

The effect of information on packaging on the consumer acceptance towards insect-based food products



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Academic year: 2017/2018
Bachelor Thesis (YSS-82312): Food Quality Design

Abstract

The goal of this research was to find out what the effect is of information on the packaging of insect-based food products on the degree of consumer acceptance towards those products. Previous research showed that there still was a feeling of disgust towards entomophagy. A questionnaire was conducted where the respondents were randomly presented one of the three conditions: the packaging of cricket crisps with (1) no claim, (2) a nutrition claim or (3) an environmental claim. The group which was shown the packaging without a claim was used as a control group. The principle of willingness to pay was used as a moderator to measure the consumer acceptance. The results showed that the respondents had a higher willingness to pay for the cricket crisps when a nutrition or an environmental claim was placed on the packaging, in comparison when no claim was placed on the packaging. The conclusion of this research was that the placement of information on the packaging of insect-based food products has a positive effect to the degree of consumer acceptance towards those products.

Table of Contents

Introduction	3
Theoretical framework	4
Consumer acceptance	5
Willingness to pay	6
What types of information	6
Bottom-up & Top-down approach	7
Method	8
Procedures and variables	8
Results	9
Participants	9
Main results	9
Gender	10
Education level	11
Conclusion	12
Discussion	13
Theoretical relevance	13
Practical relevance	13
Limitations and future research	13
References	14
Appendix	16

Introduction

The interest in alternative protein sources of high nutrition value, such as edible insects, has increased remarkably in recent years (Looy, Dunkel & Wood, 2015). In the past, insects were mostly eaten in countries in Asia, Africa and Latin America (Van Huis, Van itterbeek, Klunder, Mertens, Halloran & Vantomme, 2013). In those countries insects are part of the regular diet and for the inhabitants were seen as normal. Insects are eaten for different reasons. In some cases, when there are food shortages, harvesting and eating insects was a solution for this food problem. Another reason to eat insects is that insects are seen as staple food or as a delicacy, so it was eaten for their taste and nutrition values (Durst, Johnson, Leslie & Shono, 2010). Although eating insects is normal for a lot of inhabitants of non-western countries, it is exactly the opposite for many inhabitants of western-countries. In the western psyche there is a specific view about insects; insects are seen as disgusting, dirty and dangerous (Looy et al., 2015). Kellert (1993) stated that the majority of Westerners see all the different kind of insects as one big group of 'bugs' and see all of them as potential threats. This negative point of view is strengthened due to contemporary media, because television, movies, videogames and books teaches this aversion (Looy et al., 2015). These contemporary media make people believe that insects are disgusting and that the majority of the insects are inedible for humans consumption except under tragic circumstances. When this is the case, it is called "starvation food" (Bukkens, 1997). Metaphors about insects are widely used in the western world. These metaphors are used to dehumanize the "other". When a metaphor about insects is used, the intention is to show that certain behaviour is seen as weird, as inhuman (Haslam, 2006).

In the contemporary western world, the comprehension is coming, that eating insects is not as inhuman as thought in the past. People start to realize that insects contain high value proteins and essential amino acids and have a high vitamin and mineral content (Belluco, Losasso, Maggioletti, Alonzi, Paoletti & Ricci, 2013). When these nutrition values get compared to the nutrition values of conventional livestock, the ones of insects show better perspectives; they have a higher crude protein percentage and contain more zinc, calcium and vitamin B12 (Huis & Tomberlin, 2016). Next to the nutrition advantages, the farming of insects requires little space and water and also the biomass conversion rate has a higher success rate than those of most conventional livestock (Van Huis & al., 2013). Another advantage is that insects emit considerably fewer greenhouse gases and ammonia than most livestock. So insects are relatively efficient in reducing their environmental footprint. For example, the converting rate of what they eat into tissue (which can be consumed by other animals), is twice as efficient as the converting rate of pigs and poultry and when you compare it with cattle, it is even more than five times as efficient (Durst et al., 2010). Furthermore, the food conversion rate of insects is 20 times more efficient than that of cattle.

That the negative mind-set about insects in the western world is slowly changing in a positive mind-set is a victory in itself. The question that arises is 'how can we stay in this positive mind-set and how can we improve it?'. Derby and Levy (2001) reported that, within the 1990 Diet and Health Survey, one-third of the consumers said they had changed their mind about buying a product after reading the information on the label. This suggests that information on the packaging of food products is very

important in the consumer decision-making process. Food labels are seen as the nexus between sellers and buyers of food products (Derby & Levy, 2001). That information on food products has such an influence on the buying behaviour of consumers can be seen as a point of possibilities for the selling of insect based products. If the information on the packaging of insect-based food products shows what the advantages are of the use of insects in food products, this might increase the selling of these products and thus the rate of acceptability of insect-based food products by consumers.

Because of this hypothesis the following main research question is used:

Main question: *What is the effect of information on packaging to the degree of consumer acceptance of insect-based food products?*

The following sub questions are used to answer the main question:

Sub question 1: What is the effect of nutrition claims on the packaging of insect-based food products to the degree of consumer acceptance?

Sub question 2: What is the effect of environmental claims on the packaging of insect-based food products to the degree of consumer acceptance?

Theoretical framework

The primary role of food packaging is to obtain consumer attention (Underwood, Klein & Burke, 2001). Marketers want that consumers get interested in their product and they can increase this chance by making an attractive packaging. With the term packaging is meant “The container that is in direct contact with product itself, which holds, protects, preserves and identifies the product as well as facilitating, handling and commercialisation.” (Ampuero, Vila, 2006, pp. 101). The importance of packaging has increased over the years, due to emerging and popularisation of self-service sales systems. People are able to inspect their potential purchases personally. They can go to a supermarket and take a look at the products by themselves. Back in the days, there always was a sales attendant between the consumer and the product (Fantoni, 2003). You could not grab and inspect the product yourself. So it can be said that packaging made a move to the foreground. Since this ‘transformation’, packaging became a so called ‘silent salesman’, since it gives information about the qualities and benefits of the product (Vidales Giovannetti, 1995).

On the packaging of food products, often a lot of information is available. First, there is the brand name, which according to Wood (2000), shows the primary points of differentiation between competitive offerings. Second there is the brand logo, which serves to attract consumer attention and set expectations. Third, there is the food labelling, which is “*a uniquely valuable tool to help consumers acquire and use product-specific health and nutrition information on food packages.*” (Derby & Levy, 2001, pp. 372). Last, there is the general information on the packaging of food products. This general information can give a lot of different types of information. It can inform consumers about general benefits of the product, the origin of the product, the way it is produced and so on. For this research, we will only focus on this general information.

Consumer acceptance

Consumer acceptance is a very broad term. It does not have a single definition and it can be looked at from different perspectives. According to Lensvelt & Steenbekkers (2014) insects can be seen as a relatively new or innovative food in the Western world. Although it is seen as a relatively new product, we already consume it regularly. Maybe even unknown, because there are many products which contain insect-based ingredients, like E-120 in Dutch pink cakes and sometimes the flour in bread. Siegrist (2008) named three product properties that influence the consumer acceptance of new products:

1. Factors related to the product

Within factors related to the product, the perceived benefit is a very important factor. As already said, insects have high value proteins and essential amino acids and have a high vitamin and mineral content (Belluco et al., 2013). This is a very big benefit because it is a positive factor related to health. Another important factor is the perceived risk. There are certain insects who are transmitters of diseases (Kellert, 1993). For example, houseflies can pick up an infectious agent and transfer it to food that is used for consumption. Another example is that mosquitoes, ticks and fleas can be responsible for blood-borne diseases. The problem is that only few people realize, that there is only a small amount of insects that are damaging and that the majority is beneficial. Next to this, it is also very important to look at the characteristics of the insects. As said before, in the Western world, people view entomophagy with feelings of disgust (Rozin & Fallon, 1987). This can be the reason that people prefer to eat products with processed insects instead of unprocessed insects, because then the attributes and the origin of the insects are less visible (Hartmann, Shi, Giusto & Siegrist, 2015). Furthermore, when insects are incorporated into familiar foods, this will reduce negative reactions towards insect-based foods (Hartmann et al., 2015).

2. Social trust and norms

Social trust and norms can be seen as a difficult factor in relation with insect-based products. Because of the fact that many people still have a very negative view about insects, they do not have a lot of social trust (Looy et al., 2015). Eating insects or insect-based products is not a regular norm in the Western world, because insects are not part of the regular diet in Western countries (Van Huis et al., 2013).

3. Psychological factors influencing acceptance.

The psychological factors might be the most important factors in relation with insect-based products. Although all the benefits of insects are available, the negative view still predominates. Insects are still seen as disgusting, dirty and dangerous (Looy et al., 2015). Lensvelt & Steenbekkers (2014, pp. 558) stated that “*A suggestion to increase the consumer acceptance of entomophagy is to provide information about entomophagy or to provide people with the opportunity to try insects*”. This goes in line with the earlier showed 1990 Diet and Health survey which showed the result that one-third of the consumers said they had changed their mind about buying a product after reading the information on the label. When consumers get better informed about the benefits of insects, this can increase their acceptability towards them.

Willingness to pay

As described in the paragraph before, consumer acceptance is a very difficult and broad term. This means that the measurement of consumer acceptance will not be easy at all. A measuring rod that is used often is *willingness to pay* (WTP). According to Gafni (1998), willingness to pay is defined as “The maximum amount that an individual is willing to pay for goods” (pp. 465). In this research, WTP will be used to measure the consumer acceptance, because according to Chern, Rickertsen, Tsuboi & Fu (2003), the higher the WTP for a certain product, the higher the consumer acceptance will be for that certain product. A side note that should be made is that the comparison of the WTP should be made between products which are relatively comparable. It does not make sense to compare the WTP of cricket crisps with the WTP of a mobile phone. There is not just one method with using the WTP. Frew, Whynes & Wolstenholme (2003) named four different types of formats of WTP elicitation:

1. Open-ended (OE) format: Each participant can choose his/her own WTP, unbounded and unprompted.
2. Payment scale (PS) approach: There is a prespecified and ordered list with values and the participants have to choose one.
3. Close-ended (CE) format: The participants is given a certain value and they simply have to accept or reject it.
4. Bidding on bargaining format: The participants are given a value and they can accept or reject this. After the acceptance or rejection, the participant can make a higher or lower offer by itself. For this research, the second option will be used, so the ‘Payment-scale’. This format is chosen, because it will give the participants freedom in their answering, but it keeps them limited to reasonable answers.

What types of information

Information on food products can be very diverse. What is seen a lot these days is the use of health and nutrition claims. The difference between a health and nutrition claim is often misunderstood. The European Food Safety Authority (EFSA) gives definitions for both of them. According to the authority, health claims are “Any statements on labels, advertising or other marketing products that health benefits can result from consuming a given food, for instance that a food can help reinforce the body’s natural defences or enhance learning ability”. A nutrition claim “states or suggests that a food has particular beneficial nutrition properties”. Examples that can be used are when there is stated that a product contains “low fat” or “high in protein” (“Nutrition and health claims”, z.d.). Roe, Levy & Derby (1999), stated that when consumers are exposed to a health or a nutrition claim that they see the specific product as more healthy and that they had a higher purchase intention. That the purchase intention increases when there is a exposure to health and nutrition claims might be very interesting for insect-based food products, since the purchase intention is not that high. Roe & al. (1999) also found that when there are claims given, this can affect the evaluations of perceived risks of diseases of the certain product. This also, can be interesting for insect-based food products. As said before, the view that insects are disease transmitters is still exaggerated by consumers. The placing of health or nutrition claims can decrease this view and it can become more realistic. For this

research we will only focus on nutrition claims and not on health claims.

For this reason, the first hypothesis will be:

H1: The placement of nutrition claims on the packaging of insect-based food products, will increase the consumer acceptance towards those products.

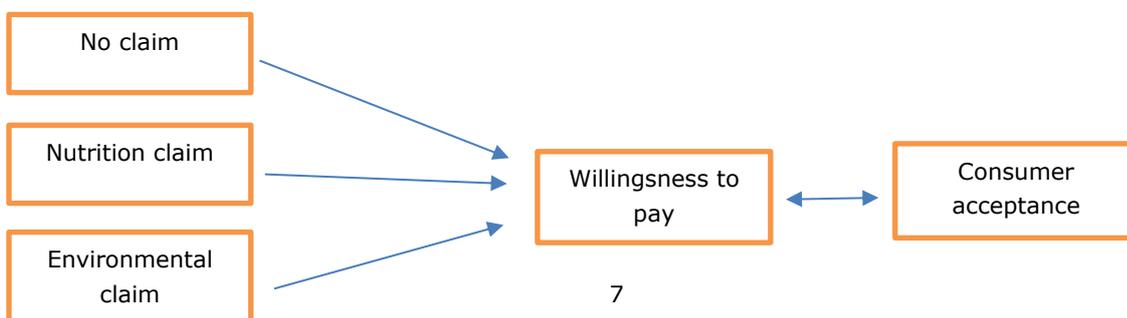
Of course there are way more claims which are placed on the packaging then just nutrition and health claims. Kollmuss & Agyeman (2002) stated that people are becoming more and more aware of the environmental issues that we are having in our current society. This results in that we are giving more attention to products which are produced in an environmental friendly way. Kollmuss & Agyeman (2002) made a conceptual model which stated that when people obtained more 'environmental knowledge', this would increase their 'environmental attitude' and this would result in 'pro-environmental behaviour'. A research from Vlosky, Ozanne & Fontenot (1999) also concluded that consumers who have more environmental attitudes, are more likely to buy green products.

Because of these researches the second hypothesis will be:

H2: The placement of environmental claims on the packaging of insect-based food products, will increase the consumer acceptance towards those products.

Bottom-up & Top-down approach

That information on food products is important is well known at this point. That the quality of the information should be at a certain level makes a lot of sense, but how does it work with the quantity of the information? Does more information means that consumers get a better view of the product or does it works counterproductive and people act lazy and do not want to read all the information? For this issue, the Bottom-up and Top-down approach will be used. Bottom-up factors are features of the product or the advertisement, such as shape and size. On the other hand, top-down factors domicile in the person and his/her attentional process (Pieters & Wedel, 2004). With top-down factors you can think of brand familiarity and product involvement (Rayner, Rotello, Stewart, Keir & Duffy, 2001). For example, when you are thirsty, you will be more open for to a Coca-Cola commercial in comparison to when you are not thirsty. The study of Pieters et al. (2004) looked at the importance of surface size of pictorials and text on advertisements and on products, so at the Bottom-up factors. Their results were: "an increase in the size of the pictorial does not increase attention to the entire advertisement, but an increase in the surface size devoted to the text does" (Pieters et al., 2014, pp. 43). These results can be very interesting for the information on the packaging of insect-based food products. This will mean that the more positive information is placed on the packaging, the higher the level of attention will be. So if a certain claim is placed on the packaging, the level of attention will be higher, in comparison then when no claim is placed on the packaging. With these hypotheses the following conceptual model is created:



Method

Procedures and variables

In this research an online questionnaire was conducted. An online questionnaire was suitable in this research, because with an online questionnaire, there was the possibility to obtain much data in a relatively short time. According to Wright (2005), another advantage of an online questionnaire is that it makes it easier to find people who fit the target group. The online questionnaire was made with Qualtrics. This research contains three levels of one variable. The variables were the different kind of claims which were placed on the packaging. The three levels consisted of 'a nutrition claim', 'an environmental claim' and 'no claim'. For the measurement of consumer acceptance, WTP will be used as a moderator. In particular, payment-scale from Frew, Whyne & Wolstenholme (2003).

The questionnaire started with a closed selection question related to the educational level of the participant. If the person in question was a student, the questionnaire would continue. Otherwise, the questionnaire would stop. First, some general questions about the eating of insects were asked. Then the question about the different kind of claims was asked. For this question an example of a packaging of cricket crisps was used. With the use of randomization, every respondent got a question with one of the three packages. So they were only shown one packaging, thus one condition. The first package contained no claim, so there was no extra text added. This packaging without a claim, was more of a control packaging. This control packaging was used, so that during the analysis, a comparison could be made with the other two conditions. The second package contained the nutrition claim: '20g of protein per bag'. The third package contained the environmental claim: a logo which claimed that the product was made 'eco-friendly'. The respondent had to fill in a slider with their willingness-to-pay for the concerned product. The slider started at €0.00 and ended at €5.00. To give the respondent an indication of the price of crisps, the price of a bag of Lays crisps with the same weight as the cricket crisps was showed.

Finally, some general questions about the person itself were asked, like gender and age. These questions were asked at the end, because they costed the least amount of cognitive effort. If the respondent would want to make a chance to win a VVV gift card and/or participate in further research, they could fill in their e-mail address. At the end the respondent was thanked for their time. The questionnaire was shared via Facebook at different pages, like 'Wageningen Student Plaza' and 'Campus Plaza Wageningen' so it would reach as many persons as possible in a minimum amount of time.

Results

Participants

In total 191 participants filled in the questionnaire. There were 73 males, 116 females and 2 gender neutral participants. The whole questionnaire was in Dutch, because this research focused on Dutch students. The reason that there is chosen for students, is because students are more open to try new things (Rubens, De Jong & Prozee, 2006). The condition 'no claim' was filled in by 65 participants, which contained 21 males and 44 females. The condition with the nutrition claim was filled in by 62 participants, which contained 29 males and 33 females. The condition with the environmental claim was filled in by 64 participants, which contained 25 males and 39 females. In total, 167 WO students, 23 HBO students and 1 MBO student filled in the questionnaire.

Because only one MBO student filled in the questionnaire, this student was added to the group of HBO students. The condition 'no claim' was filled in by 55 WO students and 10 HBO students. The condition with the nutrition claim was filled in by 55 WO students and 7 HBO students. The condition with the environmental claim was filled in by 57 WO students and 7 HBO students.

Main results

Figure 1 shows that the respondents (N=65) have a willingness to pay of €0.93 for cricket crisps without a claim on the packaging. Second, respondents (N=62) have a willingness to pay of €1.16 for cricket crisps where a nutrition claim is placed on the packaging. Last, respondents (N=64) have a willingness to pay of €1.05 for cricket crisps where an environmental claim is placed on the packaging.

Within all the three questions, an example of a packaging of Lays Crisps was shown, with the corresponding price, so that a reliable comparison could be made. The bag of Lays Crisps costs €0.89, so all the willingness's to pay for the cricket crisps, regardless of the type of claim, are higher than the price of a regular bag of Lays Crisps.

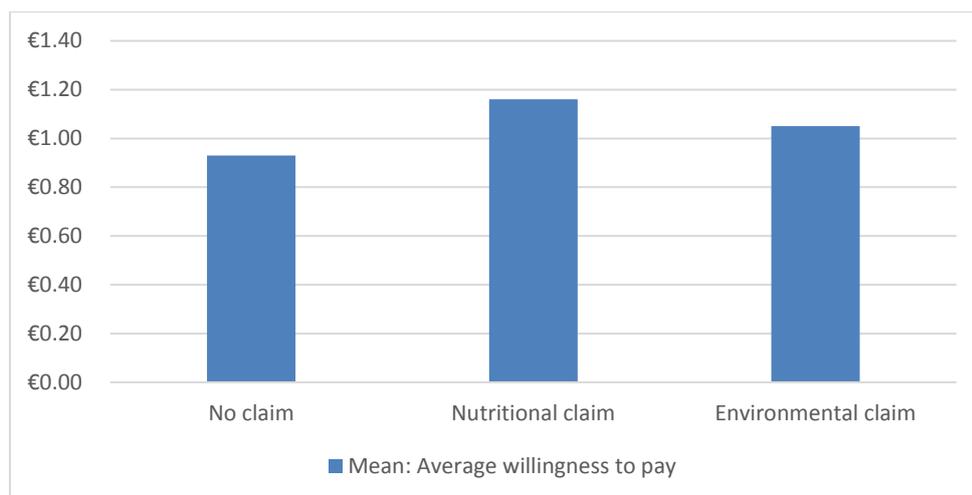


Figure 1: Average willingness to pay for cricket crisps with different types of claims on the packaging.

Table 1: Standard deviation per claim

Type of claim	Standard deviation
No claim	0.416
Nutrition claim	0.381
Environmental claim	0.394

The significance of these differences is measured with a One-way ANOVA. Because SPSS put all the data into one dataset, it was not possible to measure the significance directly. By manually putting the data in a new dataset, in the right order, it was possible to measure the significance of these differences. The One-way ANOVA gives a value of 0.011, which is below 0.05, so the differences of these questions are significant.

Gender

Figure 2 shows the willingness to pay per claim, per gender. First, when no claim is placed on the packaging, males (N=21) have an average willingness to pay of €0.81 and females (N=44) have an average willingness to pay of €0.99. Second, when a nutrition claim is placed on the packaging, males (N=29) have an average willingness to pay of €1.23 and females (N=33) have an average willingness to pay of €1.11. Third, when an environmental claim is placed on the packaging, males (N=25) have an average willingness to pay of €0.98 and females (N=39) have an average willingness to pay of €1.08.

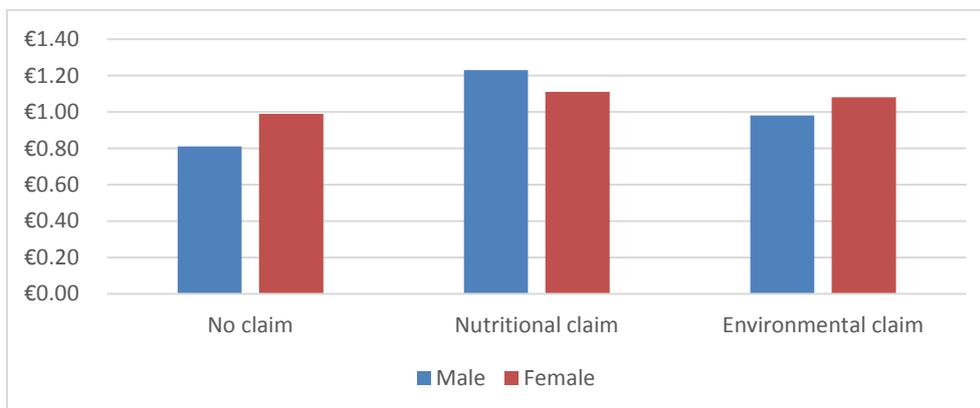


Figure 2: Average willingness to pay for cricket crisps with different types of claims on the packaging per gender.

Table 2: Standard deviation per claim, per gender

Type of claim per gender	Standard deviation
No claim: male	0.313
No claim: female	0.448
Nutrition claim: male	0.322
Nutrition claim: female	0.412
Environmental claim: male	0.396
Environmental claim: female	0.398

A two sample independent T-test was done to check the differences between male and female on significance. Table 3 shows that none of the willingness's to pay per claim in combination with gender were significant. Nevertheless, the results were still showed.

Table 3: Significances willingness's to pay per claim in combination with gender

Type of claim	Significance
No claim	0.167
Nutrition claim	0.826
Environmental claim	0.970

Education level

Figure 3 shows the average willingness to pay, per claim, per education level. As said before, the MBO and HBO students are combined together into one group, which is defined as the 'HBO group'. First, when no claim is placed on the packaging, HBO students (N=10) have an average willingness to pay of €0.85 and WO students (N=55) have an average willingness to pay of €0.95. Second, when a nutrition claim is placed on the packaging, HBO students (N=7) have an average willingness to pay of €1.14 and WO students (N=55) have an average willingness to pay of €1.16. Last, when an environmental claim is placed on the packaging, HBO students (N=7) have an average willingness to pay of €0.98 and WO students have an average willingness to pay of €1.05.

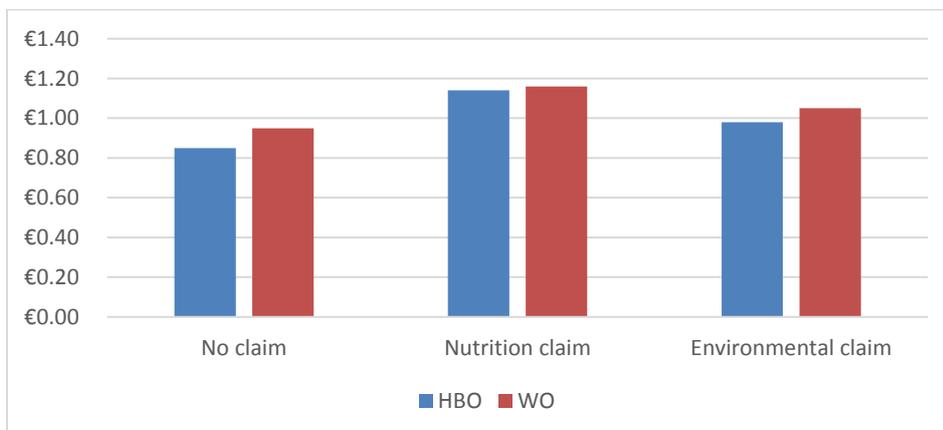


Figure 3: Average willingness to pay for cricket crisps with different types of claims on the packaging per education level.

Table 4: Standard deviation per claim, per education level

Type of claim per education level	Standard deviation
No claim: HBO	0.399
No claim: WO	0.422
Nutrition claim: HBO	0.569
Nutrition claim: WO	0.356
Environmental claim: HBO	0.312
Environmental claim: WO	0.405

A two sample independent T-test was done to check the differences between HBO and WO students on significance. Table 5 shows that none of the willingness's to pay per claim in combination with education level was significant. Nevertheless, the results were still showed

Table 5: Significances willingness's to pay per claim in combination with education level

Type of claim	Significance
No claim	0.737
Nutrition claim	0.259
Environmental claim	0.475

Conclusion

First, the sub questions were answered with their hypothesis and in the end the main question was answered. The first sub question was *'what is the effect of nutrition claims on the packaging of insect-based food products to the degree of consumer acceptance?'* with *H1: The placement of nutrition claims on the packaging of insect-based food products, will increase the consumer acceptance towards those products.*

The results showed that the respondents had an average willingness to pay of €0.93 per bag of cricket crisps where no claim was placed on the packaging and an average willingness to pay of €1.16 when a nutrition claim was placed on the packaging. With these results there could be concluded that the placement of a nutrition claim on insect-based food products had a positive effect on the degree of consumer acceptance. There was a higher willingness to pay, so a higher consumer acceptance. Thus, H1 was accepted.

The second sub question was *'What is the effect of environmental claims on the packaging of insect-based food products to the degree of consumer acceptance?'* with *H2: The placement of environmental claims on the packaging of insect-based food products, will increase the consumer acceptance towards those products.* The results showed that the respondents had an average willingness to pay of €0.93 per bag of cricket crisps where no claim was placed on the packaging and an average willingness to pay of €1.05 when an environmental claim was placed on the packaging. With these results there could be concluded that the placement of an environmental claim on insect-based food products had a positive effect on the degree of consumer acceptance. There was a higher willingness to pay, so a higher consumer acceptance. Thus, H2 was accepted.

The main question of this research was: *'What is the effect of information on packaging to the degree of consumer acceptance of insect-based food products?'* During this research, we specified 'information' as the different kind of claims which were placed on packages. Both of the hypotheses were accepted, so the claims had a positive effect on the consumer acceptance towards the insect-based food products. Thus, the conclusion could be made that information on the packaging of insect-food products had a positive effect to the degree of consumer acceptance towards those products. The results of the willingness to pay in combination with gender and education level were not part of the main research or the sub questions, but are still interesting to look at. When no claim was placed on the packaging, females had a higher willingness to pay than males. However, when a nutrition claim or an environmental claim was placed on the packaging, males had a higher

willingness to pay in both cases. This means that males are more impressionable to claims than females. When the different education levels were compared, WO students had a higher willingness to pay in all the three conditions than HBO students. This can be explained by the fact that in general, WO students are more concerned about their nutrition and/or the environment and thus have a higher willingness to pay towards those products. Especially, because the majority of the participants were WO students of the Wageningen University, where the environment plays an important role.

Discussion

Theoretical relevance

In existing literature there has been done a lot of research about the acceptance of entomophagy. The conclusion of almost all of those researches is that people still have a feeling of disgust towards it, despite given all the positive effects. Because of this reason, this research looked at what the effect is of different types of information on the packaging of the insect-based food products. These different types of information are specified as different types of claims. What is the effect of the placement of no claim, a nutrition claim or an environmental claim on the packaging of insect-based products? The results showed that the placement of a nutrition claim or an environmental claim has a positive effect to the willingness's to pay of the product and thus a positive effect towards the consumer acceptance.

Practical relevance

This research also has some practical relevance's. Marketers can learn from this research that people have a higher willingness to pay for a certain product when a nutrition or an environmental claim is placed on the packaging of that product. One of the goals of many marketeers is to make as much profit as possible. This profit can be increased by making sure that a lot of their products contain nutrition or environmental claims on the packaging.

Furthermore is this research beneficial for proponents of entomophagy. They hope that many people will understand the nutrition and environmental benefits of entomophagy in comparison with the general livestock. Because of the higher consumer acceptance of insect-based food products when a nutrition or an environmental claim is placed, the proponents of entomophagy can try to increase the number of claims placed on the packaging of those products.

Limitations and future research

This research definitely was not flawless and there were some limitations. First of all, during the data collection, most of the respondents were students of the Wageningen University. This could have decreased the external validity of the research, because in general, students of Wageningen University were more concerned with the environment in comparison with students from other cities. Next to that, there was an uneven balance between MBO, HBO and WO students. The reason behind this was probably that the questionnaire had been shared via Wageningen related Facebook pages, because the majority of the visitors of those pages are WO students. These two points can be improved in future research by sharing the questionnaire on other pages than just my own Facebook page or Wageningen related Facebook pages.

During the analysis of the results the first thing that came up was that not all the results were significant. This decreased the trustability of the research, because now it is unknown if the results gave a correct representation. From earlier own research, it is known that it is hard to make a questionnaire yourself with significant related questions.

Next to that, this research only looked at the effect of nutrition and environmental claims. There exist way more different types of claims. In future research there can be taken a look at all the other types of claims, so that a complete picture can be showed. Overall, the conclusion can be made that there is perspective for future research to find out how the view towards entomophagy can be improved.

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Appendix

Questionnaire

Page 1

Beste deelnemer,
ik ben Jip Jansen en ik ben bezig met mijn bachelor thesis voor mijn studie Bedrijfs- en Consumentenwetenschappen. Hierbij heb ik data nodig die ik aan de hand van deze enquête probeer te verzamelen. Deze enquête gaat over voedingsmiddelen waarin insecten zijn verwerkt. Uw antwoorden zullen anoniem blijven en enkel gebruikt worden voor dit onderzoek. Uw deelname is compleet vrijblijvend en u kan op ieder moment stoppen als u dat wilt. Onder de deelnemers worden drie VVV cadeaubonnen verloot ter waarde van €7.50.
Alvast enorm bedankt voor uw hulp!

Page 2

Bent u een student op MBO, HBO of WO niveau?

- A. Ja, ik ben een student op MBO niveau
- B. Ja, ik ben een student op HBO niveau
- C. Ja, ik ben een student op WO niveau
- D. Nee, ik ben geen student

Page 3

Heeft u ooit bewust insecten gegeten, zo ja, in welke vorm?

- A. Ja, ik heb ooit insecten in zijn geheel gegeten
- B. Ja, ik heb ooit insecten gegeten, maar deze waren wel verwerkt in een ander product
- C. Nee, ik heb nog nooit insecten gegeten
- D. Ik weet niet of ik ooit insecten heb gegeten

Page 4

Op de volgende pagina wordt u gevraagd wat u bereid bent om te betalen voor een bepaald product. De prijs van een vergelijkbaar product wordt ook gegeven, zodat u een goede vergelijking kunt maken.

Page 5

Hieronder ziet u een verpakking van chips. Deze chips is gemaakt van een mengsel van maismeel en sprinkhaanmeel. Daardoor is deze chips gemaakt op een milieuvriendelijke manier. Een zak Lays chips van ongeveer hetzelfde gewicht kost €0.89. Hoeveel bent u bereid om te betalen voor deze chips?



Page 6

Hieronder ziet u een verpakking van chips. Deze chips is gemaakt van een mengsel van maismeel en sprinkhaanmeel. Daardoor bevat deze chips meer eiwitten dan normale chips. Een zak Lays chips van ongeveer hetzelfde gewicht kost €0.89. Hoeveel bent u bereid om te betalen voor deze chips?



Page 7

Hieronder ziet u een verpakking van chips. Deze chips is gemaakt van een mengsel van maismeel en sprinkhaanmeel. Een zak Lays chips van ongeveer hetzelfde gewicht kost €0.89. Hoeveel bent u bereid om te betalen voor deze chips?



Page 8

Wat is uw geslacht?

- A. Man
- B. Vrouw
- C. Anders

Page 9

Wat is uw leeftijd?

- A. Jong dan 18 jaar
- B. 18 jaar
- C. 19 jaar
- D. 20 jaar
- E. 21 jaar
- F. 22 jaar
- G. 23 jaar
- H. 24 jaar
- I. 25 jaar
- J. Ouder dan 25 jaar

Page 10

Bedankt voor uw deelname! Als u hieronder uw e-mailadres achterlaat dan maakt u kans op een van de drie VVV bonnen ter waarde van €7.50.

Page 11

Mocht u interesse hebben om vaker deel te nemen aan een onderzoek, dan kunt hieronder uw e-mailadres achterlaten.

Page 12

Mocht u vragen hebben over dit onderzoek dan kunt u een mailtje sturen naar:

jip.jansen@wur.nl

Page 13

End of the survey

