

Preliminary Master Thesis Report



“The effect of accurate knowledge about organic products on consumers purchase intention: the moderating effect of health, environment and taste”

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Abstract

This preliminary thesis examines how accurate knowledge about organic products in terms of nutrition, environment and taste can affect consumers purchase intentions. The thesis will review national and international literature on organic products and production; nevertheless, there is limited research conducted in Norway. Thus, this thesis will contribute with an understanding about Norwegian consumer knowledge about organic products and production methods and how this affects their purchase intention.

The study is divided into four different main parts; introduction, literature review, methodology and limitations and future research.

Keywords: Organic production, taste, environment, ethics, health, accurate knowledge and consumers purchase intention.

1.Introduction

In the marketplace, the demand for organic products has increased during the last decade, and it is expected to rise even further in the future (Stortinget, 2017). Thus, making organic a “hot” topic among researchers. Companies have seen that the market for organically produced goods has increased substantially, and an increased number of households choose organic products when purchasing groceries (Ngobo, 2011). Due to the differentiated food market, grocery stores now offer a wide range of food with different quality and prices making it easier for consumers to purchase organically produced food. Based on this, research has observed a shift in consumer trends in the recent years; thus, the food that used to satisfy basic physiological needs such as hunger and nutrition (Maslow’s needs hierarchy) has now become a source of pleasure and identity in terms of social status (Vittersø & Tangeland, 2015; Batson,1998).

According to Honkanen et al. (2006) and Vittersø & Tangeland (2015), as stated in Olson (2016: 1007), organic food can be defined as “...use of raw materials and farming methods that are in balance with natural environmental systems, which more specifically means production without bioengineering and man-made pesticides, herbicides, fertilizers, hormones, and antibiotics”. Thus, researchers are concerned with questions such as: are organic food healthier? does it taste better? is it better for the environment? how sustainable is it? and what is the benefits of purchasing organically produced food?

Based on these questions and the mixed evidence in literature, there are reason to believe that knowledge about organic products varies between groups of consumers. Nevertheless, Norwegian trend numbers showed a high result of the search word “What is organic food?” and that the most related search word to organic food was “Fairtrade” (Google Trends, 2017). This can be related to findings “...about one-third of respondents of the 2002 TNS survey did not know how to correctly identify an organic product” (Padel & Foster, 2005: 610). This indicates that the general Norwegian consumer does not have accurate knowledge about organic products and production methods.

This preliminary thesis starts by looking at the organic food industry, both national and international. The literature review is the second part of the thesis and consists

of: ethics, taste, environment, health and attitudes towards organic products. Following the literature review is the research question and contribution to the topic. The methodology part explains the questionnaire and its development and procedure, and which statistical tools to use to analyse the data obtained prior to the questionnaire. And, lastly, the thesis discusses the limitations, future research and timeline of the thesis process.

1.1 Organic food industry

An individual has two different choices to choose from in a purchase situation of products, they could either buy conventional food or organic food (Olson, McFerran, Morales & Dahl, 2016; Vittersø, & Tangeland, 2015). Current findings state that there is an increasing trend of choosing sustainable products across several product categories. Hence, consumers frequently aspire to choose products that are perceived as more ethical choices (Olson et al., 2016). However, despite the increase of green consumers, research by Olson (2013) states that there is a gap between customers reported attitude and their actual purchase behaviour. This is also consistent with Magnusson, Arbola, Hurtsti, Åberg & Olow-Sjoden (2001) article, stating that even though people are more positive towards acting in a good way and being pro-green, they frequently do not buy organic and green products in a purchase situation.

1.2 Organic food in Norway

In today's marketplace, there is a small but steady increase in the purchase of organic products in Norway (Landbruksdirektoratet, 2017). In addition, the market share of organic food in Norway varies a lot between the different product categories. Statistics from the Norwegian Government demonstrate that the turnover for organic products in Norway has quadrupled (from NOK 500 million to NOK 2 billion) from 2006 to 2015 (Stortinget, 2017). Further, we observe (Appendix 1) that vegetables have the highest market share of organic products with 23% share, while dairy product is the second largest product category by a market share of 15% (Landbruksdirektoratet, 2017a). Within the dairy category, milk stands for 68,2%. Based on statistics from Nielsen, there is a rapid increase in the sale of organic milk in Norway, and from 2011 to 2016 sales increased by 75%. Even though organic products have a low market share, financial numbers show that the Norwegian retail stores had a turnover of 562 million NOK for only selling organic vegetables (Landbruksdirektoratet, 2017b). Nevertheless, the total market

share of organic products for total consumption is still quite low (Doorn & Verhoef, 2011).

Despite the shift in trend, Padel and Foster (2015) argue that price continues to be the main reason for not buying organic food. In Norway, organic goods are perceived as expensive, and there is reason to believe that manufacturers use a price premium strategy, based on the given attributes valuable to the consumers. Hence, there is an overall perception that organic food is expensive for all product categories. However, this does not correlate within the dairy category. For example, conventional and organic milk had no difference in price at Coop, and generally within dairy products the price differences are very low (Appendix 2). Nevertheless, for all other product categories, the price difference between organic and conventional product are high (Appendix 2). Thus, price is the main obstacle for buying organic food in Norway.

1.3 Government

According to the Environmental Performance Index, Norway is ranked 17th on their list that compares 180 countries worldwide (Environmental Performance Index, 2016). Hence, organically produced food is highly prioritized by the Norwegian government, and assumably the general consumer is concerned about the environment and is more likely to purchase products (i.e organic products) that do not harm the environment.

In the Norwegian government, there is a disagreement between the different political parties about the focus areas around the production and consumption of organic food (Stortinget, 2017). The previous government set a target that organic food would account for 15% of food consumption by 2020 (Vittersø & Tangeland, 2015). This objective was originally set to be met in 2015; however, it was adjusted in 2009 as the target was considered too ambitious compared to the actual consumption of organic food (SSB, 2009). In order for the government to achieve this goal, the consumer barriers to purchase organically produced food needs to be reduced. Consequently, this will be difficult to reach, as while the world's organic farming area increased by 21% over a three years period since 2014, Norway has not increased their organic agriculture during the same period (FIBL, 2017).

2. Literature review

In the following section we will give a review of the existing literature about the advantages and disadvantages of organic products and production methods. The literature review is divided into six different parts: ethics, taste, environment, nutrition, attitudes towards organic products and purchase intentions. Organic could be regarded as a 'hot topic' among researchers, and thus, there are a good selection of existing literature on the topic. Thus, it is important to review the existing literature before making a contribution to the topic.

Many economic models frequently use price and income as explanation for consumer behaviour, also when considering organic products (Zanoli & Naspetti, 2002). However, consumers are getting more concerned with being informed and receive more information about organic production and process compared to conventional products (Zanoli & Naspetti, 2002). Nevertheless, recent research conducted in Norway explains that Norwegian consumers are happy with the range of organic food, but the trust in the labelling system and quality of the food is more negatively perceived (Vittersø & Tangeland, 2015). Why are consumers starting to question organic production method?

Organic products are perceived as a sustainable, tasty and a healthier option compared to conventional products by many consumers (Olson, 2016). However, there are several different opinions in the literature and among consumers regarding the advantages and disadvantages of organic products. While some literature state that there are limited to no connection between health claims and organic products (Smith-Spangler et al., 2012; Brandt, 2012; Olson, 2016), other have found plenty of evidence that contradicts this (bbcgoodfood, 2017). Some literature also argues that organic produced food tastes better than conventionally produced food (Doorn & Verhoef, 2011), while other research find that this is not reflected in blind tastings (Hughner et al., 2007; Olson, 2016). Another advantage of purchasing organic produce is the environmental benefits as the fertilisers do not pollute the air, soil or water (Kareklas, Carlson & Muehling, 2014). Nevertheless, organic production requires more land and thus result in an increase in deforestation (Seufert, Ramankutty & Foley, 2012). These ideas and theories in the literature will be discussed further in the following sections.

2.1 Ethics:

Research by Olson, McFerran, Morales & Dahl (2016) elaborates on making ethical consumer choices and conflicting reactions to these choices. Choosing organic products could be perceived as an ethical, moral and prosocial choice, as the products arguably do not harm the environment, animals or humans (Olson et al., 2016). Doorn and Verhoef (2011) argues that consumer choice about organic products and their willingness to pay (WTP) can be framed as a social dilemma. This implies that the individual must consider individual motives, such as helpfulness, quality and environment.

The article by Olson et al. (2016) argues that people receiving government assistance are perceived as less moral when purchasing a ethical product (i.e. organic product) as the price usually is higher than conventional products. On the other hand, for people with higher income, purchasing an organic product would be perceived as a moral choice. This could be explained in short that people receiving government assistant are paid through tax money and should be more careful about where they spend their money, while those earning regular income spend their own money and an ethical choice would be more appreciated. Thus, the individual needs to be able and willing to pay the higher price of the ethical products. However, if the price of organic (ethical) food decrease, then this issue of moral conviction against the consumers receiving government assistance would diminish.

Based on previous research, one could argue that buying organic in many cases could not be considered ethical. It is argued that, compared to conventional food, producing organic products increase the use of land making it less sustainable and environmentally friendly (Seufers et al., 2012; Olson, 2016). This could arguably make the choice of buying organic a less ethical decision.

2.2 Taste:

Magnusson et al. (2001) states that the single most important purchase criteria for consumers is taste, hence this is another important attribute to consider when discussing organic products. Due to its higher price and exclusion of man-made fertilisers, many consumers perceive organic as having a superior taste compared to conventional competitors (Hughner et al., 2007; Olson, 2016). And, among pro-organic commenters commenting the Stanford meta-analysis about organic

products and nutrition, as found and argued by Olson (2016), one of their main reasons for purchasing organic is taste. Nevertheless, in blind tastings, there is no significant difference in taste between organic and conventional food (Hughner et al., 2007; Olson, 2016). Even in some cases, conventional products have been judged as having a superior taste compared to its organic competitors. Thus, consumer's perception about superior taste is just a perception due to their knowledge about the growing and production process.

2.3 Environment:

Some researchers and consumers consider organic products to be more environmental friendly as it is not grown with man-made, chemical fertilisers which pollutes the water, soil and air (Kareklas et al., 2014). Hence, consumers in wealthy countries are questioning the agriculture and production of conventional food, as they believe the process harms the environment and animal health and welfare (De Boer, 2003). This has resulted in the trend of green consumerism in most western countries, which could be regarded as a newer trend where it is important to appear and be green, or in other words, to be concerned about the environment (De Boer, 2003). Thus, organic products have been a way for food producers to meet this demand of more environmental friendly and healthier options (Kareklas et al., 2014; Vittersø & Tangeland, 2015).

As green consumerism has become a trend in today's market, organic food has become a popular marketing tool for retail chains (Vittersø & Tangeland, 2015). Firms spend extensive amount of money to be perceived as environmental friendly, increasing the consumers purchase intention of their products in general, while also increasing the firm's reputation and CSR. Thus, by adding organic products into a product portfolio, retailers are able to increase their market share within a category and also improve their reputation (Bezawada & Pauwels, 2013). Hence, besides bringing a diverse option to the consumers and meeting their demands, it also becomes a part of the firm's green-washing strategies (Vittersø & Tangeland, 2015). Therefore, firm's have the ability to meet the demand of the consumers due to the trend of green consumerism, while also enhance their reputation by being perceived as more environmental friendly. But, how ethical this practice is, could be questioned.

Nevertheless, in recent years, research has found some attributes about the organic production methods which questions the environmental benefits of it (Seufert et al., 2012; De Boer, 2003; Olson, 2016). One of the most questioned attributes of organic production and concern among organic-sceptics is that it requires more land to produce, compared to its conventional competitors (Seufert et al., 2012; De Boer, 2003; Olson, 2016). Even though De Boer (2003), who could be regarded as a pro-organic researcher, commented on the reduction of pesticide use in organic production, and also argued that producing organic milk increases the land use compared to conventional milk.

One of the major concerns and challenges around the globe is the growing population, thus, the demand for meat and high-calorie food is increasing (Seufert et al., 2012). This implies that food producers need to find ways of producing food more effectively and minimizing the use of land when producing it. As organic food contributes to a more widespread deforestation, it is not a sustainable method to feed the growing population (Seufers et al., 2012). Thus, organic food is arguably not as environmental friendly as it is perceived by many consumers and researchers. Organic could be regarded as more environmental friendly and sustainable if the production yield and transportation distance for producing it is reduced, and consumers become more concerned with eating in season fruit and vegetables and reducing meat consumption (Olson, 2016).

2.4 Nutrition and Vitamins:

Both pro-organic and the general consumer believe and expect organic food to be healthier and have less calories than food produced conventionally (Lairon & Huber, 2014; Olson et al., 2016; Magnusson et al., 2001). Research has also found a 30 percent lower risk of pesticide contamination when eating organic fruit and vegetables compared to conventional alternatives, even though it is within the allowable safety limit (Brandt, 2012). Thus, one of the most common arguments among consumers for buying organic is the health benefits (Olson, 2016; Magnusson et al., 2001). This belief is largely based on the way organic food is produced, as it is produced in a “natural” way.

Nevertheless, these health claims could be challenged as research has found contradictory evidence (Smith-Spangler et al., 2012; Brandt, 2012; Olson, 2012).

In fact, the vitamin content of organic plant and animal products are equivalent to the vitamin content of conventionally produced products (Smith-Spangler et al., 2012). Also, analysing the nutrition content revealed that only the phosphorus content of organic produce was superior to conventional products, a result that was only significant in one of the experiments (Smith-Spangler et al., 2012; Brandt, 2012). Lastly, Brandt (2012) discovered no difference in the fat and protein content between organic and conventional milk. Hence, there are no significant health advantages of eating organic food, and thus could not justify the price based on this information (Smith-Spangler et al., 2012; Brandt, 2012; Olson, 2012).

2.5 Attitudes towards organic products:

Tarkiainen & Sundqvist (2005), Magnusson et al. (2001) and other researchers have highlighted the importance of understanding consumer behaviour around organic purchase decisions. Indeed, the interest in organic products has increased among both academics and consumers. The article by Magnusson et al., (2001), argues that Swedish respondents have positive attitudes towards buying organic products, but the actual purchase rate is low. Their study also finds demographic differences and that the largest gap between attitudes and purchase behaviour is among the younger generation. This may coincide with the premium price of organic food and the income of this generation.

As argued earlier, organic food is perceived as food that charges a price premium in the market. Studies show that consumers are not willing to pay price premiums for organic food (Doorn & Verhoef, 2011). Their findings also state that organic food can be perceived as food with low quality; however, this depends on the food category (Doorn & Verhoef, 2011). Hence, this could affect consumers purchase intention, and explain the low market share of organic products. Doorn and Verhoef (2011) research highlights that if a consumer perceives the product as low quality, the individuals WTP will decrease. Lastly, they also find evidence that organic food is less popular in some categories, and that the WTP differs between virtue and vice organic food. However, as there are several options, both expensive and inexpensive, money spent on purchasing food based on personal preference, influences the willingness to pay (Olson et al., 2016).

2.6 Research Question

According to Zanolli & Naspetti (2002), consumers differ based on both their experience and expertise regarding organic products. Thus, consumers knowledge about organic products and production methods varies. We assume that this difference in knowledge will affect the consumers purchase intention of organic products. Hence, the consumers purchase intention is influenced by the level of knowledge of about taste, nutrition and the environmental factors of organic products. After reviewing the literature regarding organic products, we could not find empirical research on consumers accurate and inaccurate knowledge about organic products, and how this affects their intention to buy organically produced food. Therefore, we have formulated the following research question to give a contribution to the subject:

RQ: How will accurate knowledge about organic products affect the consumers' purchase intentions?

2.7 Contribution

We predict that knowledge (IV) about organic products in terms of health, environment and taste, will affect consumers purchase intentions (DV). And, moreover, explains the variation of the dependent variables. But the question is: how will the consumers knowledge of the different moderators affect consumer purchase intention in different ways? And which moderator has the strongest effect on the dependent variable? Therefore, the main aim of this thesis is to investigate differences between the moderators, and the relative importance of accurate knowledge, and how this affects the consumers purchase intentions in different ways. Hence, with this study we hope to contribute to the discussion concerning consumer behaviour related to the subject of consumption of organic products.

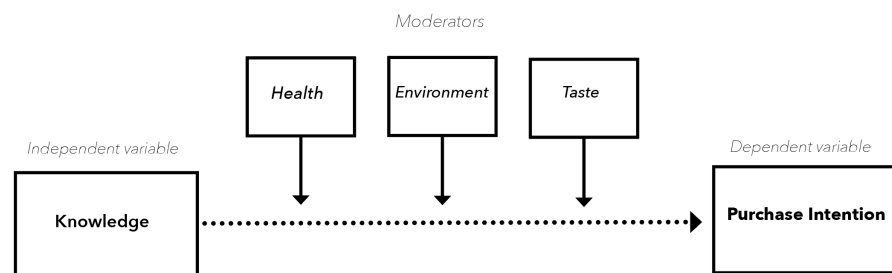


Figure 1: Conceptual Model

3. Methodology

In the following section will we describe the main study, the design and procedure, the questionnaire development and how the results will be tested. The study will be conducted in Norway with Norwegian consumers.

3.1 Main Study

This thesis will attempt to answer the research question stated earlier using a survey, where information is acquired from the respondents. This could be regarded as a quantitative research method, with a descriptive research design (Malhotra, 2010). The aim of a descriptive research design is to give a description of something based on data collected through a survey or observation (Malhotra, 2010). There is no clear method for choosing the number of participants in the study, as this is based on different factors such as the size of the population (Sheth-Voss, 2008). We aspire to obtain a minimum of 300 respondents completing the test, using an incentive with a chance to win a gift card to attract respondents.

3.1.1 Participants:

As mentioned, the target group will be Norwegian consumers. Our research will not target one specific age group, since age is not a relevant variable in our study. However, the demographic variable will be added in the questionnaire based on that one has the possibility to compare answers between genders and age. Hence, see how it affect the behavioural patterns. Further on, the questionnaire will be created and distributed using the online questionnaire service Qualtrics. This service allows us to choose a variety of settings, as well as distributing it to a larger area in Norway since it is an online service. Moreover, it increases the internal validity of the questionnaire since respondents cannot go back and change their answer after a response is given. Another advantage of this service is the ability to check the ongoing drop-out rate, i.e. where do the respondents drop out and how many. This will give an indication of how many participants we need in order to receive an appropriate number of respondents.

3.1.2 Questionnaire Development

Malhotra Marketing research will work as a framework for scale developing and designing of the questionnaire, as well as the marketing scale handbook by Bruner (2009) to get the right wording of the questions. According to Malhotra (2010) a questionnaire should include unambiguous questions and words with only one

meaning, to diminish the bias of people not understanding the questions / statements. Thus, this will be a focus area during the development of the questionnaire. The categorical order is randomized to minimize bias from the order of the question, and, as mentioned, the respondents will also not be able to go back and change their answer. As the survey only consists of questions including neutral response, we are able to use forced response as a default setting. Thus, the survey will not include missing values in the data obtained (Janssens, Wijnen, Pelsmacker & Kenhove, 2008).

3.1.3 Pretest:

In the questionnaire development process, we will conduct a pretest prior to the main test. The pretest enables us to identify and eliminate potential issues with the designed survey, such as leading questions, confusion about question wording etc (Malhotra, 2010). Thus, the pretest allows us to make final changes to the survey. The pretest will involve a small sample of respondents, approximately 15 people, and the participants will be observed and will also be able to give feedback during and after the survey (Malhotra, 2010). The people participating in the pre-study will be excluded from participating in the main study.

3.1.4 Design and Procedure:

The questionnaire in the main study will be divided up into four parts: the respondents perceived knowledge about organic products, a fact quiz testing the consumers accurate and inaccurate knowledge, questions regarding their purchase intention of organic products, and lastly, some final demographic questions (See appendix 3 for draft of the questionnaire).

The respondents will first be presented with a welcoming message and an introduction to the survey, as well as being informed about the chance of winning a gift card. We will emphasize that the participation is voluntary, and the data collected is anonymous. To be able to proceed, the respondents must agree with the terms.

After reading the terms, it is essential to start with identifying Norwegian consumers knowledge about organic products. Hence, subjective vs objective consumer knowledge. To be able to do this, the study will start with general questions capturing their subjective knowledge. According to Bruner (2009),

subjective questions captures the respondents opinions of their knowledge, while objective questions attempt to evaluate the respondents actual knowledge by asking questions with a correct answer.

The second part will objectively measure the respondents knowledge about organic products and production methods, thus, attempts to capture the respondents accurate and inaccurate knowledge. This is tested using dichotomous questions (Malhotra, 2010), hence having two response alternatives, in this case, true/false, and additionally supplemented by a natural alternative, such as I don't know or indifferent. Malhotra (2010), argues that a neutral alternative is essential, and if a natural alternative is not included, the questionnaire forces the respondents to choose between true or false, even when they feel indifferent or do not know the answer. However, this could result in a need for more respondents than stated earlier, as there is a danger of several respondents choosing the neutral option. Lastly, we have added a reversed scales for the question about taste to control for acquiescence biases.

The third part of the quantitative questionnaire will measure the respondents purchase intentions, i.e. the dependent variable. Our statements will be measured using a 7-point Likert scale from the response categories (1 = Totally disagree to 7 = Totally agree). According to Janssens et al. (2008) a wide scale will give a more realistic picture; thus, a 7-point scale is used in our questionnaire.

In the last part of the study respondents will answer standard demographic questions. This is questions including: age, gender and geographical living area. Due to social desirability bias, the questions about demographic was given in the end of the main study (King & Bruner, 2000). According to Bruner (2009), gender related questions should include a "Do not want to answer" alternative, therefore, this is added to the response alternatives.

3.2 Statistics

Using a questionnaire as a main source of information, will make it easy to analyse the responses using the statistical data tool SPSS. At this point in our thesis, we believe that a factor analysis is an appropriate method to use, as it enables us to identify different groups based on their answers in the questionnaire (Malhotra,

2010). Based on our research, we predict that we will obtain four different main groups (figure 1). A MANOVA procedure could be used to assess the differences between the four groups on the dependent variable, purchase intention (Malhotra, 2010).

<p><i>1 - high subjective and objective knowledge</i></p> <p><i>2 - high subjective and low objective knowledge</i></p> <p><i>3 - low subjective and objective knowledge</i></p> <p><i>4 - low subjective and high objective knowledge</i></p>
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Figure 2: Predicted observations

4. Limitations and Future Research

In the current thesis, the focus is on consumers perceived purchase intention, and not the actual purchase behaviour. Previous research indicates that consumers report to purchase organic products more frequently than numbers based on actual consumption (Magnusson et al., 2001).

In regard to the questionnaire testing the respondents accurate knowledge, using dichotomous questions (true/false), the “correct” answers are based on our research findings, mentioned in the literature review (Appendix 4). However, as there is mixed evidence in the literature about organic products and production processes, the “correct” answers in the questionnaire are based on scientific articles that have a high validity. Nevertheless, there are few articles that discuss the advantages and disadvantages of organic products and production methods. Therefore, future research should focus in this using different research methods and other population samples in order to strengthen the validity of the literature and the arguments.

5. Timeline

5.1 Our timeline for future master thesis progression:

January: Finish and hand in preliminary + first draft of questionnaire

February - March: Finalize the questionnaire and conduct the surveys

April: Analyse the results of the survey

May: Finishing the paper - conclusion of our findings

June: Finalize the paper and proofread

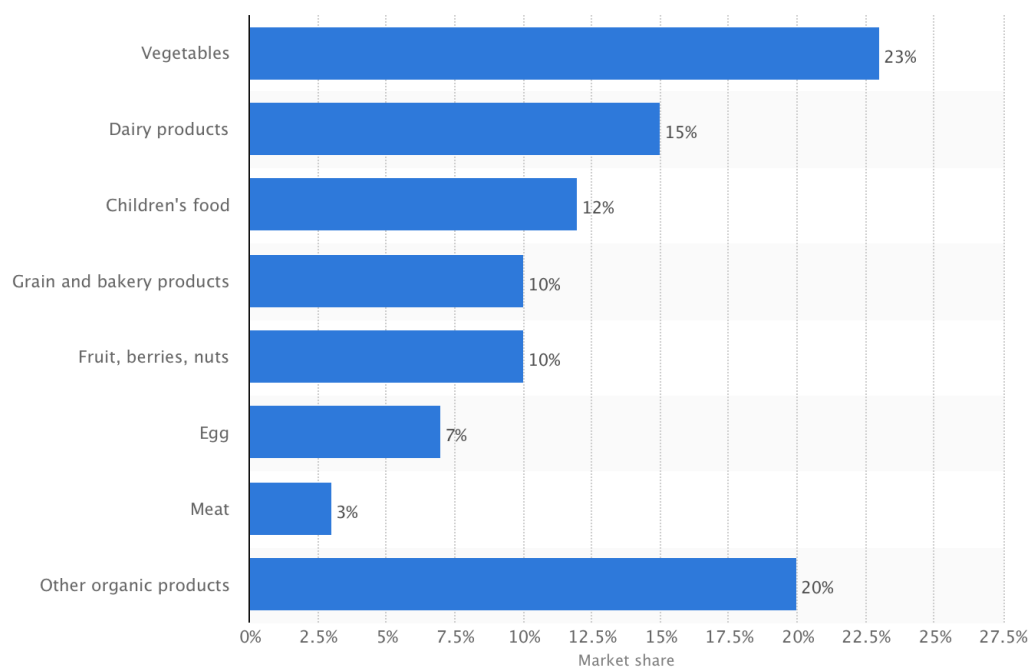
July: Again proofread, finalize

August: Hand-in paper

6. Appendix

Appendix 1: Market share of organic products in Norway

Market share of organic products in Norway in 2016

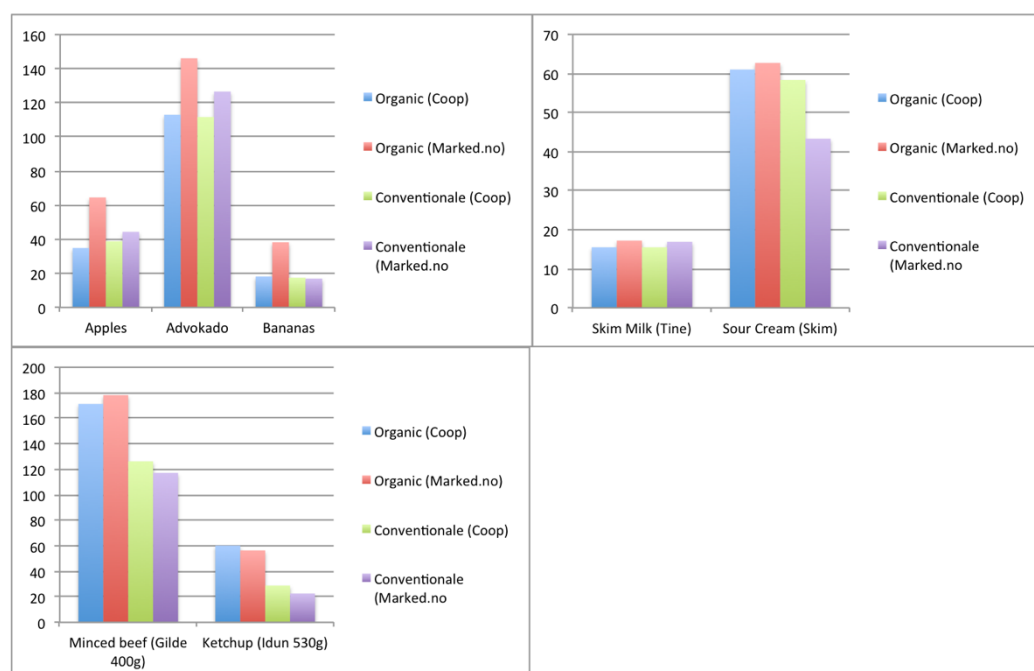


Appendix 2: Prices in Store (Price pr.kg)

Fruit and vegetables	Organic (Coop)	Organic (Marked.no)	Conventional (Coop)	Conventional (Marked.no)
Apples	34,88	64,5	38,8	44,3
Avocado	113	146,1	111,67	126,6
Bananas	18,13	38,2	17,43	16,9

Dairy product's	Organic (Coop)	Organic (Marked.no)	Conventional (Coop)	Conventional (Marked.no)
Skim Milk (Tine)	15,5	17,2	15,5	16,9
Sour Cream (Skim)	61	62,7	58,33	43,3

Other products	Organic (Coop)	Organic (Marked.no)	Conventional (Coop)	Conventional (Marked.no)
Minced beef (Gilde 400g)	171,25	178,2	126,25	117,2
Ketchup (Idun 530g)	60,19	56,4	28,87	22,6



Appendix 3: Draft Questionnaire for Pretest

Dear respondent

This survey is part of a Master Thesis in Strategic Marketing Management at BI Norwegian Business School. The questionnaire is designed to capture Norwegian consumers knowledge about organic production. The questionnaire will take approximately 8 minutes, and the data from the survey will be treated confidential and will not be used individually. The participation is voluntary, and to be able to qualify for the gift card you need to complete the survey and fill out your email in the end.

By clicking on the button you have read and understood the above consent form and desire of my own free will to participate in this study. Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

Kind Regards,

Ingrid Marker and Martina Nicole Naess.

Master of Science in Strategic Marketing Management, BI Norwegian Business School.

Thank you for your participation your contribution will be appreciated.

- I consent, begin the study
- I do not consent, I do not wish to participate

Part 1: Organic Products

I know a lot about organic products?

Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree Strongly agree

My knowledge of nutrition and vitamin content of organic products is?

Inferior (1) 2 3 4 Superior (5)

My knowledge of the advantages and disadvantages of organic products and production methods is

Very poor Poor Neutral Good Very good

Please rate your knowledge about the environmental impacts of organic production

Not knowledgeable Bellow average Average Above average Very knowledgeable

Part 2: Quiz

Experiments show that organic products taste virtually the same as conventional products?

- True
 - Fals
 - I don't know
-

Research finds that organic products generally have a better taste compared to conventional products?

- True
 - Fals
 - Indifferent
-

Organic products could be considered more environmental friendly than conventional products in terms of water, soil and air pollution

- True
 - False
 - I don't know
-

Organic products requires more land to produce?

- True
 - False
 - I don't know
-

Organic production is a sustainable production method when considering feeding the world's population?

- True
 - False
 - I don't know
-

Except for dairy products, the price of buying organic products in Norway are significantly higher than conventional products?

- True
 - False
 - I don't know
-

In general, organic food is a healthier option than conventional food?

- True
 - False
 - I don't know
-

Research have found that the vitamin content of organic and conventional food is equivalent?

- True
 - False
 - I don't know
-

There is a 30 % lower risk of pesticide contamination when eating organic fruit and vegetables compared to conventional alternatives?

- True
 - False
 - I don't know
-

The protein content of organic milk is higher than conventional milk?

- True
 - False
 - I don't know
-

Research finds that the nutrition content of organic food is significantly higher than for conventional food?

- True
- False
- I don't know

Part 3: Purchase Intention

Would you consider purchasing organic products?

- Definitely not (1) 2 3 Might or might not (4) 5 6 Definitely yes (7)
-
-

Do you purchase organic products?

- Never 2 3 Sometimes (4) 5 6 Regularly (7)
-
-

Part 4: Demographic

How old are you?

- Under 25
 25-34
 35-44
 45-54
 55-64
 Over 64
 Do not want to answer
-

What is your gender?

- Male
 Female
 Do not want to answer
-

Where do you live?

- I live in the city
 In the suburbs
 In the countryside
 Do not want to answer
-

Enter your email bellow to be able to win the gift card:

Appendix 4: Correct answer sheet

Correct answer sheet

- | | |
|---|-------|
| 1) Experiments show that organic products taste virtually the same as conventional products? | TRUE |
| 2) Research finds that organic products generally have a better taste compared to conventional products? | FALSE |
| 3) Organic products could be regarded as more environmental friendly than conventional products in terms of water, soil and air pollution | TRUE |
| 4) Organic products requires more land to produce? | TRUE |
| 5) Organic production is a sustainable production method when considering feeding the world's population? | FALSE |
| 6) Except for dairy products, the price of buying organic products in Norway are significantly higher than conventional products? | TRUE |
| 7) In general, organic food is a healthier option than conventional food? | FALSE |
| 8) Research have found that the vitamin content of organic and conventional food is equivalent? | TRUE |
| 9) There is a 30 % lower risk of pesticide contamination when eating organic fruit and vegetables compared to conventional alternatives? | TRUE |
| 10) The protein content of organic milk is higher than conventional milk? | FALSE |
| 11) Research finds that the nutrition content of organic food is significantly higher than for conventional food? | FALSE |

7.References

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