub-questions. These sub-questions will specify on the meat substitutes market and the Dutch young adult market. The first part of the sub-questions are empirical.

Sub-question 1: What are meat substitutes and what is their origin?

Sub-question 2: What does the market for meat substitutes in the Netherlands look like?

Sub-question 3: Who are the biggest consumers of meat substitutes?

1.5 Theoretical sub-questions

The second set of sub-questions is theoretical.

Sub-question 1: What is the choice process of customers?

Sub-question 2: How can marketers influence the choice process of customers?

Sub-question 3: What are the motives of buying meat substitutes?

1.6 Ethical research issues

Companies can enhance their sales by focusing on advertisements that is in line with what the target audience finds important. For example, given that young adults care about nutritional values and sustainability of the product. Companies could promote their nutritional values on the packaging by placing text that explains how much better this product is than regular meat. The company is portraying their product as healthier than other products, but the core features of the product is not changed. The promotion could attract more buyers that subconsciously care about this type of information.

Companies could also use fake green/ecology marketing to attract consumers that care about sustainability. This type of marketing is called greenwashing. Greenwashing is misleading the target audience about the environmental responsibility of the company (Lukinović and Jovanović, 2019).

In conclusion, companies could create additional value without actually changing their products or production processes. Promoting these attributes are ethical issues, as the company is cheating the audience. Especially with greenwashing.

1.7 Research limitations

A large portion of the respondents in the interviews and survey will be people from Rotterdam. It could be interesting to also include a control variable that looks at differences between city and countryside. But since the personal network is used for the survey, only a small group of people from a countryside can be included in this research. Therefore, the results from countryside respondents could not be representative for the entire Dutch young adult population.

Furthermore, the attributes that are found to be the most impactful on the decision making of the consumers of meat substitutes are based on ten interviews. If the answers of the respondents are not similar, and many attributes are only mentioned once, it could be useful to increase the amount of interviews.

Additionally, the interviews are meant to ask people about their own conscious shopping behavior. The respondents come up with attributes that they think have influence on their behavior. In real life decision making however, other attributes could influence the behavior unconsciously. For example the location of the products in a supermarket (Caruso et al. 2018). Additional attributes that researchers found to have impact on the willingness to pay will be added alongside the attributes that are found in the interviews.

Lastly, the amount of respondents of the survey could be a limitation. The higher the sample, the better the distribution of the control variables. A higher sample size will have greater statistical power. This is somewhat corrected by narrowing down the target population. The smaller the population of interest, the smaller the sample size can be in order to maintain representativeness (Lenth, 2012).

1.8 Chapter layout

This research will continue with several chapters. Each chapter is briefly explained in this chapter layout.

Chapter 2: Literature study. The literature study will cover the sub-questions, in order to have a better understanding of the concepts used in this research.

Chapter 3: Research methodology. This chapter covers the choice of research, data collection method and research sample. Lastly, the analysis method is explained.

Chapter 4: Research outcome. This chapter explains the findings of the literature study. Additionally, summaries of the key analyses will be provided.

Chapter 5: Conclusions and recommendations. Chapter 5 will be the final chapter of this research.

All the key findings will be discussed and the central research question will be answered.

Furthermore, recommendations to the market and future research is provided. Lastly, the limitations will be covered and the reflection on this paper is held.

Chapter 2: Literature Study

2.1 Empirical sub-questions study

2.1.1 *Sub-question 1: What are meat substitutes and what is their origin?*

Meat substitutes have been around for over a thousand years, first found in Asia and in the Middle East. The origin of the first signs of meat substitutes was in China in 965 (Shurtleff and Aoyagi, 2015). During the Song dynasty, the word tofu was used in a way of reducing meat consumption, as it was called “mock chop sticks”. After hundreds of years, at the end of the 17th century, the meat

substitutes finally arrived in Europe as it was traded and transported by the Dutch East Asia Company. Around 1960, the demand for soy-based meat substitutes like tofu and tempeh in the Netherlands increased drastically. This was mainly due to the arrival of large amounts of Indonesian immigrants. This increasing interest in meat substitutes led to the production of tofu and tempeh in Europe, and the population adapting to the taste of meat substitutes (Shurtleff and Aoyagi, 2015).

In the late 90's, a growing movement of vegetarian people started to arise in Europe. Meat substitutes became more popular due to this movement, but it was only still a small portion of the population. However, because of the growing interest, the selection of meat substitutes began to grow. Where it was first mainly soy-based food, more and more meat substitutes were introduced made from fungi, lupine, dairy and wheat. The innovation was made possible because of new technologies to improve the texture of the products, and a growing awareness of environmental and ethical concerns about meat consumption. The technological innovation resulted in products that felt more meat-like.

Nowadays, meat substitute products are available in every grocery store. The variety of brands and products in this category has increased over the years. For example, the Albertheijn offers 17 different brands of meat substitutes. These brands in turn offer a variety of different plant-based products, such as burgers made of beans, fungi or spinach. Dairy products are also commonly subsidiarized by plant-based cheese products, or plant-based milk products.

Examples of the well-known brands are Garden Gourmet, Vegetarische Slager and Vivera. Garden Gourmet offers 32 different plant-based products on its own. The Vegetarische Slager and Vivera both offer 14 different plant-based products. This showcases the wide range of products that are currently on the market in the Netherlands (Albertheijn, 2021).

Since there is a wide variety of different plant-based food products, a narrowing will be made in this research. Only products that are meant to be used as an alternative for meat products are taken into account. This excludes plant-based cheese products and other dairy products. The focus will be towards products that serve as meat substitutes. The most common products are plant-based burgers, fake chicken pieces and vegetarian minced meat (Albertheijn, 2021).

2.1.2 Summary

Plant-based products started off as tempeh and tofu in the 1960's. But the variety of products has changed since the 1990's. The plant-based food has developed significantly since then and is currently offered by numerous brands. Currently, tempeh and tofu are still popular. But the most meat substitute brands are now focused on producing plant-based burgers, fake chicken pieces, and

falafel. The biggest suppliers in the Dutch grocery stores are Garden Gourmet, Vegetarische Slager, and Vivera. In conclusion, the trend of conscious consumption continues and became inescapable in the last 10 years in the Dutch grocery stores. This is further showcased in the next sub-question.

2.1.3 Sub-question 2: What does the market for meat substitutes in the Netherlands look like?

The Dutch market for meat substitutes is relatively new, starting in the 1960's. This was however a very small, niche market. Later in the 90's more people started eating meat substitutes. This increase was mainly a result of the emergence of the mad cow disease in the 1980's (Asgar et al. 2010). Additionally, global shortage of animal protein and a stronger demand for healthier food options resulted in a higher demand for plant-based food products. but the market was not yet a significant share of the total meat consumption in the Netherlands. During 1990-2006, the meat substitute industry in the Netherlands was already producing for a few firms but the products were considered to be low-performing. The most common consumers during this phase were vegetarians and vegans, driven by ethical, cultural or religious factors (Tziva et al. 2020). The market was dominated by two international firms, Quorn and Tivall. The Dutch company Vivera established as well but it was very small compared to the two internationals.

In the Netherlands, attention on long-term environmental issues was arising. In 1993 the Ministry of the Environment initiated the Sustainable Technology Development program to look for technologies that could contribute to providing more plant-based protein alternatives. Meat substitutes were seen as a potential candidate within the search for better nutrition Tziva (2020).

From 1996-2006, multiple crises with regards to livestock supply chains and health and safety concerns resulted in more developments in the meat substitute industry. Outbreaks such as the mad cow disease and the chicken flue led to the mass media attention towards health risks of meat consumption. Meat substitutes gained more positive attention and demand rose. In 2000, the Dutch retail turnover from meat substitutes increased 10% on average (Tziva 2020).

In 2007, the revenue of meat substitutes was 58.4 million euros in the Netherlands. From 2007 onwards, the revenue increased annually. In 2018, the revenue of meat substitutes in the Netherlands was already 97.6 million euros. Data from Statista (2020) shows that the average annual rate from 2007 to 2020 is 7.8%. The last two years, 2019 and 2020, are based on a forecast. The annual rate between 2018 and 2020 is expected to be 10%.

To put in perspective, the annual revenue growth in Europe between 2018-2020 is an estimated 7.3% (Vegansociety, 2019). Compared to the other European countries, the Dutch meat substitute market is estimated to grow significantly faster.

Other data shows that the industry for meat substitutes in the Netherlands has faced a big increase compared to the regular meat market. In 2014, the share of meat substitute market in the Netherlands was 1% of the total meat market. In 2017 the meat substitute market was already 3% of the total meat market (Wild et al, 2014).

To put in perspective, the meat substitute industry in Germany is also examined. The meat substitute industry of Germany is also increasing annually, but the share of meat substitute in 2020 is less than 1% of the total meat market (DW, 2020). In Germany, the regular meat market decreased with 4%, whereas in the Netherlands it increased in 2020. This shows the significance of the Dutch growth of the meat substitute market.

An interesting trend that could partly explain the current growth in interest, is the boom in plant-based sales due to the coronavirus pandemic. Researchers explain this boom due to the fact that consumers look for products that are good for their health. It is thought that during the pandemic, people had more time to think about healthier habits, for example their diets. This awareness could be the reason why there is an even greater shift towards meat substitute consumption. Furthermore, conventional meat producers faced some production challenges during the pandemic (Xin, 2021).

2.1.4 Summary

Since the arrival of meat substitutes in the Netherlands in 1960's, the industry has faced a significant increase. The demand for meat substitutes increased especially in the 1990's, due to health safety crises such as the mad cow disease and the chicken flu. Additionally, global shortage of animal protein and a stronger demand for healthier food options resulted in a higher demand for plant-based food products.

From 1990-2006, multiple companies started their businesses in the Netherlands looking to gain market share. From 2000 onwards, the yearly increase in demand for meat substitutes became noticeable, with a yearly growth rate of 10%.

In 2007, the meat substitute market was 54.8 million euros in the Netherlands. From 2007 to 2018 the market has increased every year with an average growth rate of 7.8%.

2.1.5 Sub-question 3: Who are the biggest consumers of meat substitutes?

Statista (2021-a) shows that the share of vegetarians and flexitarians in the Netherlands is increasing during 2017-2020. From 6% to 12% and 31% to 50% respectively. Another study of Statista (2020) shows the distribution of this growing number. The share of respondents with a vegan diet in Netherlands in 2018 is researched. The largest share in the Netherlands is among 18-34 years old.

This group is currently 4% of the population. In perspective, the same question was asked to Dutch participants above 45, in which the amount was smaller than 1%.

To showcase the interest in Dutch young adults further, another study of Statista (2021-b) was performed. A 2018 survey showed that in the age bracket of 18-24 years old, vegetarian diets were five times larger than that of the age bracket of 55+ years old. For flexitarian diets, the share of the age brackets between 18-34 years old were also the highest.

Besides the actual consumption of meat substitutes, there is a lot of attention for it among the Dutch population. The majority of Dutch people are in favor of policies that try to reduce meat and dairy production, research explains (Kieskompas, 2021). Most Dutch respondents (85%) think that, whether or not you eat meat, should be a personal choice. But 70% clarify that the government should be allowed to nudge towards meat reduction. 23% say that the government should be able to forbid production of animal consumption.

Dutch people are also ambitious about changing their diets. Current plans in the House of Representatives suggest a 50/50 protein distribution. Meaning that the protein in food should be 50% plant-based and 50% animal-based. The respondents in the research aim for a 60% plant-based and 40% animal-based protein distribution in 2025 (Kieskompas 2021).

Data about demographics of meat substitute consumers is missing, but there is some data about vegetarians in the Netherlands. Most notable is that most vegetarians do not live in cities. South- and North-Holland only have 0,4% and 2,7% of its population that consider themselves vegetarians in 2020 (Biojournaal, 2020). The average in the Randstad is 1.9%. The biggest relative share of vegetarians is found in East-Netherlands. Almost 5% of the population is a vegetarian.

Additionally, women are the biggest share of the total amount of vegetarians. 5.9% of the total population in the Netherlands is vegetarian. 2.3% is also a veganist. For men this is only 1.8% and 0.7% respectively (Biojournaal, 2020). Furthermore, plant-based food is particularly popular among people under the age of 40. Almost 7% of people under 40 eat plant-based food every day (Duurzaam ondernemen, 2020).

Lastly, research tries to suggest that intelligence in childhood is associated with a vegetarian diet in mid-adulthood (Richards, 2007). The results show that this association is independent of educational attainment and social class. Concrete evidence is not found about whether or not current vegetarians and veganists are relatively more intelligent than meat eaters.

2.1.6 Summary

Vegetarianism and veganism is growing rapidly in the Netherlands. The largest share of this growing population are young adults. More women are vegetarian than men, and most vegetarians are found in the east of the Netherlands. Where in the Randstad, only an average of 1.9% of the population is a vegetarian. Meat substitutes are particularly popular among young adults in the Netherlands. This group has the highest share of the total revenue for meat substitutes. Studies are trying to prove that people who eat vegetarian diets are more intelligent than meat eaters, but there is no evidence yet.

2.2 Key findings

This empirical research was focused on basic knowledge about meat substitutes, the Dutch market and the growth of the market. To conclude the empirical sub-questions, I present the most important findings.

The meat substitutes market in the Netherlands began in the 1960's. Since then, the interest in the products began to grow and the selection of products increased. The selection of meat substitutes that are currently found in the Netherlands are mainly soy-based food. However, more and more meat substitutes are made from fungi, lupine, dairy and wheat. The innovation was made possible because of new technologies to improve the texture of the products, and a growing awareness of environmental and ethical concerns about meat consumption.

This growing awareness led to the shift from a niche market to a bigger market. Nowadays, the consumption of meat substitutes in the Netherlands is 4% of the total meat consumption. The meat substitute market is now over 100 million euros and is predicted to increase every year.

The biggest consumers of the meat substitutes is expected to be young adults. This age group has the highest share of vegetarians, flexitarians and vegans among the Dutch population.

2.3 Theoretical sub-questions study

2.3.1 Sub-question 1: *What is the choice process of customers?*

Many consumer behaviour studies have been done to understand the choice process of customers. The customer purchase decision process, as explained by Riyadi and Rangkuti (2016), is a process of five stages.

1) Need recognition

The customer purchase decision process begins with a problem or need. The consumer's current state differs from the consumer's desired state. Consumers are trying to find products or services that satisfy their needs. The need is first recognized when the buyer feels any stimuli that encourages him. Stimuli can be internal or external.

For the meat substitute market specifically, an internal need is hunger. If a customer is hungry, they want to eat. An External stimulus can be an advertisement. Grocery stores regularly promote products that are on sale. Upon visiting a store, customers who need food will be attracted by this external stimulus.

2) *Information search*

After the buyer is encouraged by internal or external stimuli, they will want to collect as much information as possible to find the best choice. The amount of information that the customer wants to collect depends on the strength of its desire, the amount of information they already have, the ease of obtaining additional information and the feeling of actually searching information (iEduNote, 2021). Throughout this information collecting, consumers may learn about the brand features from varying competitors. Consumers typically have for different sources to gather information from.

- Personal sources: these are close friends, family and acquaintances.
- Commercial sources: Advertising, salesmen, packaging etc.
- Public sources: social media, reviews, news etc.
- Experimental sources: Trying out products, examining, in-store use etc.

In general, the consumers receive the most information from commercial sources (iEduNote, 2021). However for meat substitutes specifically, experimental sources might have a big influence on the information gathering of consumers. A study done by Veeck and Burns (2005) shows that experimental food needs to be eaten multiple times before consumers get used to it. Veeck and Burns say that after 20 meals with experimental food (different color, insects etc.), people start to enjoy eating it and do not mind the controversial looks of the food. Meat substitute products could be relatable to experimental food, as some people have never used it in a meal before. Meat substitute companies could benefit from this. They could promote their products with free samples for people to try their products.

3) *Evaluation of alternative*

With all the information in mind, the buyer will end up with a selection of interesting alternatives. The selection is considered to be based on rational considerations and standards. Important characteristics, or attributes, are weighted against each other based on their attractiveness. Besides attributes, consumers generally consider the degree of importance, belief in the brand and expected satisfaction (iEduNote, 2021).

Consumers of meat substitutes will evaluate the attributes of the products. Examples could be taste, price, brand etc. Consumers will pay more attention to attributes that are important to them.

Afterwards, the consumers will have a set of potential products in mind. These products are weighted against each other based on the ratings of all the attributes. The particular ratings of one product is called the brand image (iEduNote, 2021).

4) *Purchase decision*

After evaluating the products that the consumer could potentially buy, they make a decision. The decision is influenced by the different sources in the second step of the purchase decision progress. If the buyer decides to actually buy, then the person has to make a decision on the brand, price, seller, quantity, time and manner of payment. Typically, consumers buy the brand that they think will provide the most satisfaction.

On the other hand, two factors could change the attitude of the consumer towards the product (iEduNote, 2021). The first factor is the influence of others before the purchase happened. For example, if a customer is planning to pay for a plant-based burger of a particular brand. But their friend has had a bad experience with this product and advises them not to purchase it.

Secondly, an unexpected situation could incur that influences the purchase decision. Consumers could have a certain price in mind, but this is not in line with the actual price. This could happen in a grocery store where the price promotion is no longer available for a certain meat substitute. Upon registering, the customer notices and could decide not to purchase the product.

5) *Post purchase behaviour*

After the purchase, the buyer will feel satisfied or dissatisfied. This is usually determined after the consumer used the product or service. After the purchase, consumers could feel a difference in the consumer's expectation and the product's perceived performance (iEduNote, 2021). If the product does not meet the expectations, the consumer will feel dissatisfied. But if the product meets the expectation, the customer is satisfied. The consumer could also feel delighted if the expectation is exceeded. Companies that focus on quality and hospitality often focus on the exceeding of expectations (iEduNote, 2021).

Satisfaction will enhance the consumers' attitude towards the product. It could lead to another purchase in the future, word-of-mouth promotion, less attention to other brands and many more positive effects. Dissatisfaction could reduce future consumption and bad word-of-mouth promotion.

2.3.2 Summary

The customer purchase decision process takes a look at how consumers complete their search for a solution of their problem or need. The need is recognized, whereafter consumers will find as much

information needed to find a set of promising products or services. This set is evaluated on its expected satisfaction. One product will be chosen for purchase. After the purchase, the consumer will feel satisfied or dissatisfied.

Marketeers could use this five-step model of choice behaviour to understand the search process of buyers. Especially in the step *evaluation of alternatives*. Buyers look for the best alternatives and will closely look at the attributes of the products. Marketeers have to understand their target market in order to effectively add value to the buyers. Research in the most important attributes for the target market could help to improve this value creation.

2.3.3 Sub-question 2: How can marketeers influence the choice process of customers?

Marketeers commonly use cognitive heuristics to attract consumers. Tversky and Kahneman (1974) define these heuristics as a mental shortcut that people make to allow for quick and efficient decision making. The decisions are made intuitively, rapidly and/or automatically. In everyday tasks this is helpful, because heuristics “reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations” (Tversky and Kahneman, 1974, p. 1124). Although heuristics are helpful, they could also lead to cognitive biases.

“A bias is detected when deviation from a norm is observed. The more systematic and frequent such normative deviation is found to be, the more legitimate the assertion that a bias is indeed present.” (Caverni et al. 1990, p.7).

Biases are essentially the flaw of making a purely rational decision (as cited in Furnham and Boo, 2011). The pure rational decision is based on a normative model that describes how the situation should have been processed to see what the correct response would normally be (Caverni et al. 1990).

Caverni et al. 1990) categorize the cognitive biases in six sections. Between each section, the cognitive biases differ in their nature. This means that the cognitive activity involves different neurological processes, such as problem solving or judgment of probability. The six sections in the study of Caverni et al. are as follows.

Section 1: Biases relative to the external structure of information.

Section 2: Biases in reasoning pragmatics.

Section 3: Response biases and context effects.

Section 4: Biases relative to the categorization activity.

Section 5: Biases in probabilistic judgment.

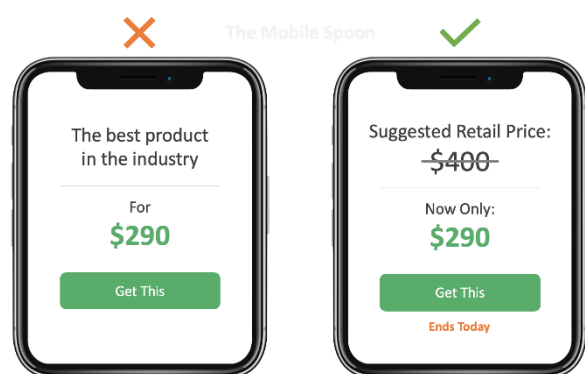
Section 6: Biases and cognitive aids.

This paper will dive deeper in some of the heuristics explained by Tversky and Kahneman (1974) and Caverni et al. (1990). The chosen heuristics could be used by marketers in order to subconsciously influence the choice behaviour of meat substitute consumers.

Anchoring

One of these heuristics is called 'anchoring'. Tversky and Kahneman (1974) explain the anchoring effect as the disproportionate influence on decision makers to make judgments that are biased toward an initially presented value (as cited in Furnham and Boo, 2011). Customers make estimates based on an initial value. This value is suggested by the formulation of the problem, or because the customer has prior knowledge. The final answer is reached by adjusting the initial value (Tversky and Kahneman, 1981).

The following picture shows an example of how the anchoring effect is implemented by marketers. The actual price of the product is \$290. As this might be too high for most consumers, changing the initial presented value to \$400 makes the product seem relatively cheap. \$290 might look more interesting now and consumption may increase.



Anchoring in retail stores is done very often. Presenting a product in sale by simply crossing off a high price and presenting the 'promotional' price. If the promotional price is in fact a lower price than usual, the price elasticity of the product will result in an increase in demand. But if the promotional price is actually the same as before, and the initial (crossed off) price is higher than usual, this could still increase the demand of the product.

For meat substitutes this could be interesting, as there is not a clear reference price ready in the mind of customers. Given that a lot of customers are new to eating meat substitutes, showing a high initial price and a lower actual price could influence the choice behaviour of customers.

Framing

Another heuristic that marketers could use for meat substitutes is the framing effect. The framing effect is explained by Tversky and Kahneman (1981) as the decisions based on the way information is presented instead of the information itself. The presentation of the information influences the decision of people because the options are presented with positive or negative connotations. A positive connotation shows a gain, whereas negative shows a loss. This effect results in a general

tendency for people to be risk-averse when exposed to gains and risk-seeking to losses (as cited in Druckman, 2001).

Tversky and Kahneman (1981) developed the following experiment to explain the framing effect:

“Problem (N=150): imagine that you face the following pair of concurrent decisions. First examine both decisions, then indicate the options you prefer.” (Tversky and Kahneman, 1981, p.454)

Decision (i). Choose between:

- A. a sure gain of \$240 (84%)
- B. 25% chance to gain \$1000, and 75% chance to gain nothing (16%)

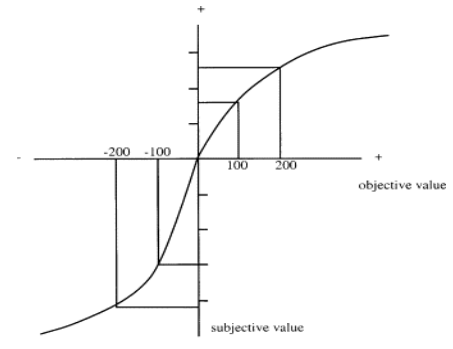
Decision (ii). Choose between:

- C. a sure loss of \$750 (13%)
- D. 75% chance to lose \$1000, and 25% chance to lose nothing (87%)

In choice decision (i), the majority is risk averse. This means that the guaranteed \$240 is equal or preferred over the chance of 25% to gain \$1000. Even though option B has a higher expected value of \$250.

In choice (ii), the majority is risk seeking. The guaranteed option A is now less preferred than the option with 75% chance to lose \$1000.

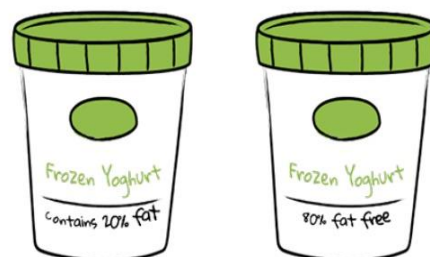
Tversky and Kahneman (1981) explain this phenomenon as a value function that is S-shaped, such as in picture 2. People that make choices in terms of gains are risk averse. When the option results in losses, people are risk seeking.



Picture 2: Framing effect

The following example with yoghurt clarifies how the way of information provided could affect the decision of an consumer in a grocery store. The two cups of yoghurt are exactly the same and contain the same amount of fat. But “contains 20% fat” has a negative emphasis on the amount of fat in the cup. Whereas “80% fat free” is a more positive way of addressing the amount of fat. The

FRAMING



latter option will be chosen more often than the first option.

The framing effect is also interesting for meat substitute marketers. Meat substitutes are very often compared to regular meat products. Therefore, on the packages of meat substitutes you will find a lot of information regarding fat, protein and sometimes Co2 emissions. The way a marketer presents this information on the packaging as opposed to competitors could be an effective way of influencing the choice behaviour of customers.

2.3.4 Summary

Caverni et al. (1990) listed all the heuristics that affect the decision making of people. Two of which were particularly interesting for the meat substitute market. The anchoring effect is the disproportionate influence on decision makers to make judgments that are biased toward an initially presented value (Tversky and Kahneman, 1974). The framing effect is when the presentation of the information influences the decision of people because the options are presented with positive or negative connotations.

Both the anchoring effect and framing effect can be used by meat substitute marketers to subconsciously influence customers. Showing a high initial price and a lower actual price (anchoring) could influence the choice behaviour of customers. Additionally, the way a marketer presents this information on the packaging as opposed to competitors could be an effective way of influencing the choice behaviour of customers (framing).

2.3.5 Sub-question 3: What are the motives of buying meat substitutes?

For this research specifically, it is important to understand what motivates Dutch young adults to buy meat substitutes. Therefore, the next part will look into research that has been done to discover the most important motives. Concrete data about the Dutch young adult market is scarce. However, there seems to be a trend in other countries, showing the growing interest in meat substitutes among young adults. For example, Mintel (2020) shows that in the UK between 2014 and 2019, a trend of cutting back meat is shown. This trend is mostly driven by younger millennials who are becoming more aware of more varied choices, such as vegan burgers. These young adults are either full-time vegans, or eating more plant-based substitutes for personal reasons. The most common reason is health concerns. Plant-based diets have shown to lower risk of developing a coronary heart disease, high blood pressure and diabetes (McManus, 2020).

Janssen et al (2016) conducted a different research with German participants. Even though this is not entirely generalizable to the Dutch market, both countries are fairly similar in wealth per citizen and cultural background. The results could be the same for both countries.

Janssen et al. conducted research to identify the motives for consumers to follow a plant-based diet. Their main focus was to see if people who follow a plant-based diet oppose animal agriculture. In order to identify the motives, interviews at seven vegan supermarkets in Germany were held. Over 300 consumers interviewed were asked to explain their motivations for their diet. Three main motives were found: Ethical-related motives (90% mentioned this), personal well-being and/or health (70%), and environment-related motives (46,8%). Almost 80% of the interviewed people named multiple motives of the three described above.

Ethical-related motives are related to the animal welfare, suffering in farming and animal rights. Personal well-being and/or health motives is focused on the nutritional values of plant-based food, and the risk of diseases that come with a regular meat diet (Dyett et al. 2013). Environmental motives consists of aspects such as resource scarcity, environmental sustainability, and rainforest clearing (Beardsworth and Keil, 1992).

These three distinctions in motives helped the researchers to conduct a two-step cluster analysis to find clusters within the 300 consumers following a vegan diet (Janssen et al, 2016). The analysis resulted in five significant clusters, as shown below.

Table 1: Participant’s motives for following plant-based diets formed into five clusters

Clusters	N	Share of total
Animal- and self-related motives	100	30.4%
Animal-, environment- and self-related motives	98	29.8%
Animal-related motives	49	14.9%
Animal- and environment related motives	47	14.3%
Consumers not driven by animal-related motives	35	10.6%

It can be concluded that most consumers that were interviewed have multiple motives for following a vegan diet. These clusters are helpful for marketeers in order to target specific groups of people with their product promotion. For simplicity, only the three primary concerns (without combinations) are used in this research. More about this in the *methodology* part.

2.3.6 Summary

the study done by Janssen et al. (2016) shows three main motives for young adults to consume meat substitutes: *Ethical-related motives (90% mentioned this), personal well-being and/or health (70%), and environment-related motives (46,8%)*. The study also found that for most respondents, a

combination of the three motives are present. Ethical-related motives are related to the animal welfare, suffering in farming and animal rights. Personal well-being and/or health motives is focused on the nutritional values of plant-based food, and the risk of diseases that come with a regular meat diet (Dyett et al., 2013). Environmental motives consists of aspects such as resource scarcity, environmental sustainability, and rainforest clearing (Beardsworth and Keil, 1992).

2.4 Key findings

The theoretical sub-questions dove deeper in the choice process model, marketing influence strategies, and motives for buying meat substitutes. The customer purchase decision process contains five stages: *need recognition, information search, evaluation of alternatives, purchase decision, post purchase decision*. Marketeers could use this five-step model of choice behaviour to understand the search process of buyers. Especially in the step *evaluation of alternatives*. Buyers look for the best alternatives and will closely look at the attributes of the products.

Improving these attributes can be done in a way that tries to influence the target market. Two heuristics can be used, namely the anchoring effect and the framing effect. Both could be interesting to implement for meat substitutes. Anchoring could be done by placing a higher initial price compared to the actual price to try to lure new customers. Framing can be used by informing the customers in a way that is more positive than competitors. The information on packages regard the nutritional values and environmental facts.

Lastly, the study done by Janssen et al. (2016) shows three main motives for young adults to consume meat substitutes: *Ethical-related motives (90% mentioned this), personal well-being and/or health (70%), and environment-related motives (46,8%)*. The study also found that for most respondents, a combination of the three motives are present. These clusters could be helpful for marketeers in order to target specific groups of people with their product promotion.

2.5 Summary of key findings

This part will summarize all of the key findings of the literature study. The study was done to answer the six sub-questions that dive deeper into the theory about the meat substitute market in the Netherlands and its consumers.

The meat substitute market in the Netherlands grew rapidly since the introduction in the 1960's. The products started off as tempeh and tofu, but the range of products is a lot bigger now. The most meat substitutes are now made of soy, fungi, lupine, dairy and wheat. This innovation is partly caused by the technological improvements concerning the texture of meat substitutes. Secondly, the

demand for meat substitutes is higher due to a growing awareness of environmental and ethical concerns about meat consumption.

The growth has not stopped since the introduction of the first meat substitutes in the Netherlands. The annual revenue growth of meat substitute sales is 7.8%. This growth is predicted to hold in the coming years. With an annual revenue of over 100 million euros, the meat substitute market is now 4% of the total meat market.

The demographic group that is mostly responsible for this revenue is the age bracket of 18-35 years old. Data shows that young adults have the highest share of total consumption of meat substitutes. This group also has the highest relative amount of vegetarians, flexitarians and vegans of the Dutch population.

To understand the underlying choice process of the consumers of meat substitute, the customer purchase decision process was explained. This process has five stages: *need recognition, information search, evaluation of alternatives, purchase decision, post purchase decision*. Marketeers should focus on the improvement of their product attributes in order to have a comparative advantage over competitors.

Some marketing strategies to influence the choice process is using heuristics. The anchoring effect can be used to try to lure new customers. The initial price and actual price are then anchored in a way that the actual price looks very appealing for customers. Alternatively, the framing effect can be used to influence the way that customers perceive the information. Using a more positive way of phrasing compare to competitors could be beneficial.

The last key finding is the motives for young adults to eat meat substitutes. three main motives were found: *Ethical-related motives (90% mentioned this), personal well-being and/or health (70%), and environment-related motives (46,8%)*. Research should be done to see if different attributes appeal to the different motives in order to effectively target the segment that you want to market for.

2.6 Hypotheses and research models

Price often has effect on the willingness to pay for a product, research shows (Erickson and Johansson, 1985). But I expect to find more attributes that have effect on the willingness to pay for meat substitutes in the Dutch market for young adults. The first hypothesis is as follows:

2.6.1 Hypothesis 1 - Price

H0: Only price will have a significant effect on the willingness to pay for meat substitutes.

H1: Price will not be the only attribute with a significant effect on the willingness to pay for meat substitutes.

A model to test this is the Likelihood Ratio Test. The test looks for key attributes and control variables that are significant in a conjoint analysis (Huelsenbeck and Rannala, 1997).

The second hypothesis is in line with the theory of Janssen et al (2016). They found that there are multiple motives for people to start a plant-based diet. The three main motives were Ethical-related motives (90% mentioned this), personal well-being and/or health (70%), and environment-related motives (46,8%). It is expected to find differences in the important attributes between the three segments.

2.6.2 Hypothesis 2 – differences between segments

H0: The three segments will have the same attributes with significant effect on meat substitutes.

H1: One or more segments will have different attributes with significant effect on meat substitutes.

The Likelihood Ratio Test is also useful to test the second hypothesis. The control variables, in this case the different segments, can be put in the Likelihood Ratio Test to see if they affect the outcome of the test. In addition, an Effect Marginal Test will be conducted to compute the range and importance of the key attributes. This could show the actual difference in utility of the attributes between the three segments (Perrailon, 2019). This is valuable for marketing purposes.

Chapter 3: Research methodology

3.1 Qualitative and quantitative research - Choice of research

This paper begins with qualitative research. This study will have ten interviews with representative interviewees. It is important to get a list of possible attributes that could have effect on the willingness to pay for meat substitutes. The interviews are held in order to ask the representative interviewees about their decision making with regards to meat substitutes. The questions in the interview are open questions, with follow-up questions to make sure the interviewees answer extensively. The questions for the ten interviews are found in Appendix B1

The list of attributes are then narrowed down by their importance for the respondents and the amount of times the attributes were mentioned. An attribute that is only mentioned by one interviewee will most likely not be an important attribute for the entire population, and will therefore be taken out. With the remaining important attributes left, the study will continue with a

quantitative research. A conjoint analysis will be made in order to test the effect of the attributes on the utility, or willingness to pay of the product.

Orme (2002) describes that the optimal amount of attributes for a full-profile conjoint is six attributes. More than this could result in respondents resorting to simplification strategies to ease their task. As the interviews will most likely generate more than six important attributes, a partial-profile conjoint will be made. For this type of conjoint, the amount of attributes can be much bigger. However, the amount of attributes shown on each choice set should be a portion of the total amount of attributes, otherwise the task is too much of a burden for respondents. Sawtoothsoftware (N.D.) explains that 2 to 4 attributes on each choice set is the optimal amount for a partial-profile design.

As explained by Cattin and Wittink (1982), a conjoint analysis is useful in marketing research to estimate the impact of product attributes on customer preferences for products. Additionally, Gustafsson et al. (2000) explain that conjoint analysis is useful for marketers to implement new product features based on the expected utility gain for customers. Marketers could also improve existing attributes in order to focus on the attributes that generate the most utility for customers (Gustafsson et al. 2000). Lastly, conjoint analysis focuses on the subconscious choice process of participants which is useful for this research, as marketing techniques are effective on subconscious behaviour (Brierley. 2017).

Partial-profile choice based conjoint analysis is in line with the goal of this paper, since the research question is; *What attributes are most important in the buying decision of meat substitutes for Dutch young adults?*

3.2 Data collection methods explanation

The data collection for the ten interviews will be done using conference-calls. During the call, the respondents are asked to answer multiple open-questions and to elaborate on their answers. The meetings are all recorded to be able to transcript them. The transcripts are found in Appendix B2. The interviews are held in Dutch, since this could enhance the extent in which the respondents freely answer on the questions. These interviews are held in order to gain in-depth information about their decision making. If the interviews are held in English, it could discourage some respondents to answer extensively due to the extra effort it could take to speak in English.

The 170 respondents for the conjoint analysis were primarily gathered from people in Rotterdam, such as friends and family. A lot of the respondents were Dutch students or young adults that have started working. A survey with Qualtrics is used to gather this data. The data for the interviews and the survey are collected from people between the age of 18-35.

Other characteristics could also have effect on the decisions of the respondents. The control variables for these characteristics are age, gender, income, and motives for buying meat substitutes. The motives are based on the study of Janssen et al. (2016). They are animal concerns, environmental concerns, and health concerns.

3.3 Data collection details

As this study focuses on the age between 18-35, it is important to find people in the bottom, middle and upper part of the age bracket. There could be differences in the choice decision between different ages. Therefore, the age of the interviewees is spread equally.

Furthermore, as showed in hypothesis 1, price could have a big influence on the willingness to pay for meat substitutes. Thus, it could be useful to have different income groups among the interviewees. A student is relatively poor, a startup worker is starting to earn money, and a 30+ year old is relatively rich (Mincer and Jovanovic, 1981). The interviewees are asked about their income to make sure that all possible attributes will be covered. Since relatively rich people could possibly have other attributes that are important to them than relatively poor people. Lastly, gender is equally distributed to control for differences in buying behavior between men and women.

For the survey for the conjoint analysis, the group of relatively older and rich respondents will be harder to collect, as this is not in the network of the researcher. In order to find respondents for this age and income brackets, the survey will be spread in Dutch Facebook and Discord groups. There are several groups on Facebook and Discord that are focused on plant-based topics. These communities discuss the plant-based industry and lifestyle of its consumers. These groups are similar to the Vegan Student Associations of universities in the Netherlands.

There is a downside of using these communities. It could lead to a lot of useless respondents as these groups are not specifically young adults in the Netherlands. Many respondents could be older, foreign, or not representative in other ways. So looking at the data very closely is needed. But if it could lead to representative respondents of 25+ years old, it is worth it.

3.4 Data analysis method explanation

For the interviews, the data is analyzed using transcripts. The textual format of the interviews will make it easier to organize the data. The attributes in the interviews will be analyzed on the amount of times respondents mentioned it and on how important the respondents indicated they were for their decision process. The attributes that are mentioned by more than one respondent will be meaningful, as they are mentioned multiple times and could therefore be representative for the population.

For the conjoint analysis, several experiments can be done to analysis the data. This research will use a Likelihood Ratio Test to test for significance of the attributes and control variables. This test shows the expected individual effect of an attribute on the utility of the customer. Adding control variables could result in interaction effects with the attribute (Huelsenbeck and Rannala, 1997).

Furthermore, an Effect Marginal Test will be done. an Effect Marginal Test will be conducted to compute the range and importance of the key attributes. This could show the actual difference in utility of the attributes between the three segments (Perraillon, 2019).

Both the Likelihood Ratio Test and Effect Marginal Test help to answer the research question. They will provide findings about whether or not attributes have significant effect on the utility of the customers, as well as insights about the range and importance of these attributes.

The raw data that from the survey has to be cleansed before the actual analyses can be done. Some respondents could decide to quickly fill in the survey without putting much thought to it. These answers are useless as this does not represent the actual behavior of the population. For all the respondents it is necessary to look at the time it took them to fill in the questions. If this is significantly faster than the normal time it takes to fill in the survey, this respondent will be filtered out.

Lastly, control questions will be put in the survey to asks people whether or not they purchase meat substitutes. This is important because some respondents will consume meat substitutes, but they are potentially not the buyer of the products. For example if the partner always buys the products, and the respondent does not. All respondents that answer “No” on this control question will be transferred to the end of the survey. A second time where this is implemented is in the control question “nationality”. If people answer “other” instead of Dutch, the survey ends there for them. A third time is in the “motivation” question, where an option is put that says “I do not eat meat substitutes”.

These control questions will make sure that the respondents skip the survey immediately so that the results are not accidently analyzed. After excluding the meaningless data, the aim is to have at least a sample of 100 useful respondents.

3.5 Prevention of possible research bias

Biases can be identified during the transcript analysis. SAGE publishing (2020) explains that it is very important to not acknowledge preconceived notions and how to neutralize them. Otherwise the researcher will most likely find what is expected to find.

For this research specifically, follow up questions in the interviews could lead to pushing the interviewees in the direction that is beneficial for the outcome of the study. Upon analyzing the transcripts, this should not be taken into account for the results.

Additionally, the choice sets in the conjoint analysis have to be made with care. The choice sets in the survey are created according to the four properties of efficient design: level balance (attribute levels occur in the experiment with the same frequencies), orthogonality (joint occurrence of two different levels equal to the product of their marginal utilities), minimal level overlap (the probability of occurrence of the same attribute is as small as possible) and utility balance (choice options must have similar utilities) (Huber & Zwerina, 1996). This way, the choice set designs will contain useful information (as cited in Verhoeven, 2021).

Lastly, a randomizer is added in the survey in order to change the order of the choice sets for each respondent. This is done to decrease the potential threat of fatigue effect of respondents. After several choice sets, the respondents could feel bored and this could decline the performance of the task. The randomizer makes sure that certain choice sets are not always at the end of the survey, since these could be answered badly due to the fatigue effect.

Chapter 4: Research Outcome

4.1 Methods explanation with regards to research question

This study used a combination of qualitative and quantitative research methods. The main goal of this study is to find what attributes are most important for the Dutch young adults that buy meat substitutes. The choice based conjoint experiment fits this goal well. But in order to make an efficient design, prior knowledge about the target market had to be found. The qualitative research method was used to gather this knowledge about representative consumers of meat substitutes in the target market. That is why the first part of the results covers qualitative research and the second part the quantitative research.

4.1.1 Qualitative research

The in-depth interviews were done to find the most important attributes that influence the choice behaviour of the target market. The interviews are in line with the research question, because knowledge about key attributes is needed in order to understand the buying motives of meat substitute consumers. This is done with a representative focus group to have a better understanding of the Dutch young adult market for meat substitutes. The interviews were the first step towards answering the research question. The second step is the quantitative research.

4.1.2 Quantitative research

The interviews were needed to make an efficient conjoint design. This conjoint design is in turn the key objective of this paper, because it looks at the estimated effect of the key attributes on the willingness to pay for consumers. Additionally, the range and importance of the attributes is measured in order to explain what the most important and least important attribute is for the target market. This is key information in order to answer the research question.

Since there is a much higher sample than in the interviews, this quantitative method is more valid with regards to answering the research question.

4.2 Outcome of research and analyses

4.2.1 Qualitative research

The qualitative research was done to find the most important attributes that influence the choice behaviour of the target market. This is done by doing in-depth interviews with ten representative Dutch young adults.

The interviews resulted in seven important attributes, which were decided on the amount of times mentioned between respondents and the stated importance. Additionally, attributes from literature were included to make sure no important attributes were left out, as some attributes could have been forgotten or be more unconsciously influencing the choice behaviour. This resulted in one additional attribute, *Packaging material* (Silayoi and Speece, 2007)

Most of the attribute **levels** are found from comparing existing products in the Dutch market for meat substitutes. However, some attribute levels are a result of the stated differences in preferences among the interviewees, such as the *Use of the product in a meal*.

The 8 attributes and their attribute levels are as follows:

Price: €2, €3.50, €5.

Flavor: Tastes like meat, Tastes like vegetables, Salty.

Texture: Dry, Crunchy, Juicy.

Appearance: Looks like meat, Looks like vegetables.

Ingredients: Mainly vegetables, Mainly fungi, Mainly beans.

Use of the product in a meal: Product is part of the meal, Product mixed in a meal, Product for on bread.

Brand: A-brand, House brand

Packaging material: Eco-friendly, Non eco-friendly.

4.2.2 Quantitative research

The quantitative research was a survey with 242 Dutch young adults. After cleansing the data, 170 valid respondents were left. These respondents had to choose between two meat substitutes in order to show their preferences between the attributes. Qualtrics was used to collect the data, and JMP was used to analyze the data. The participants of the survey were mainly women (129) and men (37), with 3 non-binary and 1 person that would rather not say their gender. The majority of the respondents were aged between 18-23 (82). The remaining respondents were between 24-29 (54) or between 30-35 (34). The spendable monthly income groups are spread very equally: less than €500 (54), between €500 - €1000 (58) and more than €1000 (58).

The survey questions are found in Appendix C1. The conversion from raw data to cleansed data is shown in Appendix E.

With the data cleansed, the analysis started. *Table 2* Shows the results of the Likelihood Ratio Test of the key attributes. The Likelihood Ratio Test is used to test for significance of the attributes and control variables. This test shows the expected individual effect of an attribute on the utility of the customer.

Table 2. Likelihood Ratio Tests of individual effect of the key attributes on utility.

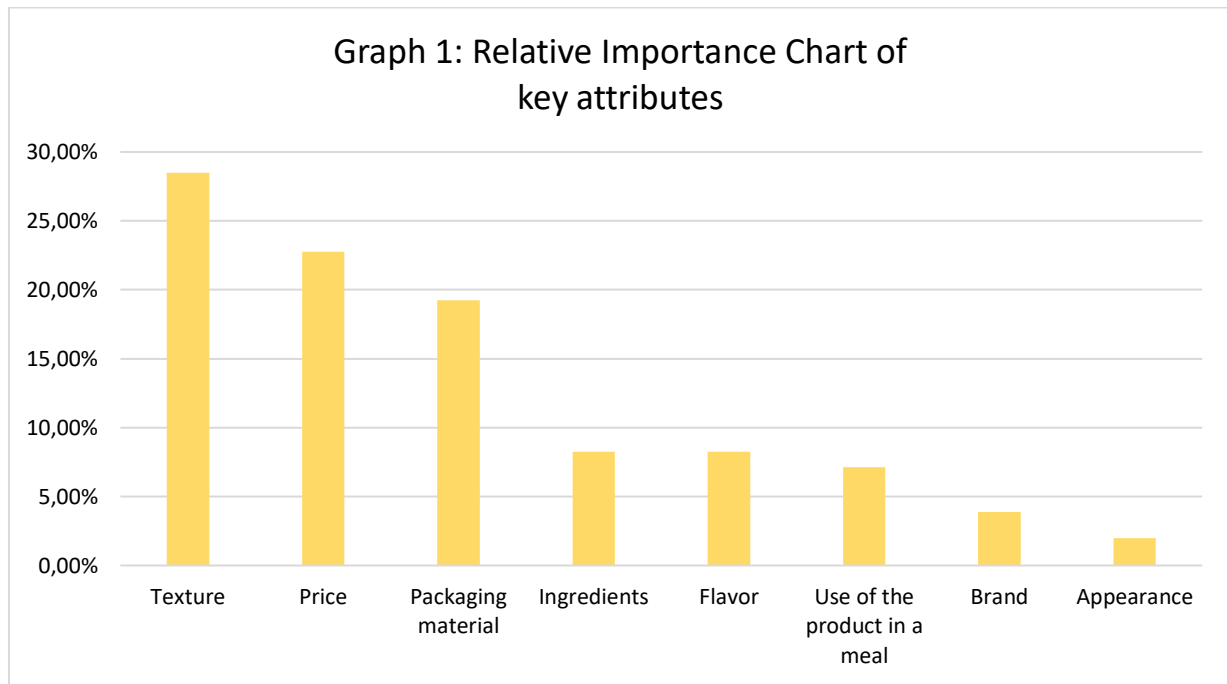
Attribute	L-R Chi-square	DF	Significance
<i>Price</i>	185,675	2	<,0001*
<i>Flavor</i>	38,196	2	<,0001*
<i>Texture</i>	283,818	2	<,0001*
<i>Appearance</i>	3,257	1	0,0711
<i>Ingredients</i>	44,110	2	<,0001*
<i>Use of the product in a meal</i>	44,399	2	<,0001*
<i>Brand</i>	14,441	1	0,0001*
<i>Packaging material</i>	232,406	1	<,0001*

* significant on a 5% significance level.

The data shows that 7 out of 8 attributes have a significant effect on the willingness to pay for meat substitutes on a 5% significance level. Only *Appearance* seems to not have a clear effect. This means that the attributes *Texture*, *Packaging Material*, *Price*, *Use of the product in a meal*, *Ingredients*,

Flavor and *Brand* have a significant effect on the willingness to pay for meat substitutes among Dutch young adults.

Furthermore, *graph 1* shows the Effect Marginals Test in order to compute the range and importance of the key attributes.



The attribute with the highest expected individual importance is *texture*. The respondents liked a juicy texture the most, whereas a dry texture received the lowest utility score. Additionally, *price* and *packaging material* were also perceived as significantly important. Eco-friendly packaging has a positive effect on utility, whereas non eco-friendly decreases utility. *Price* has a surprising effect on the utility of the respondents. The meat substitute of €2 has the highest positive effect on willingness to pay, which is to be expected. but the €3,50 meat substitute has the worst effect on the willingness to pay. For this target market, it would seem like the meat substitute of €5 generates more utility than a meat substitute of €3,50.

The last analysis was to look for interaction effects with the control variables. None of the control variables seemed to have an interaction effect with the key attributes, except for one, shown in *Table 3*.

Table 3. Likelihood Ratio Tests of the effects of the key attributes and *motivation* on utility.

Attribute	L-R Chi-square	DF	Significance
<i>Price</i>	35,448	2	<,0001*
<i>Flavor</i>	13,591	2	0,0011*

<i>Texture</i>	33,502	2	<,0001*
<i>Appearance</i>	0,679	1	0,4100
<i>Ingredients</i>	0,766	2	0,6817
<i>Use of the product in a meal</i>	3,67	2	0,2052
<i>Brand</i>	13,292	1	0,0003*
<i>Packaging material</i>	44,858	1	<,0001*
<i>Motivation*Price</i>	3,103	2	0,2119
<i>Motivation*Flavor</i>	3,272	2	0,1948
<i>Motivation*Texture</i>	5,023	2	0,0811
<i>Motivation*Appearance</i>	0,000	1	1,00
<i>Motivation*Ingredients</i>	4,479	2	0,1065
<i>Motivation*Use of the Product in a meal</i>	1,154	2	0,5615
<i>Motivation*Brand</i>	5,567	1	0,0183*
<i>Motivation*Packaging Material</i>	3,037	1	0,0814

* significant on a 5% significance level.

This table shows the Likelihood Ratio Test of the effects of the key attributes and the control variable *motivation*. *Motivation*Brand* has a significant effect on the willingness to pay for meat substitutes. The actual effect is hard to explain, as *Brand* does not have direct impact on one of the three motives to eat meat substitutes (Animal-, environmental- and health concern).

4.3 Look back at the literature study

Literature was used to understand the purchase decision process of meat substitute consumers (Riyadi and Rangkuti, 2016). Within the five stages of the purchase decision process, step 2 and 3 are interesting to link to the results of this study. Step 2 was *information search*. Consumers will look to collect as much information as possible to find the best choice. The information that could be the most relevant to put on products is information about *texture* and *packaging material*. These are

potentially to be most important attributes that consumers take into account in their purchase decision process.

The third step in the process is *evaluation of alternatives*. With all the information in mind, the buyer will end up with a selection of interesting alternatives. The selection is considered to be based on rational considerations and standards. Important characteristics, or attributes, are weighted against each other based on their attractiveness. Besides attributes, consumers generally consider the degree of importance, belief in the brand and expected satisfaction (iEduNote, 2021).

Consumers will look at what they think is the best product for them, meaning that providing clear statements of the important attributes on the meat substitute product is useful. One way to do this, which is explained earlier, is by the framing effect (Tversky and Kahneman, 1981). The way that producers present the information compared to competitors is a useful way of attracting more consumers. Focusing on the attributes that are found to be important, such as *texture*, *price* and *packaging material*, could take away the attention of other alternatives. An example could be: “this packaging only uses eco-friendly materials. First in the industry!”.

4.4 Summary of your key findings

In conclusion, the attributes *Texture*, *Packaging Material*, *Price*, *Use of the product in a meal*, *Ingredients*, *Flavor* and *Brand* have a significant effect on the willingness to pay for meat substitutes among Dutch young adults. These attributes could play a major role in the purchase decision process of the target market. *Texture* has the highest expected influence on this target markets utility. A Juicy texture provides the most utility, whereas a dry product decreases the utility of the target market the most. *Appearance* does not seem to have a significant effect on the willingness to pay. This could mean that whether or not the product looks like meat does not have much relevance on the purchase decision of the target market.

Lastly, there are no interaction effects found between the key attributes and the control variables, except for *Motivation*Brand*. Thus, within the group of Dutch young adults, differences between *gender*, *age*, *income*, *diet* and *motivation* have no clear effect on the willingness to pay for meat substitutes.

Chapter 5: Conclusions and Recommendations

5.1 Discuss key findings of the literature study

What literature has shown is that the biggest consumers of meat substitutes in the Netherlands are young adults (18-35). Data shows that young adults have the highest share of total consumption of

meat substitutes. This group also has the highest relative amount of vegetarians, flexitarians and vegans of the Dutch population.

The amount of meat substitute consumers in the Netherlands is growing, due to the global attention to environmental issues and animal-welfare concerns. Health concerns is also proved to be a motivator for eating plant-based alternatives to meat.

The total revenue of meat substitute sales in the Netherlands in 2018 is 97,6 million. This number is expected to grow 10% each year. From 2007 onwards, there has been a clear trend in the consumption of meat substitutes in the Netherlands.

The most popular products in the Netherlands are plant-based burgers, fake chicken pieces, and vegetarian minced meat. The most popular brands are Vegetarische Slager, Garden Gourmet, and the Albertheijn house brand.

Lastly, literature about heuristics could show that the anchoring- and framing effect could be interesting to influence the choice process of meat substitute consumers. These heuristics unconsciously affect the way that information is perceived and processed. Producers of meat substitutes could find an optimal way to provide information on their products in order to use these heuristics effectively.

5.2 Discuss key findings of the research

The qualitative research gave insights in the importance of different product attributes. The attributes that were believed to be most important in the decision between meat substitute alternatives were: *Price, Flavor, Texture, Appearance, Ingredients, Use of the product in a meal and Brand*. Additionally, literature suggested to include *Packaging material* as an important attribute.

The quantitative research was done in order to test the effect of the attributes on the willingness to pay for the target market. The data shows that *Texture, Packaging Material, Price, Use of the product in a meal, Ingredients, Flavor and Brand* have a significant effect on the willingness to pay for meat substitutes among Dutch young adults. This means that people in grocery stores potentially evaluate alternatives based on these attributes and their attribute levels.

5.3 Comparison of key findings

The outcome of the literature study and research have similarities and differences. An important similarity is that most of the attributes used for meat substitutes are similar to attributes used in other food items in grocery stores. *Price, Brand, Flavor, Ingredients, Packaging material and Texture* are often important in the choice process of consumers. In this research, these exact attributes were

also found to be significantly important. General theory could perhaps suggest that these attributes for food items are commonly used in conjoint analyses.

This also brings a difference. *Use of the product in a meal* and *Appearance* are not often used in conjoint analyses. The *Appearance* was based on whether or not the product looked like meat. This is only used for products that are used as plant-based meat alternatives. Even though *Appearance* did not have a significant effect on the willingness to pay, it was interesting to take this attribute into account since not many studies have implemented this.

Another interesting difference with literature is that in many conjoint analyses, the control variables show significant effect on the preferences between demographics. In literature about conjoint analyses, it is showed that price has less impact on products if a consumer has more money. Sometimes age also makes a difference in the perceived importance of different attributes. However, for this research, there were no significant differences observable for preferences between demographics. This could imply that for meat substitutes, these differences are not important. And that the attributes of meat substitutes are equally important for all differences between the demographics of Dutch young adults. But this claim is not very strong, as the sample was quite small.

5.4 Answer central research question

The research question that followed from the introduction was as follows.

What attributes are most important in the buying decision of meat substitutes for Dutch young adults?

Qualitative research showed that seven attributes are important for Dutch young adults: *Price, Flavor, Texture, Appearance, Ingredients, Use of the product in a meal* and *Brand*. Additionally, literature suggested to include *Packaging material* as an important attribute.

To test this for the entire population, the survey with a conjoint analysis was done. This resulted in the following significant attributes that provide utility for the target market: *Texture, Packaging Material, Price, Use of the product in a meal, Ingredients, Flavor* and *Brand*. These attributes provide extra individual utility for the target market. *Table 4* in Appendix D3 shows the individual expected influence of the key attributes on the utility for meat substitutes.

In conclusion, all the attributes were tested with the Effect Marginals Test in order to compute the range and relative importance per attribute. The most important attributes in the buying decision of meat substitutes for Dutch young adults are: *Texture, Price* and *Packaging material*.

5.5 Accept or refute hypotheses

5.5.1 Hypothesis 1 - Price

H0: Only price will have a significant effect on the willingness to pay for meat substitutes.

H1: Price will not be the only attribute with a significant effect on the willingness to pay for meat substitutes.

Table 2 in Appendix D1 shows the Likelihood Ratio Test. This test shows the expected individual effect of an attribute on the utility of the customer. The results show that multiple attributes, in addition to *price*, have significant effect on the utility of meat substitute consumers. Therefore, it could mean that H0 could be refuted. Meaning that it is possible that *Price* is not the only important attribute for people in their choice decision to buy a meat substitute.

5.5.2 Hypothesis 2 – differences between segments

H0: The three segments will have the same attributes with significant effect on meat substitutes.

H1: One or more segments will have different attributes with significant effect on meat substitutes.

Table 3 in Appendix D1 shows the Likelihood Ratio Test with the control variable *Motivation* added. The results show that there is one significant interaction effects, *Motivation*Brand*. However, this is not enough to state that there are differences between the importance of the attributes between the segments in *Motivation*. Therefore, H0 cannot be rejected, and there could be no differences within the three segments.

5.6 Recommendations to branch or market

The most important recommendation for the market for meat substitutes is to improve the existing attributes of the meat substitute with regards to the preferences of the target market for Dutch young adults. This research has shown that *Texture*, *Price* and *Packaging material* are the most important attributes that Dutch young adults care for. Producers of meat substitutes could try to develop their products in such a way, that the attributes that yield the highest utility are optimized.

Additionally, the use of information on the packaging is important to gain more attention of this target market than other meat substitute alternatives. Through the use of *Framing*, producers could provide essential information about their advantage over other products with regards to key attributes.

For example, producers that are more focused on *Ingredients* could inform people that their product is the most healthy, compared to alternatives. Or a producer that is focused on eco-friendly

packaging could market about how much better this product is for the environment than alternatives. This way, the consumer could be more attracted to the producers meat substitute than to alternatives.

5.7 Recommendations to future researchers

In order to expand this research, it could be interesting to look at different segments in the Dutch young adult market in the Netherlands. With only 170 respondents, it was not possible to find differences in preferences between the three segments of *motivation*. Though this could be something that producers or researchers benefit from, because more knowledge about the target market is essential for a good marketing strategy.

Furthermore, an optimal combination of key attributes could be researched for meat substitutes. This could be done for a specific target market, or for multiple target markets. This information could provide useful insights of the different target markets, in order to attract more market share for a producer.

Lastly, it could be useful to dive deeper in the important attributes stated in this study. For example, what is the best possible eco-friendly packaging for food products? Some research is done already to find the state-of-the-art package methods in order to assure food safety and sustainable solutions (Halonen et al. 2020). Information about the optimal use of materials could be beneficial for meat substitute producers.

5.8 Discuss research's possible limitations

Since the respondents of this research were mainly from personal network, not the entire population has been included equally. One example was given earlier, where the threat of not enough countryside respondents was discussed. Most of the respondents live in a city, which possibly biases the outcome of the research. Another example is that most of the respondents are currently following higher education, or have had higher education. The group of lower educated people was not represented in this research, even though there could be differences between the two groups (Moogan et al, 2002). These examples show that the respondents are not representative for the entire population of Dutch young adults.

Additionally, it is hard to say if the attributes in this research are the only important attributes that are evaluated. One reason for this is because these attributes, apart from *Packaging material*, have been chosen based on observable opinions from the ten interviews. In the actual purchase decision process, unconscious decision making also play a role in evaluating alternatives. Such as the position

of a product in the store. Therefore, more attributes could be important in the evaluation of alternatives.

5.9 Reflection of study

The most important take away from this process, is learning how academic papers are made for economic research. Reading and scanning through possibly hundreds of papers gave a good insight in what the academic research standards are. It was sometimes hard to provide the same structure and standards as other researchers. Especially finding the right information, but it is always necessary to provide a good source for every statement that is made in a paper.

Another very valuable lesson was how to make a research from scratch, on your own. Every word has been thought of and put in the paper by myself and this is harder than it looks. Even asking for help has to come from yourself and it all starts from your own motivation. This research has definitely made me realize that with enough motivation, anything is possible.

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Appendix (B1) - Interview questions

Interviews

Thank you for participating on this interview. I want to make sure that you are partaking voluntarily, therefore I want to ask you if it is alright that I interview you for my thesis? Are you okay with voice-recording this interview? The results will be used for my thesis only and will not be spread somewhere else. Let's start

What is your gender?

What is your age?

What is your yearly income?

Do you buy meat substitutes? How often?

Which features from meat substitutes do you find important when you buy them? Why are they important?

There are a lot of meat substitute products, how do you choose one from this range of products?

Do you always buy a certain one over other alternatives? Why this brand? (Which brand do you buy?)

Thank you for your time!

Appendix (B2) - Transcripts of interviews

Interview 1:

I: Bedankt dat je mee wilt doen aan dit korte interview. Ehm.. ik wil eerst even zeker weten dat jij hier aan mee wil werken. Ehm.. vind je het oke dat ik jou interview voor mijn scriptie?

R: Ja, dat vind ik oke.

I: En vind je het oke als ik dit opneem om te kunnen bewijzen aan mijn supervisor?

R: Ja.

I: Daarnaast wil ik even laten weten dat ik het alleen voor mijzelf ga gebruiken voor mijn bachelor thesis. En dan ik het niet ga verspreiden. Oke laten wij beginnen. Wat is je gender?

R: Ik ben een vrouw.

I: Oke en wat is je leeftijd?

R: Ik ben 20 jaar.

I: Wat is je inkomen ongeveer in een jaar?

R: In een jaar oeh.... Ik weet dat ik ongeveer duizend euro per maand verdien ofzo.

I: Ongeveer twaalf duizend euro per jaar?

R: ja.

I: Oke, ehm.... Koop je wel eens vleesvervangers?

R: Ja, ja. Af en toe

I: Hoe vaak ongeveer?

R: ehm.... Ik denk 1 a 2 keer per week ofzo. 2 keer per week zoiets.

I: Oke, als jij in de winkel staat en je koopt, of wilt vleesvervangers kopen. Waar let jij dan op? Wat vind jij belangrijk?

*R: Ehm.. nou ja sowieso wel **de prijs**. Ik vind sommige producten het geld niet waard. Dat is dan wel, ja dan betaal je voor een merk. Ik ben bijvoorbeeld best wel **tevreden over de Albertheijn huismerk vleesvervangers**. En die zijn echt denk ik de helft zo goedkoop en die zijn hartstikke prima. Dus daar let ik sowieso op. Bijvoorbeeld als de Vegetarische Slager. Dat vind ik gewoon een soort marketing ding. En daar sta ik dan niet echt achter.*

I: Ja duidelijk. En wat is voor jou dan prima? Jij zegt het is het mijn geld niet waard. En ik vind de vleesvervanger van Albertheijn vind ik prima. Wat maakt het voor jou dan prima?

*R: Nou ik heb dan wel veel geprobeerd. En ook allemaal verschillende merken. Soms zijn ze ook in de **aanbieding, dan denk ik dan ga ik die eens proeven**. En in principe lijkt het allemaal best wel heel erg op elkaar. **Qua smaak**. Dus zie ik geen reden om een hele dure te kopen. **Als het ook hetzelfde smaakt en voor de helft wordt verkocht**.*

I: Dus voor jou is er niet een heel groot verschil in smaak. Voor jou is de prijs is wel belangrijk.

R: Nou het ligt er aan. Als ik namelijk iemand zou zijn **die vleesvervangers zou kopen** om echt de smaakbeleving en textuurbeleving van vlees te willen krijgen. Dan zou ik wel kiezen voor de vegetarische slager. Dat is iets persoonlijks dat ik **dat niet echt per se lekker vind**.

I: Oke ehm... Zijn er wel nog andere dingen die jij belangrijk vind als je die wil kopen?

R: Vleesvervangers in het algemeen?

I: Ja, als je... heb je wel eens vleesvervangers gehad die je echt wel beter vind dan anderen?

R: ehm... Ja... op zich wel. Ik denk dat... het wordt ook steeds creatiever natuurlijk. Bijvoorbeeld, eerst had je alleen maar een groenteburger. **En dat is best wel droog en niet super smaakvol**. Nu heb je heel veel verschillende burgers met allemaal combinaties van groentes en/of bonen of noem het maar op. En dat is wel... ze hebben ook **meer met de smaak gedaan**. En daarnaast hebben ze ook de échte vleesvervangers toegevoegd die **ook lijken op vlees**. **Daar ben ik dan zelf niet fan van**. Dus in die zin, **er is zo veel keus**. **En dan vind ik wel fijn**.

I: Ja. En dan heb ik nog een laatste vraag voor je. Koop jij eigenlijk altijd dezelfde producten?

R: ehm... over het algemeen wel.

I: Welke zijn dat dan?

R: Nou ik koop wel vaker falafel bijvoorbeeld. Dat is niet eens echt een vleesvervanger, maar hij zit er wel bij. En ehm... poe even denken... ik koop ook af en toe een burger. En dat is wel iets waar ik heel erg mee experimenteer. Dus die.. **ik koop eigenlijk zo veel mogelijk verschillende**. Omdat ik ze allemaal wel **wil proeven**. En ja wat ik eigenlijk nooit koop is bijvoorbeeld shoarma ofzo. Of kip. Van die nep kipstukjes. Maar wel weer tofu of tempeh. Dat dan weer wel.

I: En wat vind je bij die burgers die je probeert. Waar let je dan op als je die uitprobeert?

R: Nou gewoon **de smaak vooral**. Ik **vind de textuur niet zo belangrijk**. Het hoeft van mij ook dus **helemaal niet op vlees te lijken**. Ik moet het gewoon lekker vinden en het idee hebben van **nou hier zit echt wel wat groentes in en hier zitten ook een beetje kruiden in**. Het is gewoon... er is wel gewoon over nagedacht dat het ergens naar smaakt zeg maar.

I: Gaat het dan alleen om de smaak? Of maakt het je ook uit dat het gezond is, of dat het voedingswaarden bevat?

R: Ja ik vind het bijvoorbeeld... de meeste dingen zijn dan toch van **soja gemaakt**. **Dat vind ik dan een beetje jammer**. Ik vind sowieso natuurlijk jammer dat ehm... soja is niet heel veel beter uiteindelijk voor het milieu dan dat je gewoon een hamburger zou kopen van goede kwaliteit. **Dus ik probeer weer wel zo veel mogelijk soja producten te vermijden of dat je echt bijvoorbeeld dus een burger hebt volledig van soja**. Maar ehm.. **waar wat echt wat meer groente in zit of dat die bijvoorbeeld is gemaakt van bonen ofzo**. Dat geeft voor mij ook meteen een **lekkerdere structuur en smaak**. En ehm... ja dat eigenlijk.

I: Oke, dankjewel dat was het.

R: Oke.

Interview 2:

I: Dankjewel dat je mee wilt doen met dit interview. Ik wil voordat we beginnen even ehm.. garanderen dat jij dit vrijwillig doet. Ehm.. Dus ik wil vragen of het voor jou oke is als je interview voor mij scriptie?

R: Ja het is oke ehm.. om mij ehm..., ja het is oke.

I: Top, vind je het oke als ik het opneem? Voor de audio?

R: Ja.

I: En daarnaast wil ik even zeggen. Ik doe dit gewoon voor mij eigen scriptie en ik ga het niet verspreiden. Dus als jij met alles akkoord gaat dan gaan we beginnen.

R: Jatoch.

I: Oke. Wat is je gender?

R: Ik ben man.

I: En wat is je leeftijd?

R: 25, net.

I: Wat is je inkomen in een jaar ongeveer?

R: Ehm.. niet zoveel, ik ben student.

I: Is dat onder de 10.000 per jaar denk je?

R: Wat?

I: Is het onder de 10.000 per jaar ongeveer denk je?

R: Ja zeker.

I: Oke. Koop jij af en toe vleesvervangers?

R: Ehm.. Ja als ik zou koken dan zou ik het... ja ligt er aan. Ik ehm... ik eet het wel soms.

I: Ja. Hoe vaak eet je het ongeveer?

R: Ehm.. misschien 1 keer in de week ofzo. Ligt er ook heel erg aan. Als ik uit eten ga ofzo of als ik buiten eet dan ga ik wel vaak ehm... voor kebab ofzo.

I: Ja precies. Maar je koopt dus wel zelf af en toe die vleesvervangers?

R: Ja als ik kook, dan koop ik dat wel eens.

I: Oke. Als jij die producten koopt, die vleesvervangers. Waar let jij dan op in de winkel? Wat vind jij belangrijk van die producten?

R: Ehm ik denk de prijs. **Ja prijs. En de smaak, voornamelijk de smaak. En voor mij hoeft het niet per se naar vlees te smaken. Maar als het maar goed proeft en goede textuur heeft.**

I: Ja. Heb je ook wel eens zeg maar producten vergeleken? Dat je dacht oke die vind ik lekkerder dan de andere.

R: Ja dat heb ik ook wel eens gedaan. **Beyond Meat burger is wel echt goed.**

I: Wat vind je nog meer belangrijk?

R: Ehm... ja kijk... **textuur sowieso**. Als **het gewoon lekker is**. **Gezond is ook altijd fijn**. Maar dat hoeft niet altijd. **Want lekker eten is niet altijd per se gezond**.

I: Als jij twee alternatieven zou vergelijken zeg maar. Zou jij dan wel kijken naar welke gezonder is voor je?

R: Ehm... ik denk dat ik **dan eerst zou kijken naar de smaak**. En als ze dan allebei even goed zijn ga ik **pas kijken naar of het gezonder is**.

I: Oke dus als jij in de winkel staat en je ziet een product liggen dan ga jij niet kijken wat beter voor je is.

R: Nee, nee zeker niet. **Ik zou sowieso kiezen voor de gene die het lekkerste is**.

I: Oke, ehm... Koop jij eigenlijk altijd dezelfde producten?

R: Ehm.. ja als ik iets koop en ik wil een Vega burger bakken. Dan zou ik sowieso die **Beyond Meat kopen**. **Die is wel heel duur, daarom doe ik het niet zo vaak**.

I: **En waarom dan Beyond Meat?** wat vind je daar zo goed aan?

R: Ehm... **die is goed want die is gewoon lekker**. Het is gewoon net een burger, maar wel anders. **Het is gewoon sappig**. Sommige van die Vega burgers zijn droog en niet zo lekker en zo. En deze is **gewoon sappig, goede textuur goede crunch**.

I: Oke. En je zegt van, het lijkt gewoon veel op een burger die van Beyond Meat. Waar let je dan op, is dat dan die sappigheid? Of waar let je dan op zeg maar?

R: **Ja sappigheid**. **En het heeft ook een beetje vleessmaak**. Kijk ik vind niet dat het 1 op 1 hetzelfde is. Maar eh.. en ik vind ook niet dat je per se moet vergelijken want het is een ander product. Maar als het gewoon lekker is en ehm... **en het is een equivalent aan een vleesburger**. **Dat vind ik het belangrijkste**.

I: Duidelijk! Dankjewel voor dit interview.

R: Oke.

Interview 3:

I: Dankjewel dat je wil meedoen aan dit interview.

R: Yes, tuurlijk.

I: Voordat we beginnen wil ik even duidelijk maken dat jij hier aan wil meewerken. Ik wil je vragen of jij het oke vind om mee geïnterviewd te worden voor mijn scriptie?

R: Ja, zeker weten.

I: Ehm.. vind je het ook oke als ik dit opneem?

R: Ja. Zeker.

I: Daarnaast wil ik even zeggen dat ik dit alleen gebruik voor mijn scriptie en dat ik dit niet ga verspreiden. Dus als jij met alles akkoord gaat kunnen wij beginnen.

R: Ja, let's go!

I: Oke. Allereerst, wat is je gender?

R: Ik ben een man.

I: En hoe oud ben je?

R: Ik ben nu 28

I: En wat is je inkomen ongeveer per jaar?

R: Ja dat zal oeh... lastig... ik denk dat dat tussen de 22 en 26 duizend ligt ofzo.

I: Oke. Ehm.. Koop jij af en toe vleesvervangers?

R: Ja zeker. Laatste tijd zeker vooral heel erg veel ja.

I: En hoe vaak ongeveer? Een schatting?

R: Ehm.. de vleesvervangers. Ja ik ben sowieso tijdje geleden overgestapt naar zoveel mogelijk vega eigenlijk. En dan de vleesvervangers die zullen dan, ik gok **drie keer per week zijn**.

I: Oke. Als jij vleesvervangers koopt in de winkel. Ehm.. naar welke, ja attributes, naar welke eigenschappen kijk jij dan van die producten?

R: Ehm... Nou ja ik kijk natuurlijk **sowieso wel een beetje naar prijs. Omdat het ja... het is niet super goedkoop dus je kijkt natuurlijk wel een beetje naar wat je krijgt**. Soms betaal je bijvoorbeeld voor Vega burgers heel veel geld voor maar twee burgers. En ik ben zelf best een grote eter. **Dus dan moet je soms kijken naar wat een slimme aankoop is**, even zo gezien. Ehm... maar verder kijk ik ook omdat ik veel sport kijk **ik naar waar veel eiwitten in zitten bijvoorbeeld**. En dat soort dingen.

I: En wat nog meer voor dingen? Kan je nog iets verder er op ingaan?

R: Nou gewoon naar op **basis van wat het is gemaakt**. Je hebt vaak **bijvoorbeeld spinazie burgers**. En je hebt ook dingen **die van noten zijn gemaakt**. En naja als je natuurlijk vega gaat eten dan is het ehm... belangrijk om een beetje te letten op dat je **wel goede aantal vitamines en dergelijken uit je vleesvervangers kunt halen**. Dus daar let ik dan wel echt op.

I: Jij let ook wel op de **voedingswaarden van de producten?**

R: **Ja zeker man.**

I: Oke. Ehm... en als jij tussen alternatieven kiest. Wat is dan voor jou het belangrijkste voor die twee?

R: Hoe bedoel je precies?

I: Als jij ehm.. bijvoorbeeld van twee merken een nepburger wil kopen. Wat is dan voor jou de voorkeur van die twee?

R: Oh zo. Nou ja het is ehm.. ik merk dat het met vleesvervangers **heel erg echt per merk ligt aan wat je koopt. Bij sommige vleesvervangers vind ik vegetarische spekjes vind ik heel vies omdat ze veel te zout zijn. En sommige níet A-merken zijn dan weer veel lekkerder omdat die veel minder zout zijn**. Dus dat is bij mij heel erg van hoe ik het al heb ervaren in het verleden. En naar hoe ik er toen naar heb gekozen als echt, **ziet het er lekker uit. Dus echt uiterlijk. En zoals ik al zei een beetje de prijs natuurlijk**.

I: Oke. **En is voor jou de smaak belangrijk?** Want je hebt het over te zoute spekjes.

R: Ja tuurlijk ja. Ja nee de smaak uiteindelijk natuurlijk. Ja ik ga niet ehm.. omdat het iets goedkoper is het kopen terwijl ik het eigenlijk vies vind. Nee Ik koop wel echt wat ik lekker vind. Maar op een gegeven moment heb je gewoon een soort van vast aantal dingen die je altijd koopt waarvan je weet dat dit is qua prijs-kwaliteit gewoon goed. Dus ja daar kies ik eigenlijk altijd uit.

I: Ja. Dus je hebt nadat je een aantal dingen hebt geprobeerd, heb jij eigenlijk een soort 'set' van producten die jij altijd koopt.

R: Ja eigenlijk wel. Ik heb altijd van bijvoorbeeld de Vegetarische kip koop ik altijd va dát merk. En dit koop dan weer van AH merk. En ja dat is een soort vaste selectie gewoon.

I: Oke ehm.. nou hartstikke bedankt voor dit interview.

R: Yes graag gedaan.

Interview 4:

I: Nou bedankt dat je wil meedoen aan dit onderzoek, aan dit interview. Voordat we beginnen wil ik even zeker weten dat je hier aan wil meewerken. Dus ik wil he vragen of jet oke is om geïnterviewd te worden?

R: Ja dat is helemaal goed.

I: En ik wil ook graag weten of je het oke vind om de recording aan te hebben.

R: Ja.

I: Nou om jou even veilig te stellen. Ik ga niks moet doen met deze interviews. Ik ga dit alleen gebruiken voor mijn scriptie. Dus ik ga het nergens verder verspreiden. Vind je dat oke?

R: Oke, ja tuurlijk.

I: Dan gaan we beginnen. Ehm.. allereerst, wat is jou geslacht?

R: Vrouw.

I: En wat is je leeftijd?

R: 22.

I: Hoeveel verdien jij ongeveer?

R: Per maand?

I: Per jaar of per maand.

R: Ehm.... Per maand denk ik ehm... qua salaris 1200-1300. Ehm... en ik heb ook nog studiefinanciering.

I: Hoeveel is dat bij elkaar per maand?

R: Ik denk zo'n 1500.

I: Oke. Nou dan gaan we door met het onderwerp. Koop jij af en toe vleesvervangers?

R: Ja eigenlijk alleen maar. Ik eet thuis geen vlees, dus alleen vleesvervangers.

I: Oke, en hoe vaak koop je die ongeveer?

R: Ehm... ik denk.... Oeh even denken hoor... ja wel... dat ik er 2 of 3 per week eet. Want ik eet vaak wel 2 dagen per week met avondeten. **Dus 2 tot 3.**

I: Oke. Ehm... en als jij in de supermarkt staat en jij koopt vleesvervangers, waar let jij dan op bij die producten?

R: Ehm... waar ik op let.... **Nou ik heb gewoon een paar die ik wel lekker vind.** Dus die koop ik dan altijd. **En vooral ook wat bij het gerecht past denk ik.** Bijvoorbeeld **pasta pesto doe ik er altijd vegetarische kip in.** En dan ga ik ja vooral.... **Ik begin eigenlijk met de goedkoopste te proeven.** En als **dit niet lekker is dan ga ik wel over naar een merk om te kijken of dat dan lekker is.** Ik denk dat dat een beetje de dingen zijn waar ik op let.

I: **Dus jij let voornamelijk eerst op de prijs eigenlijk. Als het te duur is dan overweeg je het niet gelijk.** Ehm.. **als dan de goedkope niet lekker is, dan kies je toch voor een betere smaak zeg maar.**

R: **Ja klopt.**

I: Oke ehm... en stel nou dat jij twee producten hebt die allebei wel goed zijn in smaak en even duur zijn. Zijn er dan nog andere dingen waar jij op let?

R: Ehm... **ik denk wel hoe het er uit ziet.**

I: En bedoel je dan de verpakking? Of het product zelf?

R: **Nee het product zelf.** Ehm.. **je hebt bijvoorbeeld vegetarisch gehakt wat echt zo roze achtig is, omdat ze echt dat gehakt na wilden maken. Maar ik vind dat zelf niet zo lekker er uitzien. Dus ik koop dan vaak... ja je hebt dat rul gehakt van Albertheijn. Dat is gewoon bruin. En dat, ja, heeft toch mijn voorkeur.** Maar ik denk dat dat heel verschillend is. Want ik ken ook wel mensen die ehm.. **ja die juist dan echt meer dat vleesachtige willen. Maar ja voor mij dus niet.**

I: Omdat jij dus zelf geen vlees meer eet, is het voor jou niet belangrijk dat het er zo uitziet, of dat het **zo smaakt bijvoorbeeld als echt vlees.**

R: **Nee eigenlijk niet. Ik ben ook niet zo'n vleesliefhebber. Dus ja het hoeft ook in principe niet naar vlees te smaken. Ehm... ja**

I: Oke. Ehm.. en dan wil ik nog graag weten of jij... zijn er bepaalde producten die jij regelmatig haalt?

R: Ehm... **ja vooral wel vegetarische kipstukjes. Van Albertheijn huismerk.** Ehm... en dan het **vegetarische gehakt van Albertheijn.** En ik koop ook wel **vaak ja falafel ehm...** en ik ja, ik proef ook wel vaak nieuwe dingen. Dus groenteburgers of ehm... een kaasschnitzel of zo. **Dus het wisselt eigenlijk ook een beetje met wat ik ga koken.**

I: Ja. En waarom blijf jij altijd zeg maar dezelfde kopen? Wat vind jij zo goed aan die van de Albertheijn bijvoorbeeld?

R: Ehm... ja ik denk **dat ik ze dus wel lekker vind. Dat ik ze daarom wel blijf kopen.** En ook omdat het dus de **goedkoopste was.** Ehm.. ja en als ik ze dan niet lekker vind dan ga ik natuurlijk wel iets anders zoeken. Maar dat heb ik echt niet zo heel snel. Dus vandaar denk ik ja dan kan ik net zo goed gewoon die goedkope kopen als ik het toch lekker vind.

I: Oke, ja helder. Nou dit was hem alweer, dankjewel!

R: Oke.

Interview 5:

I: Dankjewel dat je mee wil doen aan het interview. Ik wil graag voordat we beginnen even ehm.. zeker weten dat je dit vrijwillig doet. Dus vind je het oke om geïnterviewd te worden voor mijn scriptie?

R: Ja, zeker. Geen probleem.

I: En mag ik dit ook opnemen?

R: Ja.

I: Dan wil ik alleen nog even garanderen dat ik dit voor mijzelf hou. Ik ga het niet verspreiden. Het wordt gewoon alleen voor mijn scriptie gebruikt. Oke laten we beginnen. Wat is je geslacht?

R: Ik ben een man.

I: En wat is je leeftijd?

R: Ik ben 33 jaar oud.

I: Wat verdien je ongeveer per jaar?

R: Ehm even kijken... ik heb een bruto maandsalaris van ehm... 4000 euro. Dus ik denk dat ik daar jaarlijks rond de 40 duizend aan over hou.

I: Oke. Koop je af en toe vleesvervangers?

R: Ja. Niet regelmatig. Als ik zonder vlees kook is het vaak ook een gerecht waar ook geen vleesvervangers in zitten. Soms vind ik het wel lekker inderdaad om vleesvervangers te kopen.

I: Oke. Hoe vaak is dit ongeveer?

R: Ik denk ehm... maximaal 1 keer per week.

I: Oke en als jij die vleesvervangers wel koopt, waar let je dan op qua product features?

R: Ehm.. om misschien een voorbeeld te noemen: **je hebt iets van Vallais. En dat heeft een hele crunchy buitenkant en dan zit er kaas in het midden. Ik vind het altijd lekker als het een beetje een bite heeft, dus een beetje iets korkants. En als er ook iets van kaas bijzit. Een combinatie van dat vind ik fijn. Dus ik koop vaak die van Vallais. Voor de rest kijk ik vooral een beetje of het me aanspreekt. Een champignon burger spreekt mij bijvoorbeeld meer aan dan een rode bieten burger.**

I: Ja, en heeft dat dan met de kleur te maken? Of echt met smaak? Of met de voedingswaarden die er in zitten?

R: **Ik denk vooral de kleur en smaak. Het zal in mijn hoofd zitten, maar ik heb bij een burger toch het idee dat je daar een bepaalde kleur bij hebt. Een mooi bruin gebakken burger. Dan kijkt de champignon burger daar meer op dan de rode bieten burger. En qua smaak ook ja.... Als ik rode bieten wil eten eet ik dat liever gewoon als groenten dan als burgervorm.**

I: Ja ehm... vind jij het dan ook lekkerder als het wat meer verwant is aan vlees?

R: Ehm.. lastig. Ja ik vind vlees in principe gewoon lekker. Ik eet eigenlijk alleen minder vlees voor het milieu. **Dus ik zou het niet erg vinden als de smaak inderdaad gewoon lijkt op vlees Maar van de producten, de vleesvervangers die ik heb geprobeerd, vind ik de smaak ook niet slecht.** Het zijn vaak juist dingen die veel smaken opnemen. Als je ermee gaat koken en je er een lekkere saus bij dan neemt **de vleesvervanger de smaak van die saus op.** Dat is in principe ook heel lekker. **Dus daar sta ik neutraal in.**

I: Oke dus het voorbeeld wat jij noemde met die champignon burger, dan vind je het gewoon... het lijkt wel op een burger maar het hoeft niet te smaken als een burger.

R: Nee niet per se.

I: Oke duidelijk. En dat product **Vallais wat je noemt, koop jij dat vaker?** Of bepaalde producten van dat merk?

R: ehm... ik heb eigenlijk 1 favoriet. **Dat is die korkante burger met kaas en daar zit een vleesvervanger tussen.** En ik zal vast nog wel een keer een andere geprobeerd hebben. Maar vooral die eigenlijk. **Dus ik varieer niet heel erg met die producten van Vallais.**

I: Oke en als jij nou een **ander product wil uitproberen. Kies jij dan van Vallais? Of kies jij dan gewoon een ander willekeurig merk wat er goed uit ziet voor jou?**

R: Nou ik denk dat ik inderdaad een beetje **ga kijken van wat ziet er lekker uit. Ik zou het heel fijn vinden als er bijvoorbeeld een combinatie is. Dus niet alleen vleesvervanger maar bijvoorbeeld een vleesvervanger met een tomatensausje ertussen of iets met spinazie. Omdat ik spinazie heel erg lekker vind.** Dus het zal een beetje een combinatie van zijn.

I: **Dus jij kijkt ook wel goed naar de ingrediënten die er in zitten?**

R: Ja, ja.

I: **Daar baseer jij een beetje je keuze op?**

R: Ja zeker, bijvoorbeeld alleen een vleesvervanger dat zou me minder trekken dan bijvoorbeeld een vleesvervanger burger waar nog iets van tomaat tussen zit of een combinatie. Dat zou mij meer trekken.

I: Oke dankjewel dit was het interview.

Interview 6:

I: Bedankt dat je mee wil aan mijn interview. Voordat wij beginnen wil ik graag zeker weten dat jij hieraan wil meewerken. Dus ik wil vragen of jij het oke vind dat ik jou interview voor mijn scriptie?

R: Ja dat vind ik oke. Ik zie hier ook "this meeting is being recorded. Continue". Oke ja.

I: Daarnaast wil ik zeker weten dat je oke vind als ik het record?

R: Jahoor.

I: En ik wil even laten weten dat ik dit niet ga verspreiden. Ik gebruik dit gewoon alleen voor mijn scriptie. En het blijft geheel anoniem.

R: Oke.

I: Laten we beginnen. Allereerst wat is jou gender?

R: Vrouw

I: Wat is je leeftijd?

R: 24.

I: En wat is ongeveer je inkomen in het jaar. Mag ook een inschatting zijn.

R: Ja in een jaar... weet ik even niet.... Maar per maand iets van 2200.

I: Oke thanks. Ehm... dan, koop jij af en toe vleesvervangers?

R: Ja

I: En hoe vaak ongeveer?

R: Ehm... nou, ik denk 1 keer in de twee weken, of 1 keer in de week gemiddeld.

I: Oke. En als jij dat in de supermarkt koopt, waar let jij dan op bij die producten?

R: Ehm... **nou dan let ik niet echt op prijs... prijzen eigenlijk. Meer gewoon ja.... Ja waar let ik dan op... ik zou zeggen of het er lekker uitziet maar het ziet er vaak niet lekker uit. Dus i don't know. Meestal denk ik gewoon van ja... ik heb gewoon dit nodig dus ik koop dit gewoon. Want het is niet per se of ik ga kijken of het er lekker uitziet... zegmaar ik ben niet echt een spontane koper daarin.**

I: Waar zoek jij dan voor? Voor wat voor producten?

R: Ehm.. **nou altijd als ik iets Mexicaans maak dan doe ik dat met vega gehakt want dat vind ik gewoon lekker. En ehm... Falafel. Maar ook als er iets heel nieuws is ofzo. Dan vind ik het ook wel grappig om het uit te proberen. Bijvoorbeeld bij die Unox rookworsten dan probeer ik dat ook gewoon.**

I: Oke, en ehm bij dat gehakt. Want je hebt natuurlijk verschillende merken en smaken enzo. Hoe maak jij die keuze dan in de winkel?

R: Nou dat ligt er echt maar in welke winkel ik ben ook want ik vind van de Lidl vind ik het ook allemaal prima. Zegmaar ik... **ik eet het niet zo vaak dat ik denk van oh deze is veel lekkerder dan de ander.**

I: Voor jou heeft smaak dus niet zo veel invloed?

R: Nee. Dan denk ik meestal denk ik gewoon van.... **Dan toch maar de goedkoopste die er ligt ofzo.**

I: Heb je wel eens het verschil in smaak ervaren met bijvoorbeeld een goedkope en een duurdere?

R: Ehm ja met die falafel wel. Dat ligt er echt aan welke je koopt, maar dan ligt het er niet aan of het duurder is of goedkoper, maar gewoon welk merk het is. Want die maken alles heel anders.

I: Ja en wat voor falafel heb je dan het liefst? Wat vind jij de lekkerste falafel zegmaar.

R: **Ja niet van die super droge. Ik weet even niet van welk merk dat is maar ehm.. je hebt die falafel en die zijn echt balletjes niet van schijfjes. En die balletjes die zijn wat juicier.**

I: Oke dus bij jou is de textuur ook wel belangrijk.

R: Ja.

I: Okee hm... En heb jij.... Koop jij altijd dezelfde producten? Dus als jij eenmaal iets hebt gekozen haal jij die altijd of hoe zit dat?

R: Ehm ja... als ik eenmaal... ja ik denk wel dat ik dat doe inderdaad. Maar bijvoorbeeld wat ik zei van als er dan iets heel nieuws is dan zou ik ook wel kopen.

I: Oke dus jij vind het ook wel leuk om te experimenteren zegmaar.

R: Ja.

I: Ok edit was hem alweer, dankjewel.

R: Alright.

Interview 7:

I: Dankjewel dat je wil meedoen aan dit interview. Voordat we gaan beginnen wil ik even garanderen dat jij hier vrijwillig aan meedoet. Dus ik wil even vragen of je het oke vind om geïnterviewd te worden voor mijn bachelor?

R: Ja, vind ik oke.

I: Daarnaast wil ik ook graag weten of jij het oke vind dat ik dit opneem?

R: Ja, ook oke.

I: En als laatste, ik ga met deze.... dit interview ga ik niet verspreiden. Niemand anders komt dit te zien. Oke laten we beginnen. Allereerst, wat is jou geslacht?

R: Ik ben een vrouw.

I: En wat is jou leeftijd?

R: 19.

I: Wat verdien jij ongeveer per jaar?

R: ehm... 6000 euro per jaar.

I: Ehm... koop jij af en toe vleesvervangers?

R: Ja. Best vaak.

I: En hoe vaak ongeveer?

R: ehm... ja ik eet geen vlees. Maar ik koop niet heel vaak vleesvervangers. Ik denk 1 keer in de week eigenlijk.

I: Oke. Als jij vleesvervangers koopt in de winkel, wat zijn dan dingen waar jij op let qua producten?

R: Ja de prijs sowieso wel.

I: Ja? en waarom?

R: Ja ik ben wel een student en ik heb niet heel veel te spenderen. Dus ik vind het wel belangrijk dat het betaalbaar is. En ik elk geval niet duurder dan normaal vlees is. Maar ik laat het daardoor ook...

daarom eet ik vaak ook... laat ik het weg zeg maar. Want ik vind het vaak goedkoper om gewoon bami te doen zonder tofu, of zonder vleesvervangers. Groentes zijn goedkoper.

I: Oke. Waar let jij nog meer op als je die producten wel koopt?

R: Nou, misschien waar ik niet zo op let... is dat ook goed?

I: Jahoor.

R: Ja ik vind het dus niet zo van belang... het hoeft voor mij dus niet echt zoals echt vlees uit te zien. Want ik vind bijvoorbeeld een bietenburger, die is paarsig, dat vind ik eigenlijk heel lekker en als ik weet dat de smaak goed is, hoeft het voor mij niet als vlees uit te zien.

I: Oke. Dus je noemt ook smaak. Vind je smaak wel belangrijk?

R: Ja. Dat vind ik belangrijk dan het uiterlijk. Ik heb wel eens vleesvervangers gegeten wat heel erg leek... dat rozige gehakt.... Dat leek heel erg op normaal vlees. Maar dat smaakte dan niet goed. En dan heb ik liever een bietenburger die niet als... die vind ik lekker smaken... maar niet eens per se als vlees. Als het maar lekker is, dat vind ik meer.

I: Oke, dus het mag voor jou wel een authentieke look hebben zeg maar. Het hoeft niet op vlees te lijken.

R: Ja. Het mag ook een authentieke smaak hebben. Als het maar lekker is.

I: Dus voor jou, vleesvervangers mogen gewoon producten op zich zijn. Het hoeven geen... het hoeft niet zo te smaken, zo te voelen, zo er uit te zien als een burger bijvoorbeeld.

R: Nee.

I: Oke. Zijn er eigenlijk altijd bepaalde producten die jij koopt? Heb jij een soort standaard set van producten?

R: Ja redelijk. Ik ga vaak naar de Albertheijn en dat koop ik vaak de huismerken vleesvervangers. En tofu en tempeh. En dat is ook omdat het vaak goedkoop is, tofu en tempeh.

I: Oke. En die AH huismerk producten. Waarom koop je die?

R: Voor de prijs. Maar ook omdat ik ze lekker vind. Ik ehm... ik heb eigenlijk een paar keer van zo'n echt merk gekocht en dat vind ik nou niet lekkerder dan Albertheijn. Dus ik denk: smaak is hetzelfde en prijs is goedkoper.

I: Oke, en zou jij sneller dan ook andere nieuwe producten van het Albertheijn huismerk proberen?

R: Ja.

I: Die zou jij dan sneller kiezen dan een nieuw product van een ander merk?

R: Ja. Ja, omdat het betaalbaarder is.

I: Oke duidelijk. Ehm... dit was hem alweer, dankjewel.

R: Graag gedaan.

Interview 8:

I: Bedankt dat je mee wil doen aan dit interview. Voordat we beginnen wil ik even....

R: Geen probleem.

I: Wil ik even garanderen dat jij het oke vind om geïnterviewd te worden. Dus vind jij het oke om mij te helpen voor mijn scriptie?

R: Ja.

I: Daarnaast wil ik dit opnemen, vind je dat ook oke?

R: Ja.

I: En ik wil je garanderen dat... ik ga hier verder niks mee doen, ik ga het niet verspreiden. Ik gebruik het gewoon alleen voor mijn scriptie.

R: Helemaal goed.

I: Oke. Dan gaan we beginnen. Allereerst wat is jou geslacht?

R: Vrouw.

I: En hoe oud ben jij?

R: 24.

I: En weet jij ongeveer hoeveel jij verdient per maand of per jaar?

R: Ehm... even denken. Nu 1000 euro per maand. Normaal.... Ja ik zou het houden op 1000 euro per maand.

I: Oke doen we dat. Ik zou graag weten of jij vleesvervangers koopt?

R: Soms.

I: Hoe vaak is dat ongeveer?

R: Hmm... 1 of 2 keer per maand.

I: Oke, en als jij in de winkel staat en jij koopt vleesvervangers. Waar let jij dan op?

R: Hm... of het niet te zout is. Ehm... en verder, ja ik heb gewoon twee dingen waarvan ik weet die vind ik lekker en die koop ik, maar verder uhhh... niet echt.

I: En welke producten zijn dat?

R: Vegetarische balletjes en de hamburgers van Vegetarische Slager.

I: En waarom koop jij die specifieke producten?

R: Ehm.. eigenlijk koop ik helemaal geen vlees of vleesvervangers, maar af en toe heb ik dan toch zin in iets van een gehaktballetje of een hamburger en dan koop ik dat.

I: Oke en die burger van Vegetarische Slager, waarom ben jij daar fan van?

R: Omdat ze een hele fijne, goeie structuur hebben. Vaak heb je dat ze of te droog zijn of ze vallen bijna uit elkaar. Of het is gewoon niet echt lekker. Die zijn ehmm... als je niet gelijk echt een groenteburger wil, dan vind ik dat wel een goed alternatief.

I: Wil jij dan ook dat die burgers lijken op echt vlees?

R: Ehm... ja.

I: Oke dat is voor jou wel belangrijk.

R: Of nee, ik vind dat ze lijken op vlees, maar dat hoeft voor mij niet per se.

I: Oke het gaat jou echt puur om de... dat het wel een fijne structuur heeft en dat het een fijne bite heeft. Dat soort zaken.

R: Ja.

I: Oke. Je noemde ook al dat je wil dat er niet te veel zout inzit. Let jij nog op meer dingen?

R: Palmolie vind ik ook belangrijk. Maar dat is soms wel lastig met van die vleesvervangers.

I: Ja en kijk jij dan ook echt naar de ingrediënten of de voedingswaarden van die producten?

R: Ja.

I: Allebei? En de voedingswaarden, en de ingrediënten?

R: Meer de ingrediënten.

I: Oke. Jij bent geïnteresseerd in wat er nou precies inzit?

R: Ja.

I: Oke ehm.. heb jij ook wel eens andere burgers geprobeerd, behalve die van de Vegetarische Slager?

R: Ehm... die van de Albertheijn. Die vond ik minder lekker.

I: Oke dus jij vind de smaak ook wel echt belangrijk?

R: Ja klopt. Want die vond ik ook wat droger. Misschien dat dat ondertussen anders is hoor.

I: Ja. Maar jij weet nu wel dat je die van de Vegetarische Slager vind jij lekker. Dus zou jij ook andere producten van de Vegetarische Slager proberen?

R: Ehm... heb ik weleens geprobeerd. Maar daar was ik niet zo fan van. Puur omdat... ik ben ook nooit echt een vleeseter geweest. Dus alles wat op vlees lijkt vind ik al gauw... hmm.. niet zo.

I: Oke dus als er op de verpakking staat: "net echt", dan is dat voor jou een afknapper?

R: Ja, tenzij het dan om een gehaktballetje of een hamburger gaat want die vond ik wel altijd lekker.

I: Precies, dat vond je vroeger toen wel lekker. Oke. Ehm dus voor jou is het merk op zich, is niet heel belangrijk.

R: Nee.

I: Oke dankjewel! Dit was hem.

R: Oke top.

Interview 9:

I: Bedankt dat je mee wil doen aan het interview. Voordat we beginnen wil ik even duidelijk maken dat voor jou ook vrijwillig is, deze meewerking. Ik wil je vragen of je het oke vind om geïnterviewd te worden?

R: Ja dat vind ik oke.

I: Vind je het ook oke als ik dit opneem?

R: Ja dat is ook oke.

I: En als laatste: Ik ga hier niks mee doen verder. Ik ga dit gewoon gebruiken voor mijn onderzoek. Ik ga het niet verspreiden op van alles. Laten we beginnen. Allereerst, wat is je geslacht?

R: Ik ben een vrouw.

I: En wat is je leeftijd?

R: 24, bijna 25.

I: Wat is ongeveer je inkomen per maand?

R: Ehm... nu is het even kijken hoor... 1400 euro omdat ik nu 3 dagen i.p.v. 4 dagen uiteindelijk werk.

I: Oke dus 1400 maar het was eigenlijk iets meer nog.

R: Ja eigenlijk 1600.

I: Oke, prima. En koop jij wel eens vleesvervangers?

R: Ja best wel eigenlijk.

I: Hoe vaak ongeveer?

R: Ehm.. nou de laatste tijd probeer ik geen vlees te eten, dus eigenlijk een aantal weken.

I: En hoe vaak haal je het dan of hoe vaak eet je het dan zeg maar?

R: Ehm... ja sowieso wel 3 keer per week denk ik.

I: Oke netjes. Ehm... en als jij in de winkel staat, en je zoekt voor vleesvervangers, waar let jij dan vooral op?

R: **Op de prijs.**

I: Ja?

R: **Eerst de prijs sowieso, maar op een gegeven moment weet je wel wat lekkerder is en minder is zeg maar.**

I: En vind je het dan **belangrijk dat iets lekker smaakt?**

R: **Ja eigenlijk wel, maar als ik niet zoveel geld heb, ja dan ga ik liever voor het goedkope.**

I: Dus als het niet heel lekker is maar wel betaalbaar. Dan wil je het alsnog kopen?

R: Ja dan eet ik het gewoon. **Bijvoorbeeld je hebt natuurlijk ook vegetarische hamburgers. Als je gewoon sla en de rest wat op een normale hamburger zit, dat proeft het ook gewoon altijd naar een hamburger. Met saus eroverheen en weet ik veel allemaal.**

I: Ja. En ehm.. als er zeg maar twee burgers ongeveer even goedkoop zijn. Wat is dan voor de rest voor jou belangrijk?

R: **Ja dan wel de smaak.**

I: Zijn er nog andere dingen?

R: Ja ehm... soms smaakt het ook gewoon... ik weet niet meer welk merk dat is, maar dat smaakt gewoon bijna echt als een hamburger. Dat vond ik eigenlijk wel echt heel erg lekker.

I: Vind jij het lekkerder als het meer echt op vlees lijkt?

R: Ja!

I: Oke dus stel dat jij twee dezelfde burgers ziet liggen en er staat op van: "dit is bijna hetzelfde als echt vlees". Zou je dan die denk je eerder kopen?

R: Ja, denk het wel.

I: Oke. Let jij ook nog op wat er in zit? Of het goed voor je is, of dat soort dingen?

R: Als ik heel eerlijk ben lees ik niet zo goed op wat er in zit.

I: Nee dat is juist goed om weten, je moet wel eerlijk zijn natuurlijk.

R: Ja ik ben eerlijk.

I: En zijn er eigenlijk dingen die jij altijd koopt? Heb jij een beetje dezelfde producten altijd?

R: Ehm... ja stel je voor als ik echt het geld had, had ik het liefste gewoon van de Vegetarische Slager. Ja die is gewoon echt heel goed. De kip is echt gewoon dezelfde bijt als kip vind ik persoonlijk. Dus dat heeft echt mijn voorkeur. Maar ja qua budget is dat niet echt haalbaar altijd.

I: Als dat goedkoper zou zijn zou je dat liever hebben?

R: Ja denk het wel.

I: En is het dan omdat je het merk goed vind. Of vind je dan echt hoe het voelt en hoe het smaakt... vind je dat dan belangrijker?

R: Nou ik vind het gewoon een heel goed bedrijf, of hoe je dat noemt. Ik vind dat wel een goeie want die hebben ook allemaal menu's en zo. Wat je ermee kan maken en zo. Het is goed doordacht.

I: Hebben zij zo'n recept altijd er op staan?

R: Nou ik heb toevallig van mijn moeder zo'n boekje gekregen. Maar ik denk dat als je online gaat zoeken dat je dan ook wel kan vinden.

I: Ohja, en zou het voor jou ehm... zou het voor jou aantrekkelijker zijn als er... Stel je haalt een vegetarische gehakt ofzo. Dat er dan ook een recept op de verpakking staat? Zou dat voor jou goed zijn?

R: Nou ehm... Ja, het is wel handig. Want op een gegeven moment heb je niet echt meer variatie met eten.

I: Ja oke. Maar als merk vind je het dus wel belangrijk, van de Vegetarische Slager. En vind je ook de textuur lekkerder? Dus dat het echt meer een bite heeft als kip?

R: Ja.

I: Dus je vind de textuur ook belangrijk?

R: Ja dat vind ik ook belangrijk.

I: Oke dit was hem alweer, dankjewel.

R: Oh echt? Hahah.

Interview 10

I: Dankjewel dat je mee wil doen aan dit interview. Voordat ik begin wil ik even garant stellen dat ik dit alleen voor eigen gebruik ga gebruiken. Dus ik wil jou even vragen of jij het oke vind om dit interview te houden?

R: Ja zeker heb ik geen problemen mee.

I: Vind je het ook geen probleem om het op te nemen?

R: Nee geen problemen mee.

I: Oke dan kunnen we van mijn part beginnen.

R: Oke.

I: Allereerst wil ik weten wat jou geslacht is?

R: Mijn geslacht is man.

I: Hoe oud ben je?

R: 32 jaar.

I: En hoeveel verdien je ongeveer per jaar?

R: ehm.. tussen de 50 en 55 duizend.

I: Oke. En eet jij af en toe vleesvervangers?

R: Ja zekers.

I: Hoe vaak ongeveer, weet je dat?

R: Ehm... nou gemiddeld denk ik 1 keer in de 3 a 4 weken. Want wij hebben de laatste tijd meer ehm... als we dan... we hebben niet overal een vleesvervanger voor nodig weet je wel. Dus dan eten we liever vega dan met vleesvervanger eigenlijk.

I: Oke dus je eet ongeveer 1 keer in de maand eet jij vleesvervangers.

R: Klopt, zeker.

I: Oke. Als jij in de winkel bent en je zoekt wel naar vleesvervangers. Waar kijk jij dan vooral naar?

R: Wij kijken vaak naar... het soort vlees bedoel je? Of wat voor vervanger... ja tenminste... of hoe iets er uitziet? Of hoe moet ik het zien.

I: Ja dat zijn dingen die meetellen. Bijvoorbeeld als jij... je hebt natuurlijk 20 soorten producten in de winkel liggen. Wat vind jij dan belangrijk, om te kiezen welke voor jou het beste is?

R: Voor mij is het belangrijk, prijs. Ehhh... en ook wel een beetje uiterlijk, dus hoe iets er uit ziet. Ja het is wel belangrijk om mee te nemen in onze aankoop.

I: En heb je het dan over hoe het product er uit ziet? Of over hoe de verpakking er uit ziet?

R: Beide hahaha.

I: Oke dus jij kijkt naar de verpakking en het product?

R: Ik ben daar heel gevoelig voor man.

I: En wat spreekt jou dan aan denk je?

R: Als iets eigenlijk ehm... bijna 1 op 1 overkomt uit een.. ja het uiterlijk als een echt stukje vlees of zoeits.

I: Oke jij vind het belangrijk dat het lijkt op vlees?

R: Ja, ja.

I: En is het dan alleen het uiterlijk? Of heb je dat ook met smaak, of met textuur?

R: Ehm... nou dat zeg ik ook. Wij doen de laatste tijd eigenlijk als we het dan kopen, kopen we vaak iets wat misschien niet eens als vlees smaakt. We proberen dan ook wel, ja... eerst deden we wel vooral iets wat als vlees smaakte of wat erop leek. Maar nu doen we meer een soort van groenteburger of iets dergelijks. Dus eerst keken we heel erg naar het uiterlijk: leek het op vlees? Maar dan kwam eigenlijk ehm... was niet helemaal hetzelfde als vlees zelf zeg maar. Dus toen hadden we iets van dan maken we gewoon helemaal geen vleesvervanger of vlees voor bepaalde gerechten. Dus nu kijken we puur of iets ons aanspreekt, dus bijvoorbeeld een groenteburger ofzo.

I: Ja, en dan gaat het om... wat zei je smaak?

R: Smaak, uiterlijk, en prijs is voor ons het belangrijkste.

I: Oke en ben je dan ook gevoelig voor bijvoorbeeld korting op producten?

R: Ja, we hadden laatst een actie bij de Albertheijn. Van Gourmet. En toen had je 3 halen 1 betalen. Toen hebben we echt voor een maand ingeslagen. Toen hebben we echt 10 pakken gehaald ofzo.

I: Oke dus jij haalt dus misschien af en toe wel standaard producten, maar als die in de aanbieding zijn koop jij toch liever wat anders.

R: Ja. Ik heb dat met mijn vrouw erover. Als de vleesvervangers even goedkoop waren als vlees in de supermarkt, dan hadden wij vaker vleesvervangers gekocht.

I: Oke duidelijk.

R: Dan nog een laatste vraagje. Heb jij ehm... standaard producten die je altijd koopt van bepaalde merken? Of standaard vleesvervangers als jij die dan koopt?

I: Ja. Wij hebben altijd ehm... voor bepaald gerecht halen wij altijd gehakt van Gourmet. Dat is bijna hetzelfde als rul gehakt gewoon. Dus dat doen we dan in een schotel ofzo. En ehm... je hebt van die burgers volgens mij van hetzelfde merk. En die zijn echt gewoon bijna hetzelfde als een normale burger. Ik weet niet precies hoe die heten, maar die gebruiken wij altijd. Maar verder als we bijvoorbeeld een curry maken ofzo dan hoeven we geen vervangende kip te hebben.

R: Dan doen jullie geen van beide eigenlijk.

I: Ja geen van beiden als het ware.

R: Dus voor jou is het gehakt en de burgers het belangrijkste.

I: En soms die kipnuggets. Of snacks ofzo, kan ook.

R: En waarom dan per se van Gourmet? Wat vind je daar zo goed aan?

I: Ehm... ja.... Dat is een goeie vraag eigenlijk. Ik den eerlijk gezegd dat ik dat van anderen heb gehoord. Ik heb iet alles geprobeerd nog. Dus ik denk dat het van horen en zeggen is.

R: Oke, ja duidelijk. Dit was hem, dankjewel!

Appendix (C1) - Survey questions

Start of Block: Introduction

Q1 Welcome to the survey!

Thank you for participating in this research conducted by Erasmus University Rotterdam. This survey is designed to measure your preference for meat substitutes (vleesvervangers). Examples of meat substitutes are beanburgers, vegetarian chicken pieces, or vegetarian minced meat. This survey will take approximately 5 minutes to fill in.

End of Block: Introduction

Start of Block: Block 1

Q2 What is your nationality?

- Dutch (1)
- Other (2)

End of Block: Block 1

Start of Block: Block 2

Q3 Do you buy meat substitutes?

- Yes (1)
- No (2)

End of Block: Block 2

Start of Block: General questions

Q4 What is your gender?

- Male (1)
 - Female (2)
 - Non-binary / third gender (3)
 - Prefer not to say (4)
-

Q5 What is your age?

- 18-23 (1)
 - 24-29 (2)
 - 30-35 (3)
-

Q6 What is your spendable income in a month?

- Less than €500 (1)
 - €500-€1000 (2)
 - More than €1000 (3)
-

Page Break

Q7 Which of the following diets describes you the most?

- Vegetarian (1)
 - Vegan (2)
 - Flexitarian (3)
 - No particular diet (4)
-

Q8 What is your most important reason for buying meat substitutes?

- Animal-welfare concern (1)
 - Environmental concern (2)
 - Health concern (3)
 - I do not buy meat substitutes (4)
-

Page Break

Q9 Introduction

Imagine you are shopping in a grocery store to buy a meat substitute. In each question of this survey, you will be asked to consider two different meat substitutes. Please choose the one you prefer the most.

The meat substitutes will differ on every question (13 in total). Only the shown components are different. Please assume that the other components are alike in all other ways.

Explanation of the components:

- **Price:**

The price ranges from €2 to €5.

- **Flavor:**

The meat substitute can taste like meat, like vegetables, or salty.

- **Texture:**

The meat substitute feels dry, crunchy or juicy.

- **Appearance:**

The meat substitute looks similar to meat, or looks like a mix of vegetables.

- **Ingredients:**

The meat substitute is mainly made of vegetables, fungi (paddenstoelen), or beans.

- **Use of the meat substitute in a meal:**

The meat substitute is part of the meal (such as "aardappelen-groente-vlees" meals). The meat substitute is mixed in the meal (such as in a wrap or lasagne).

Lastly, it is used on bread.

- **Brand:**

A-brand or House brand.

- **Packaging material:**

Eco-friendly or non eco-friendly packaging.

End of Block: General questions

Start of Block: Block 3

Q10 Which meat substitute would you choose?

	Choice A	Choice B
Flavor	<ul style="list-style-type: none">• Tastes like meat	<ul style="list-style-type: none">• Tastes like vegetables
Texture	<ul style="list-style-type: none">• Crunchy	<ul style="list-style-type: none">• Dry
Use of product in the meal	<ul style="list-style-type: none">• Product is mixed in a meal	<ul style="list-style-type: none">• Product is part of the meal
Packaging material	<ul style="list-style-type: none">• Eco-friendly	<ul style="list-style-type: none">• Non eco-friendly

Q11 I choose option:

A (1)

B (2)

End of Block: Block 3

Start of Block: Block 4

Q12 Which meat substitute would you choose?

	Choice A	Choice B
Price	<ul style="list-style-type: none">• €2	<ul style="list-style-type: none">• €3,50
Flavor	<ul style="list-style-type: none">• Salty	<ul style="list-style-type: none">• Tastes like meat
Texture	<ul style="list-style-type: none">• Crunchy	<ul style="list-style-type: none">• juicy

Q13 I choose option:

A (1)

B (2)

End of Block: Block 4

Start of Block: Block 5

Q14 Which meat substitute would you choose?

	Choice A	Choice B
Texture	<ul style="list-style-type: none">• Dry	<ul style="list-style-type: none">• Juicy
Ingredients	<ul style="list-style-type: none">• Mainly fungi	<ul style="list-style-type: none">• Mainly beans
Packaging material	<ul style="list-style-type: none">• Eco-friendly	<ul style="list-style-type: none">• Non eco-friendly

Q15 I choose option:

A (1)

B (2)

End of Block: Block 5

Start of Block: Block 6

Q16 Which meat substitute would you choose?

	Choice A	Choice B
Price	• €3,50	• €5
Flavor	• Tastes like vegetables	• Salty
Ingredients	• Mainly vegetables	• Mainly beans

Q17 I Choose Option:

A (1)

B (2)

End of Block: Block 6

Start of Block: Block 7

Q18 Which meat substitute would you choose?

	Choice A	Choice B
Flavor	• Tastes like vegetables	• Tastes like meat
Texture	• Crunchy	• Dry
Ingredients	• Mainly fungi	• Mainly vegetables
Brand	• A-brand	• House brand

Q19 I choose option:

A (1)

B (2)

End of Block: Block 7

Start of Block: Block 8

Q20 Which meat substitute would you choose?

	Choice A	Choice B
Texture	<ul style="list-style-type: none">• Juicy	<ul style="list-style-type: none">• Crunchy
Appearance	<ul style="list-style-type: none">• Looks like meat	<ul style="list-style-type: none">• Looks like vegetables
Use of product in the meal	<ul style="list-style-type: none">• Product is mixed in a meal	<ul style="list-style-type: none">• Product for on bread
Brand	<ul style="list-style-type: none">• A-brand	<ul style="list-style-type: none">• House brand

Q21 I choose option:

A (1)

B (2)

End of Block: Block 8

Start of Block: Block 9

Q22 Which meat substitute would you choose?

	Choice A	Choice B
Price	• €3,50	• €5
Ingredients	• Mainly fungi	• Mainly vegetables
Use of product in the meal	• Product is part of the meal	• Product for on bread
Packaging material	• Eco-friendly	• Non eco-friendly

Q23 I choose option:

A (1)

B (2)

End of Block: Block 9

Start of Block: Block 10

Q24 Which meat substitute would you choose?

	Choice A	Choice B
Flavor	• Tastes like vegetables	• Salty
Appearance	• Looks like meat	• Looks like vegetables
Ingredients	• Mainly beans	• Mainly fungi
Use of product in the meal	• Product is part of the meal	• Product is mixed in a meal

Q25 I choose option:

A (1)

B (2)

End of Block: Block 10

Start of Block: Block 11

Q26 Which meat substitute would you choose?

	Choice A	Choice B
Flavor	<ul style="list-style-type: none">• Salty	<ul style="list-style-type: none">• Tastes like vegetables
Appearance	<ul style="list-style-type: none">• Looks like meat	<ul style="list-style-type: none">• Looks like vegetables
Packaging material	<ul style="list-style-type: none">• Eco-friendly	<ul style="list-style-type: none">• Non eco-friendly

Q27 I choose option:

A (1)

B (2)

End of Block: Block 11

Start of Block: Block 12

Q28 Which meat substitute would you choose?

	Choice A	Choice B
Price	<ul style="list-style-type: none">• €5	<ul style="list-style-type: none">• €2
Texture	<ul style="list-style-type: none">• Crunchy	<ul style="list-style-type: none">• Dry
Ingredients	<ul style="list-style-type: none">• Mainly fungi	<ul style="list-style-type: none">• Mainly beans
Brand	<ul style="list-style-type: none">• House brand	<ul style="list-style-type: none">• A-brand

Q29 I choose option:

A (1)

B (2)

End of Block: Block 12

Start of Block: Block 13

Q30 Which meat substitute would you choose?

	Choice A	Choice B
Price	<ul style="list-style-type: none">• €2	<ul style="list-style-type: none">• €5
Flavor	<ul style="list-style-type: none">• Tastes like meat	<ul style="list-style-type: none">• Tastes like vegetables
Brand	<ul style="list-style-type: none">• House brand	<ul style="list-style-type: none">• A-brand
Packaging material	<ul style="list-style-type: none">• Non eco-friendly	<ul style="list-style-type: none">• Eco-friendly

Q31 I choose option:

A (1)

B (2)

End of Block: Block 13

Start of Block: Block 14

Q32 Which meat substitute would you choose?

	Choice A	Choice B
Use of product in the meal	<ul style="list-style-type: none">• Product is mixed in a meal	<ul style="list-style-type: none">• Product is part of the meal
Brand	<ul style="list-style-type: none">• House brand	<ul style="list-style-type: none">• A-brand

Q33 I choose option:

A (1)

B (2)

End of Block: Block 14

Start of Block: Block 15

Q34 Which meat substitute would you choose?

	Choice A	Choice B
Flavor	<ul style="list-style-type: none">• Tastes like meat	<ul style="list-style-type: none">• Tastes like vegetables
Texture	<ul style="list-style-type: none">• Crunchy	<ul style="list-style-type: none">• Dry
Use of product in the meal	<ul style="list-style-type: none">• Product is mixed in a meal	<ul style="list-style-type: none">• Product is part of the meal
Packaging material	<ul style="list-style-type: none">• Eco-friendly	<ul style="list-style-type: none">• Non eco-friendly

Q35 I choose option:

A (1)

B (2)

End of Block: Block 15

Appendix (C2) - Survey workflow

Block: Introduction (1 Question)

Standard: Block 1 (1 Question)

Branch: New Branch

If

If What is your nationality? Other Is Selected

EndSurvey:

Standard: Block 2 (1 Question)

Branch: New Branch

If

If Do you buy meat substitutes? No Is Selected

EndSurvey:

Standard: General questions (6 Questions)

Branch: New Branch

If

If What is your most important reason for buying meat substitutes? I do not buy meat substitutes Is Selected

EndSurvey:

BlockRandomizer: 13 -

Standard: Block 3 (2 Questions)

Standard: Block 4 (2 Questions)

Standard: Block 5 (2 Questions)

Standard: Block 6 (2 Questions)

Standard: Block 7 (2 Questions)

Standard: Block 8 (2 Questions)

Standard: Block 9 (2 Questions)

Standard: Block 10 (2 Questions)

Standard: Block 11 (2 Questions)

Standard: Block 12 (2 Questions)

Standard: Block 13 (2 Questions)

Standard: Block 14 (2 Questions)

Standard: Block 15 (2 Questions)

Page Break

Appendix (D1)- Likelihood ratio tests Tables

Table 2. Likelihood Ratio Tests of individual effect of the key attributes on utility.

Attribute	L-R Chi-square	DF	Significance
<i>Price</i>	185,675	2	<,0001*
<i>Flavor</i>	38,196	2	<,0001*
<i>Texture</i>	283,818	2	<,0001*
<i>Appearance</i>	3,257	1	0,0711
<i>Ingredients</i>	44,110	2	<,0001*
<i>Use of the product in a meal</i>	44,399	2	<,0001*
<i>Brand</i>	14,441	1	0,0001*
<i>Packaging material</i>	232,406	1	<,0001*

* significant on a 5% significance level.

Table 3. Likelihood Ratio Tests of the effects of the key attributes and *motivation* on utility.

Attribute	L-R Chi-square	DF	Significance
<i>Price</i>	35,448	2	<,0001*
<i>Flavor</i>	13,591	2	0,0011*
<i>Texture</i>	33,502	2	<,0001*
<i>Appearance</i>	0,679	1	0,4100
<i>Ingredients</i>	0,766	2	0,6817
<i>Use of the product in a meal</i>	3,67	2	0,2052
<i>Brand</i>	13,292	1	0,0003*
<i>Packaging material</i>	44,858	1	<,0001*
<i>Motivation*Price</i>	3,103	2	0,2119
<i>Motivation*Flavor</i>	3,272	2	0,1948

<i>Motivation*Texture</i>	5,023	2	0,0811
<i>Motivation*Appearance</i>	0,000	1	1,00
<i>Motivation*Ingredients</i>	4,479	2	0,1065
<i>Motivation*Use of the Product in a meal</i>	1,154	2	0,5615
<i>Motivation*Brand</i>	5,567	1	0,0183*
<i>Motivation*Packaging Material</i>	3,037	1	0,0814

* significant on a 5% significance level.

Appendix (D2) - Excel data for Effect Marginals Graph

Excel data

Range and importance (1)

Attribute	Range	Importance
Price	2,65	0,22766323
Flavor	0,96	0,082474227
Texture	3,32	0,285223368
Appearance	0,23	0,01975945
Ingredients	0,96	0,082474227
Use of the product in a meal	0,83	0,071305842
Brand	0,45	0,038659794
Packaging material	2,24	0,192439863
Total	11,64	1

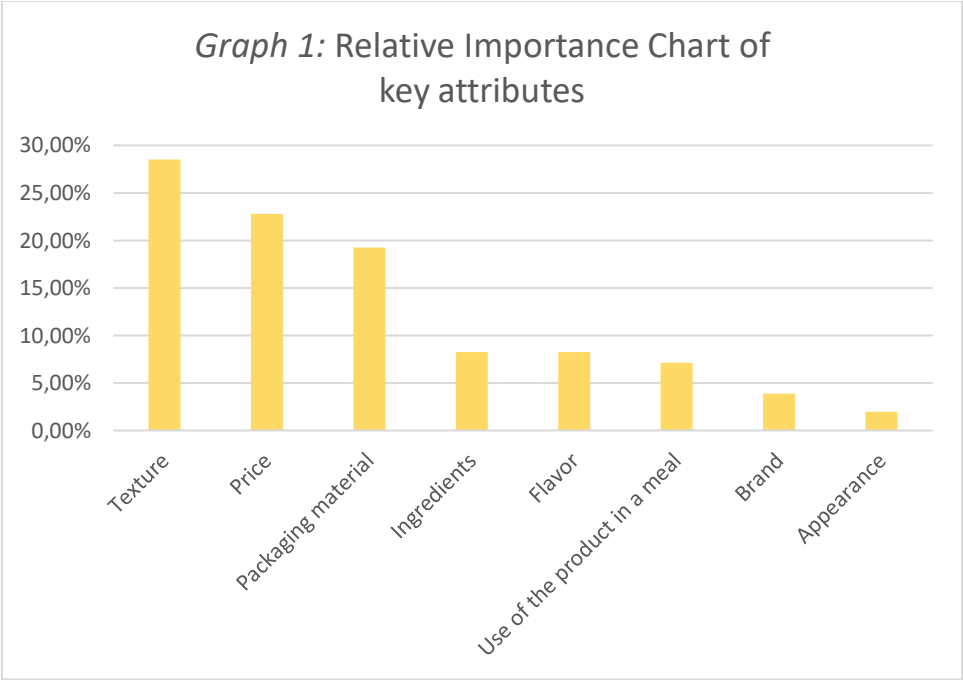
Importance in percentages (2)

Attribute	Range	Importance
Price	2,65	22,77%
Flavor	0,96	8,24%
Texture	3,32	28,50%
Appearance	0,23	1,98%
Ingredients	0,96	8,25%
Use of the product in a meal	0,83	7,13%
Brand	0,45	3,87%
Packaging material	2,24	19,24%

Importance ranked high-low (3)

Attribute	Range	Importance
Texture	3,32	28,50%
Price	2,65	22,77%
Packaging material	2,24	19,24%
Ingredients	0,96	8,25%
Flavor	0,96	8,24%
Use of the product in a meal	0,83	7,13%
Brand	0,45	3,87%
Appearance	0,23	1,98%

Effect marginals Graph



Appendix (D3) – Parameter Estimates

Table 4. Parameter Estimates.

Term	Estimate	Std Error
<i>Price(€5)</i>	-0,616	0,077
<i>Price (€3,50)</i>	-1,016	0,184
<i>Flavor (Salty)</i>	-0,632	0,109
<i>Flavor (Tastes like vegetables)</i>	0,332	0,079
<i>Texture (Dry)</i>	-1,416	0,103
<i>Texture (Crunchy)</i>	-0,489	0,110
<i>Appearance (Looks like vegetables)</i>	0,117	0,068
<i>Ingredients (Mainly fungi)</i>	0,370	0,098
<i>Ingredients (Mainly beans)</i>	-0,590	0,092
<i>Use of the product in a meal (Product for on bread)</i>	0,241	0,166
<i>Use of the product in a meal (Product is part of the meal)</i>	0,296	0,105
<i>Brand (House brand)</i>	0,227	0,062
<i>Packaging material (Non eco-friendly)</i>	-1,122	0,092

The Terms above and their corresponding estimates are relative to the base term. For price for example, the base term is *Price (€2)*. So the expected individual effect of *Price(€3,50)* is a decrease of -1,016 on the expected utility of a meat substitute, in comparison to a *price* of €2.

Appendix (E) - Raw data into Cleansed data conversion

Step 1: Partial Raw data Excel V1 (Export Qualtrics data into Excel).

The screenshot shows an Excel spreadsheet with columns labeled A through AP and rows 1 through 50. The data includes survey questions and their corresponding responses, such as 'I choose' and 'I choose option'. The spreadsheet is titled 'Survey Meat Substitutes July 5, 2017'.

Zoomed out to show the data after the introductory text.

The screenshot shows an Excel spreadsheet with columns labeled A through AP and rows 51 through 100. The data includes survey questions and their corresponding responses, such as 'I choose' and 'I choose option'. The spreadsheet is titled 'Survey Meat Substitutes July 5, 2017'.

Step 2: Raw data Excel V2 (Text into columns transformation to get tables. Removed useless text/rows/columns)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	ID	Choice 1	Choice 2	Choice 3	Choice 4	Choice 5	Choice 6	Choice 7	Choice 8	Choice 9	Choice 10	Choice 11	Choice 12	Choice 13	National	Eat meat	Gender	Age	Spendabl	Diet	Motivation	
2	R_THNDdodv	1	2	2	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	3	4	2
3	R_122U2sQv	1	2	2	1	1	1	1	1	1	2	1	2	2	1	1	1	1	1	3	4	2
4	R_20shCGlq	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	3	2
5	R_2PySsVC2	1	1	2	1	2	1	2	1	2	1	2	1	2	1	1	1	2	1	2	1	2
6	R_27eQJybl	1	1	2	1	2	1	1	1	2	2	1	2	1	1	1	1	1	1	2	3	3
7	R_2Xmuscyy	1	2	1	2	1	1	1	2	1	1	2	2	2	1	1	1	2	2	2	2	1
8	R_1Kx91Tb4	1	2	2	2	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	4	2
9	R_3KIKJLPDF	1	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	4	2
10	R_3r1DBrIBf	1	2	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	2	3	1
11	R_1QootHRU	1	1	2	1	2	1	2	1	1	2	1	1	1	1	1	1	2	1	1	1	1
12	R_2CO95FIF	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	1	3	4	2
13	R_UEWKLNHf	1	2	2	1	2	1	2	2	1	1	1	2	1	1	1	1	1	2	3	4	2
14	R_2QFf175QJ	1	2	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	1	3	1
15	R_1n7QzjIb7	1	2	2	2	1	1	1	1	2	1	2	2	1	1	1	1	2	1	1	2	1
16	R_2rABuX7Sf	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4	2
17	R_2Yr1KiG4e	1	2	2	1	1	2	1	1	1	1	2	1	1	1	1	1	2	1	2	3	2
18	R_3ke74dNU	1	2	2	1	1	1	1	1	2	2	1	1	1	1	1	1	2	1	3	1	1
19	R_27ELhBvef	1	2	1	1	1	1	1	2	1	1	2	2	1	1	1	1	1	1	1	4	2
20	R_1MIQMbf	1	2	2	1	2	1	1	2	1	2	1	2	1	1	1	1	1	1	3	4	2
21	R_3n6sfy8qf	1	1	1	1	2	2	1	1	1	2	2	2	2	1	1	1	2	1	1	3	1
22	R_8oeXVqekf	1	2	2	1	1	1	1	2	2	1	1	1	1	1	1	1	2	1	1	4	2
23	R_3Ord98da	1	2	1	1	1	2	1	2	1	1	2	2	1	1	1	1	2	1	2	1	2
24	R_1c8BpCJ7f	1	2	1	1	2	1	1	1	2	1	2	1	1	1	1	1	2	1	1	1	1
25	R_3HzagW8f	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	2	3	4	3
26	R_2fC335VU	1	2	1	1	1	2	1	1	1	2	1	2	1	1	1	1	2	2	3	4	3
27	R_2vdpDCLD	2	2	1	1	1	1	1	1	2	2	1	2	2	1	1	1	2	2	3	4	2
28	R_1Dwd68tp	1	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1	2	1	2	4	2
29	R_1DpCmyNI	1	2	1	1	1	2	1	2	1	1	2	2	1	1	1	1	2	2	2	3	2
30	R_OPdrt1c2	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	2	3	3	2
31	R_2uqwVD4f	1	2	1	1	1	1	1	2	1	1	2	2	1	1	1	1	1	2	1	3	1
32	R_1nOuZ7iq	1	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	1	4	2
33	R_2wAWb01	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	2	2	4	1
34	R_3HLhLML4j	1	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	2	3	2
35	R_2QjG1a3U	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	2	1	3	2
36	R_YYn9xMV	1	2	1	2	1	2	1	2	2	1	2	1	1	1	1	1	2	2	3	1	2
37	R_cFH8uqRif	2	2	1	1	2	1	1	1	2	1	2	1	2	1	1	1	1	2	2	4	3
38	R_1N3mN3O	1	1	2	1	2	1	2	1	1	2	2	2	1	1	1	1	2	2	2	4	2
39	R_205bKXRtc	1	2	2	1	1	1	1	2	1	1	2	2	1	1	1	1	1	2	3	4	2
40	R_3pa6u61sf	1	2	2	1	2	1	1	2	1	1	1	1	1	1	1	1	2	2	3	1	1
41	R_3gNj4Z97c	1	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	2	3	2	2	1
42	R_31KQG08f	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
43	R_RUz21dfM	1	2	2	1	1	2	1	1	2	1	2	2	1	1	1	1	2	1	1	3	1
44	R_2Tn1S61Ha	1	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	2	3	1

Survey Meat Substitutes July 5, Ready

Survey Meat Substitutes July 5, Ready

Step 3: Raw data JMP V1 (Copied data from Excel to JMP)

Raw data Jmp V1 (Copied from Excel into JMP) - JMP Trial

File Edit Tables Rows Cols DOE Analyze Graph Tools View Window Help Get Started

ID	Choice 1	Choice 2	Choice 3	Choice 4	Choice 5	Choice 6	Choice 7	Choice 8	Choice 9	Choice 10	Choice 11	Choice 12	Choice 13	Nationality	Eat meat substitutes	Gender	Age	Spendable income	Diet	M...
1 DdodwaH7kUj	1	2	2	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	3
2 U2zOxPent5G	1	2	1	1	1	1	1	1	1	2	1	2	2	1	1	1	1	1	1	4
3 HCGJleQVbug	1	2	2	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	3
4 5tVbCRg4VMx	1	1	2	1	2	1	2	1	1	2	1	2	1	1	1	1	1	1	2	1
5 QbYvCRg4VMx	1	1	2	1	2	1	1	1	2	2	1	2	1	1	1	1	1	1	2	3
6 kusycv99mwx1	1	2	1	2	1	1	1	2	1	1	2	2	1	1	1	1	2	2	2	2
7 91Tb4Dcl4ij	1	2	2	2	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	4
8 jLPDF7HJss	1	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	4
9 9BriBAMhRpxz	1	2	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	2	3
10 iotHUI6imKHnp	1	1	2	1	2	1	2	1	1	2	1	1	1	1	1	1	2	1	1	1
11 95FI96ocTGj	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	1	1	4
12 wLNheeY00KJ	1	2	2	1	2	1	2	2	1	1	1	2	1	1	1	1	1	2	3	4
13 H75QlejU34Uj	1	2	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	1	3
14 Dqjto7WQOSMT	1	2	2	2	1	1	1	1	2	1	2	2	2	1	1	1	2	1	1	2
15 3uX75MakLkLw	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4
16 KIG4eh9VAW	1	2	2	1	1	2	1	1	1	1	2	1	1	1	1	1	2	1	2	3
17 74dNL80ctn5Q	1	2	2	1	1	1	1	2	2	1	1	1	1	1	1	1	2	1	3	1
18 LhBepBmRS4d	1	2	1	1	1	1	1	2	1	1	2	2	2	1	1	1	1	1	1	4
19 QMBfmbABRGoh	1	2	2	1	2	1	2	1	2	1	2	1	2	1	1	1	1	1	3	4
20 sYb8fMPmceK	1	1	1	1	2	2	1	1	1	2	2	2	1	1	1	2	1	1	1	3
21 XYq6GT5XhNT	1	2	2	1	1	1	1	2	2	1	1	1	1	1	1	1	2	1	1	4
22 99Ba83Kock	1	2	1	1	1	2	1	2	1	1	2	2	1	1	1	1	2	1	2	1
23 bpC7OwKe6M	1	2	1	1	2	1	1	2	1	2	1	1	1	1	1	1	2	1	1	1
24 agW8MLXeWPRW	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	2	3	4
25 3S5YUaPqoP	1	2	1	1	1	2	1	1	1	2	1	1	2	1	1	1	2	2	3	4
26 pDCLDB3eDa8Q	2	2	1	1	1	1	1	2	2	1	2	2	2	1	1	2	2	2	3	4
27 r068paQFNJe	1	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1	2	1	2	4
28 CmYNUhyzK1	1	2	1	1	1	2	1	2	1	1	2	2	1	1	1	1	2	2	2	3
29 9it1c2C3vYmZ	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	2	3	3
30 W4D43Dsdhul	1	2	1	1	1	1	1	2	1	1	2	2	1	1	1	1	2	1	1	3
31 uZ7qP0BHdKu	1	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	1	4
32 Wb01P68xhbj	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1	2	2	4
33 HLM4LjHb4m	1	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	2	3
34 3ia3U5290n7	1	2	1	1	2	1	1	1	1	2	1	1	1	1	1	1	2	1	1	3
35 h9mMW7cVcmf7	1	2	1	2	1	2	1	2	2	1	2	1	1	1	1	2	2	3	1	1
36 BuqRfIdlpNBF	2	2	1	1	2	1	1	1	2	1	2	1	2	1	1	1	1	2	2	4

Step 4: Raw data JMP V2 (Stack Choice Sets into 1 column and name the new column “Response”).

Raw data JMP V2 (Stack Choice sets into 1 column) - JMP Trial

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ID	Nationality	Eat meat substitutes	Gender	Age	Spendable income	Diet	Motivation	Choice set	Response
1 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 1	1
2 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 2	2
3 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 3	2
4 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 4	1
5 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 5	1
6 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 6	1
7 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 7	1
8 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 8	1
9 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 9	1
10 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 10	2
11 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 11	1
12 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 12	2
13 R_TtNIDdodwaH...	1	1	1	1	1	3	2	Choice 13	1
14 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 1	1
15 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 2	2
16 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 3	1
17 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 4	1
18 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 5	1
19 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 6	1
20 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 7	1
21 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 8	1
22 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 9	2
23 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 10	1
24 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 11	2
25 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 12	2
26 R_122U2sQxPcerl...	1	1	1	1	3	4	2	Choice 13	1
27 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 1	1
28 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 2	2
29 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 3	2
30 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 4	1
31 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 5	1
32 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 6	1
33 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 7	1
34 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 8	1
35 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 9	1
36 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 10	1
37 R_20ShCGJleQV...	1	1	1	1	1	3	2	Choice 11	2

Step 5: Raw data Excel V3 (JMP stacked data in Excel and “if function” to indicate new columns “Response 1 and Response 2”.

	A	B	C	D	E	F	G	H	I	J	K	L
1	ID	Nationality	Eat meat	s Gender	Age	Spendable	Diet	Motivation	Choice set	Response	Response 1	Response 2
2	R_TiNIDdc	1	1	1	1	1	3		2 Choice 1	1	1	0
3	R_TiNIDdc	1	1	1	1	1	3		2 Choice 2	2	0	1
4	R_TiNIDdc	1	1	1	1	1	3		2 Choice 3	2	0	1
5	R_TiNIDdc	1	1	1	1	1	3		2 Choice 4	1	1	0
6	R_TiNIDdc	1	1	1	1	1	3		2 Choice 5	1	1	0
7	R_TiNIDdc	1	1	1	1	1	3		2 Choice 6	1	1	0
8	R_TiNIDdc	1	1	1	1	1	3		2 Choice 7	1	1	0
9	R_TiNIDdc	1	1	1	1	1	3		2 Choice 8	1	1	0
10	R_TiNIDdc	1	1	1	1	1	3		2 Choice 9	1	1	0
11	R_TiNIDdc	1	1	1	1	1	3		2 Choice 10	2	0	1
12	R_TiNIDdc	1	1	1	1	1	3		2 Choice 11	1	1	0
13	R_TiNIDdc	1	1	1	1	1	3		2 Choice 12	2	0	1
14	R_TiNIDdc	1	1	1	1	1	3		2 Choice 13	1	1	0
15	R_122U2s	1	1	1	1	3	4		2 Choice 1	1	1	0
16	R_122U2s	1	1	1	1	3	4		2 Choice 2	2	0	1
17	R_122U2s	1	1	1	1	3	4		2 Choice 3	1	1	0
18	R_122U2s	1	1	1	1	3	4		2 Choice 4	1	1	0
19	R_122U2s	1	1	1	1	3	4		2 Choice 5	1	1	0
20	R_122U2s	1	1	1	1	3	4		2 Choice 6	1	1	0
21	R_122U2s	1	1	1	1	3	4		2 Choice 7	1	1	0
22	R_122U2s	1	1	1	1	3	4		2 Choice 8	1	1	0
23	R_122U2s	1	1	1	1	3	4		2 Choice 9	2	0	1
24	R_122U2s	1	1	1	1	3	4		2 Choice 10	1	1	0
25	R_122U2s	1	1	1	1	3	4		2 Choice 11	2	0	1
26	R_122U2s	1	1	1	1	3	4		2 Choice 12	2	0	1

Zoomed out for more data

Step 6: Raw Data JMP V3 (Copy-paste back to JMP to create stacked column for “Response 1 and Response 2”. This new column is now named “Choice”, to indicate every respondents choice for the choice that they made per choice set.

Raw data JMP V3 (Copy paste from excel sheet back to JMP and create stacked column for response 1 and 2) - JMP Trial

Source	ID	Nationality	Eat meat substitutes	Gender	Age	Spendable income	Diet	Motivation	Choice set	Response	Choice option	Choice
1	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 1	1	Response 1	1
2	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 1	1	Response 2	0
3	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 2	2	Response 1	0
4	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 2	2	Response 2	1
5	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 3	2	Response 1	0
6	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 3	2	Response 2	1
7	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 4	1	Response 1	1
8	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 4	1	Response 2	0
9	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 5	1	Response 1	1
10	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 5	1	Response 2	0
11	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 6	1	Response 1	1
12	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 6	1	Response 2	0
13	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 7	1	Response 1	1
14	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 7	1	Response 2	0
15	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 8	1	Response 1	1
16	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 8	1	Response 2	0
17	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 9	1	Response 1	1
18	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 9	1	Response 2	0
19	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 10	2	Response 1	0
20	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 10	2	Response 2	1
21	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 11	1	Response 1	1
22	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 11	1	Response 2	0
23	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 12	2	Response 1	0
24	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 12	2	Response 2	1
25	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 13	1	Response 1	1
26	R_T1NIDdodwaH...	1	1	1	1	1	3	2	Choice 13	1	Response 2	0
27	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 1	1	Response 1	1
28	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 1	1	Response 2	0
29	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 2	2	Response 1	0
30	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 2	2	Response 2	1
31	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 3	1	Response 1	1
32	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 3	1	Response 2	0
33	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 4	1	Response 1	1
34	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 4	1	Response 2	0
35	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 5	1	Response 1	1
36	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 5	1	Response 2	0
37	R_122U2sQxPcerf...	1	1	1	1	3	4	2	Choice 6	1	Response 1	1

Step 7: Cleansed data JMP V4 (All choices are now indicated per respondent and the control variables are added in the same data sheet

The data continues with more columns, this is the left-side of the data.

Cleansed data JMP V4 (All choices now indicated per respondent and added control variable data) - JMP Trial

Respondent	Choice Set	Choice	Price	Flavor	Texture	Appearance	Ingredients	Use of the product in a meal	Brand	Packaging material	Nationality	Eat m substit
1	1	1	€2	Tastes like vegeta...	Juicy	Looks like vegetables	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	
2	1	1	€2	Tastes like vegeta...	Crunchy	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	
3	1	2	€2	Salty	Crunchy	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	
4	1	2	€3.50	Tastes like meat	Juicy	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	
5	1	3	€2	Tastes like vegeta...	Dry	Looks like meat	Mainly fungi	Product for on bread	A-brand	Eco-friendly	1	
6	1	3	€2	Tastes like vegeta...	Juicy	Looks like meat	Mainly beans	Product for on bread	A-brand	Non eco-friendly	1	
7	1	4	€3.50	Tastes like vegeta...	Crunchy	Looks like meat	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	
8	1	4	€5	Salty	Crunchy	Looks like meat	Mainly beans	Product is mixed in a meal	House brand	Eco-friendly	1	
9	1	5	€5	Tastes like vegeta...	Crunchy	Looks like vegetables	Mainly fungi	Product is mixed in a meal	A-brand	Eco-friendly	1	
10	1	5	€5	Tastes like meat	Dry	Looks like vegetables	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	
11	1	6	€2	Salty	Juicy	Looks like meat	Mainly vegetables	Product is mixed in a meal	A-brand	Non eco-friendly	1	
12	1	6	€2	Salty	Crunchy	Looks like vegetables	Mainly vegetables	Product for on bread	House brand	Non eco-friendly	1	
13	1	7	€3.50	Tastes like vegeta...	Dry	Looks like vegetables	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	
14	1	7	€5	Tastes like vegeta...	Dry	Looks like vegetables	Mainly vegetables	Product for on bread	House brand	Non eco-friendly	1	
15	1	8	€3.50	Tastes like vegeta...	Crunchy	Looks like meat	Mainly beans	Product is part of the meal	House brand	Eco-friendly	1	
16	1	8	€3.50	Salty	Crunchy	Looks like vegetables	Mainly fungi	Product is mixed in a meal	House brand	Eco-friendly	1	
17	1	9	€2	Salty	Crunchy	Looks like meat	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	
18	1	9	€2	Tastes like vegeta...	Crunchy	Looks like vegetables	Mainly vegetables	Product is mixed in a meal	House brand	Non eco-friendly	1	
19	1	10	€5	Tastes like vegeta...	Crunchy	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Non eco-friendly	1	
20	1	10	€2	Tastes like vegeta...	Dry	Looks like meat	Mainly beans	Product is part of the meal	A-brand	Non eco-friendly	1	
21	1	11	€2	Tastes like meat	Crunchy	Looks like vegetables	Mainly vegetables	Product for on bread	House brand	Non eco-friendly	1	
22	1	11	€5	Tastes like vegeta...	Crunchy	Looks like vegetables	Mainly vegetables	Product for on bread	A-brand	Eco-friendly	1	
23	1	12	€2	Salty	Crunchy	Looks like meat	Mainly beans	Product is mixed in a meal	House brand	Non eco-friendly	1	
24	1	12	€2	Salty	Crunchy	Looks like meat	Mainly beans	Product is part of the meal	A-brand	Non eco-friendly	1	
25	1	13	€2	Tastes like meat	Crunchy	Looks like meat	Mainly fungi	Product is mixed in a meal	House brand	Eco-friendly	1	
26	1	13	€2	Tastes like vegeta...	Dry	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Non eco-friendly	1	
27	2	1	€2	Tastes like vegeta...	Juicy	Looks like vegetables	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	
28	2	1	€2	Tastes like vegeta...	Crunchy	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	
29	2	2	€2	Salty	Crunchy	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	
30	2	2	€3.50	Tastes like meat	Juicy	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	
31	2	3	€2	Tastes like vegeta...	Dry	Looks like meat	Mainly fungi	Product for on bread	A-brand	Eco-friendly	1	
32	2	3	€2	Tastes like vegeta...	Juicy	Looks like meat	Mainly beans	Product for on bread	A-brand	Non eco-friendly	1	
33	2	4	€3.50	Tastes like vegeta...	Crunchy	Looks like meat	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	
34	2	4	€5	Salty	Crunchy	Looks like meat	Mainly beans	Product is mixed in a meal	House brand	Eco-friendly	1	
35	2	5	€5	Tastes like vegeta...	Crunchy	Looks like vegetables	Mainly fungi	Product is mixed in a meal	A-brand	Eco-friendly	1	
36	2	5	€5	Tastes like meat	Dry	Looks like vegetables	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	

This is the right-side of the data

The screenshot shows the JMP software interface with a data table. The table has 36 rows and 13 columns. The columns are: Respondent, Appearance, Ingredients, Use of the product in a meal, Brand, Packaging material, Nationality, Eat meat substitutes, Gender, Age, Spendable income, Diet, and Motivation. The rows contain data for 36 different respondents, with their characteristics and preferences for various products.

Respondent	Appearance	Ingredients	Use of the product in a meal	Brand	Packaging material	Nationality	Eat meat substitutes	Gender	Age	Spendable income	Diet	Motivation
1	Looks like vegetables	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	1	1	1	1	3	2
2	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	1	1	1	1	3	2
3	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
4	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
5	Looks like meat	Mainly fungi	Product for on bread	A-brand	Eco-friendly	1	1	1	1	1	3	2
6	Looks like meat	Mainly beans	Product for on bread	A-brand	Non eco-friendly	1	1	1	1	1	3	2
7	Looks like meat	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
8	Looks like meat	Mainly beans	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
9	Looks like vegetables	Mainly fungi	Product is mixed in a meal	A-brand	Eco-friendly	1	1	1	1	1	3	2
10	Looks like vegetables	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
11	Looks like meat	Mainly vegetables	Product is mixed in a meal	A-brand	Non eco-friendly	1	1	1	1	1	3	2
12	Looks like vegetables	Mainly vegetables	Product for on bread	House brand	Non eco-friendly	1	1	1	1	1	3	2
13	Looks like vegetables	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	1	1	1	1	3	2
14	Looks like vegetables	Mainly vegetables	Product for on bread	House brand	Non eco-friendly	1	1	1	1	1	3	2
15	Looks like meat	Mainly beans	Product is part of the meal	House brand	Eco-friendly	1	1	1	1	1	3	2
16	Looks like vegetables	Mainly fungi	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
17	Looks like meat	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
18	Looks like vegetables	Mainly vegetables	Product is mixed in a meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
19	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
20	Looks like meat	Mainly beans	Product is part of the meal	A-brand	Non eco-friendly	1	1	1	1	1	3	2
21	Looks like vegetables	Mainly vegetables	Product for on bread	A-brand	Non eco-friendly	1	1	1	1	1	3	2
22	Looks like vegetables	Mainly vegetables	Product for on bread	A-brand	Eco-friendly	1	1	1	1	1	3	2
23	Looks like meat	Mainly beans	Product is mixed in a meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
24	Looks like meat	Mainly beans	Product is part of the meal	A-brand	Non eco-friendly	1	1	1	1	1	3	2
25	Looks like meat	Mainly fungi	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
26	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
27	Looks like vegetables	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	1	1	1	1	3	2
28	Looks like meat	Mainly fungi	Product is part of the meal	House brand	Eco-friendly	1	1	1	1	1	3	2
29	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
30	Looks like meat	Mainly vegetables	Product is part of the meal	House brand	Non eco-friendly	1	1	1	1	1	3	2
31	Looks like meat	Mainly fungi	Product for on bread	A-brand	Eco-friendly	1	1	1	1	1	3	2
32	Looks like meat	Mainly beans	Product for on bread	A-brand	Non eco-friendly	1	1	1	1	1	3	2
33	Looks like meat	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
34	Looks like meat	Mainly beans	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2
35	Looks like vegetables	Mainly fungi	Product is mixed in a meal	A-brand	Eco-friendly	1	1	1	1	1	3	2
36	Looks like vegetables	Mainly vegetables	Product is mixed in a meal	House brand	Eco-friendly	1	1	1	1	1	3	2

This is the final conversion of the data. With this data, the analyzation in Appendix D1 and D2 were done.