Health claims on organic nutrition - Are organic consumers receptive to health claims on organic nutrition?
Abstract

The German food market changed tremendously as the population increasingly seeks for healthy and fair traded nutrition in comparison to the past years when pricing was one of the decisive attributes. This fact causes the increasing demand for natural, regional and also health enhancing products. Currently more and more conventional food is promoted by so called health claims that feature the health enhancing aspects of those products. Thus a potential increasing competition for organic products could arise, which are per se seen as ‘healthier’ than conventional food. In response to that it can be assumed that providers of organic products could also consider the usage of health claims on their packaging. Based on this idea the present work analysis if organic consumers imply the requirements to perceive health claims on organic nutrition positively. The most important theoretical part of the paper literary research outlines the motives behind the consumption of organic food, the perception of health claims on conventional food and the Øko-foods consumption model upon which the primary research is based. The survey revealed that the majority of organic consumers is (very) nutrition aware and purchases organic food for health and fewer residues and chemicals reasons. Therefore organic consumers particularly watch out for certain product attributes that can support these motives. Hence important for this consumer group are informative product characteristics as ingredients, organic label and beneficial product attributes that support nourishing aware and healthy. In this regard health claims that feature the health enhancing aspects of those products, constitute an adequate strategic mean in order to create a positive perception and attitude towards the product.
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<table>
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<th>Description</th>
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<tr>
<td>%</td>
<td>Per Cent</td>
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<td>€</td>
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<td>AC</td>
<td>Abstract Conceptualization</td>
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<td>AE</td>
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<td>Dinkis</td>
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<td>EC</td>
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<td>EU</td>
<td>European Union</td>
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<td>GmbH</td>
<td>Gesellschaft mit beschränkter Haftung</td>
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<td>IFOAM</td>
<td>International Federation of Organic Agriculture Movements</td>
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<tr>
<td>ISOE</td>
<td>Institute for Socio-Ecologic research questions</td>
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<td>LOHAS</td>
<td>Lifestyle of Health and Sustainability</td>
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<td>Ltd</td>
<td>Limited</td>
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<td>MBA</td>
<td>Master of Business Administration</td>
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<td>No.</td>
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<td>RO</td>
<td>Reflective Observation</td>
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<td>S-O-R Models</td>
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1. Introduction

The following study provides an insight about whether health claims on organic nutrition are perceived positively by organic consumers and could therefore support the purchase of organic products or not. This topic as well as the investigation itself is based on the tremendous changes within the food industry which is described in the following paragraph.

Statistics of the Federal Office of Statistics show that the food market changed incredibly during the past 25 years. The decline of the per capita consumption of classical staples (Dustmann, 2006) shows that this kind of product is increasingly loosing relevance. The Federal Ministry of Education and Research (2010) reported that nowadays food denotes more than just satisfying hunger. Food is an important part of the German culture as it might also imply well-being, pleasure and relaxation. Currently there is manifesting a changing trend towards values concerning nutrition. Food shall beyond satisfying hunger and offering a taste adventure also support our health as there is the consensus that eating the ‘right’ food extends life expectancy and improves quality of life (Bundesministerium für Bildung und Forschung, 2010). Now the question arises: ‘How does this change come about?’ A number of factors are responsible for the changing consumer values towards food. Some of them are for example aging population, new illnesses, increasing health consciousness and advanced food and technology science (Agriculture and Agri-Food Canada, 2009). In respect of the steadily arising discussions regarding negative impact of certain groceries on health the majority of our society considers a balanced nutrition of importance. As a consequence German citizens increasingly favour healthy and fair traded nutrition in contrast to the past when people primarily searched for cheap products. According to the National Association of the German food industry every fourth person, which means 26% of the population do not longer set first priority on prices but health and moral-ethical criteria are gaining importance. This fact causes the increasing demand for natural, regional products in environmental-sparing packaging and thus the growing organic food market (Weindlmaier et al., 2001). The food retail sector adopted this trend with pleasure and as a response towards the new consumer needs the offer of organic products rose (BÖLW, 2011). According to the market research institutions AC Nielsen, GfK and BioVista there was a turnover of the organic food segment in Germany of 7 billion Euro in 2012 in comparison to 6,6 billion Euro in 2011. This is an increase of 6% which led to the organic food share of 3,9% of the whole food market in Germany (BÖLW, 2013). Also the sales of the last years show that there is a relatively stable growth rate of the organic segment.
Moreover statistics show that Germany is currently behind Japan and USA the third biggest market for health enhancing nutrition (Fend, 2011). In this regard more and more conventional food is promoted by health claims that feature the health enhancing aspects of those products. Thus a potential increasing competition for organic products could arise, which are per se seen as ‘healthier’ than conventional food (Gedrich, et al., 2005). In response to that one can assume that providers of organic products could also consider the usage of health claims on their packaging. Based on this emerging situation this work shall analyse if organic consumers imply the requirements to perceive health claims on organic products positively and if health claims can therefore support the purchase of organic food.

1.1 Objectives and contribution

As there is already research about the correlation of health claim advertising and consumer behaviour of conventional food, (Trijip and van der Lans, 2007; Garretson and Burton, 2000; Kozup et al., 2003) this investigation shall critically analyse the interdependence of health claim advertising of organic products and consumer behaviour. Thereby it is of great interest to find out if organic consumers imply the requirements to perceive health claims on organic products positively and thus create a positive attitude towards the products which could support the purchase of the product. Thereby the results can give advice for the positioning of organic-food-brands regarding health claim usage, thus influence strategic and entrepreneurial decisions concerning marketing of organic food brands.

1.2 Research question

According to Saunders et al. (2009), the key criterion of a successful research is whether a set of clear conclusions could be drawn from the collected data. The extent to which this can be reached is determined by the clarity of which the initial research question is created. Apart from theoretical discussion this project focuses on the following specific research question and objectives to contribute an incremental part to the existing literature and to deepen the understanding of the topic:
Research question

Do organic consumers imply the requirements to perceive health claims on organic products positively?

Research objectives
1. To describe how the socio-economic characteristics of the consumer influence purchase of organic nutrition
2. To describe how the socio-economic characteristics of the consumer influence the nutrition awareness of organic consumers
3. To explore the relationship between value orientation and nutrition awareness which in turn affects the perception of attributes of organic food
4. To identify the links between perceived attributes of organic food and consumer attitudes towards the purchase of organic food

1.3 Structural approach

The following paragraph reveals the rough structure of this project and the approach how to achieve the research objectives. In the beginning this work provides a general introduction of the topic and defines the problematical issue the work wants to investigate in as well as its valuable contribution to the existing literature. Thereafter some theoretical terms are discussed and clarified in order to provide a sufficient industrial background and basic understanding for the investigation of this topic. The industrial background covers the terminology of health claims, discusses the perception of health claims on conventional food and defines the terminology ‘organic’. Moreover the industrial background deals with the motives of organic food consumption and the target group of organic nutrition. The next part, the literature review talks then about consumer behaviour theory and models in general in order to gain an understanding for the consumer behaviour model used later on. Thereafter more specific ecological consumption behaviour models are analysed and evaluated. The second part of the literature review then deals with the Øko-foods consumption model and its variables which is used as fundamental basis for the research question and research objectives. After having developed the research question and objectives based on the theory of the Øko-foods consumption model, the methodology, to verify these objectives will be defined. This encompasses the purpose of the research, the research philosophy, the research approach, the research strategy, the sampling technique, the research choice and the time horizon. Moreover it considers ethical issues as well as limitations of the research. Thereupon data will be collected and analysed. After having acquired and analysed the data, all results will be provided and discussed. In the end of the project the findings of the investigation will be compiled, conclusions can be drawn, limitations will be detected and recommendations on future research as well as on the organic industry will be expressed. The last part of the dissertation then covers the reflection of the learning with regard to the dissertation itself and the whole MBA programme. Thereby the learning experience of key stages during the work of the dissertation will be described as well as the researcher’s personal learning
style. Moreover it deals with the skill development occurring during the MBA programme and their application in the future.
2. Industry background

This section describes the main terms and theoretical background information of this present research work. Thereby the investigation topic is highlighted in greater detail and a basic understanding regarding the dissertation topic is provided.

2.1 What are health claims?

Basically health claims are advertising messages, that directly associate the consumption of a product with health (Verordnung (EG) Nr. 1924/2006). The EU 'Health Claim regulation' defines a health claim in general as “any claims that explain, suggest or imply that a relationship exists between a food category, a food or one of its constituents and health” (Asp, Bryngelsson, 2008, p. 1211S). According to the U.S. Food and Drug Admimistration (2013) health claim stands for any claim made on the label of food, including a dietary supplement that contains ‘third party’ references, written statements as a brand name including a term such as ‘heart’, symbols or vignettes that illustrate the relationship of any substance in a food and a disease or health-related condition. Moreover they say that health claims are limited to statements about disease risk reduction and can not be claims about the diagnosis, the cur or treatment of the disease. However the European Food Safety Authority (2014) states health claims assert or indicate, that food has beneficial nutritional properties as ‘low-fat’, ‘sugarless’ or ‘high in fibre’. Health claims are statements on labels, advertising or any other marketing activities according to which the consumption of a certain food product contributes to health related advantages, as for example the increase of defence forces or the improvement of learning capacity. All explanations are different in a little manner but have at least the similarity that health claims express the relationship of special substances and health-related benefits after consumption. For this work the definition of the EU ‘Health Claim regulation’ seems to be the appropriate one as it is in wide use in Germany and is aligned with the rules concerning health claim advertising that have to be followed. These rules will be explained in the following paragraph.

The regulation (EC) No. 1924/2006 about nutritional value- and health-related statements regulates the utilization of advertising messages that have a special connection to nutrition and health (Holle, 2007). Aim of the regulation is primarily to create common competition conditions in every state as well as a high level of consumer protection (Meyer, 2007). According to article 4 of the regulation, since recently food providers are only allowed to use health and nutrition claims if the products are registered on the positive list of the EU and simultaneously correlate with the given nutrient profile (BfR, 2008). The changes of the legal parameters will have considerable influence on the competition within the food sector due to the fact that basically huge companies get benefits in comparison to smaller ones. Moreover the regulations will change the way in which nutrition is promoted. Scientifical statements will be simplified whereas emotional advertising will become more difficult. Thereby the legislator wants to achieve that in future nutrition will seek more for health than enjoyment (Holle, 2007).

The health claim regulation differentiates between nutrition claims and health claims, whereby there is a further differentiation for health claims. For one thing there are claims related to special substance for growth and the body functions or for their physical functions. An example for this type of claims is
the following: ‘Calcium is important for health bones’. This type of claim is regulated in article 13 of the regulation. For another thing there is article 14 which regulates claims that refer to the reduction of a disease risk or to the development and health of children (Food Safety Authority of Ireland, 2012). Nevertheless both of them are health claims. The regulation is applied on every food, that is offered to the end consumer within the European Union, as long as it is promoted by health or nutrition claims (Meyer, 2007).

Figure 2: Structure of the health claim regulation (Adapted from: Holle, 2007)

2.2 Perception of health claims on conventional food

For the marketing of health benefiting food products the utilization of health claims are of strategic importance (Jew et al., 2008; Hartmann et al., 2008; Grunert et al., 2000). Jew et al. (2008) state that with the introduction of these health enhancing products into the market place, health claims became a successful mean to communicate the health benefits of food that contain specific formulations to the consumer. Also Hartmann et al. (2008) state that health claims are a useful product information tool since for example nutritional value of declarations are often misunderstood. Also Grunert et al. (2000) argue that the usage of health claims plays a significant role for the communication of information. Information is getting more accessible and easier to process for the consumer by the usage of health claims. Thereby health claims make it easier to convince the consumer of the health benefit. They observed that without health claims the interest in the fortified food product is relatively low.

However various other studies consider how consumers evaluate and understand health claims. While according to Bhaskarans and Hardley (2002) consumers are sceptical towards claims as they perceive it as an advertising message, other research findings show that there is a higher purchase intention on food with health related statements (Bech-Larsen et al., 2001; Tuorila and Cardello, 2002). Also Aschemann and Maroscheck (2008) show in their study that there is a higher willingness to buy products with claims than without claims. Although in their study only 40% of all products were products labelled with health claims, 44,4% of all test persons chose health claim labelled products. It
can be assumed that some of these findings are related to the results of the following studies. Williams (2005), Trijip and Lans (2007) state that there seems to be a tendency that products that are promoted with health claims are accounted to be more healthy than products that are not branded by health claims. Furthermore there are findings that say that the evaluation of the claims is also depending on the product type and the creation of the claim. Hailu et al. (2009) show in their study that consumers tend to have a more positive attitude towards health claim products if these products have a long history of safe consumption and healthiness as e.g. yogurt and margarine. Another study shows that highlighting lowered disease risk in the claim may be more effective in influencing the purchase than information emphasizing the reduction of a specific risk factor for an illness (Devcich et al., 2007). However van Kleef et al. (2005) argue in one of their investigations that consumers prefer concepts that primarily communicate health related benefits in combination with a healthy image or an existing health positioning. For familiar ingredients as probiotics, it is enough to mention the substances to create positive impressions. However a strengthening of the claim does not necessarily lead to a stronger perceived benefit (Urala, 2005).

According to the current literature findings it can be said that there is a correlation between health claim advertising and consumer behaviour (Jew et al., 2008). Furthermore it can be stated that there is a dependence on the formulation of the claim and the type of product that is promoted (Hailu et al., 2009). Moreover it is shown that the positive correlation is often linked to the promoted health factor (Trijip and Lans, 2007). However the mentioned studies and research findings are only pertaining to conventional food. As a result of that and due to the fact that organic products increasingly gain importance, caused by the changing nutrition behaviour (BÖLW, 2011), this work will exclusively focus on organic products.

2.3 What is organic?

According to the current scientific literature the meaning of the term ‘organic’ is not uniformly clarified. There are very common definitions as the one of Chinnici et al. (2002, p.188) that says organic products are: “Products which have less impact on the environment than comparable products’. However Fotopoulus and Krystallis define organic products by characteristics of the consumer: “Organic products are eco-products, suitable for consumers conscious of the ecology and the environment, who are health conscious” (Fotopoulus and Krystallis, 2002, p.731). Nevertheless there are also more specific definitions. Lampiki for instance argues that organic farming is based on the following description: “A production system which avoids or largely excludes the use of synthetic compounded fertilisers, pesticides growth regulators, and livestock feed additives” (Lampkin, 1994, p.6). Due to the fact that organic food products are products of organic farming, it is reasonable to illustrate the specialities of the organic production process. The definition of the International Federation of Organic Agriculture Movements (IFOAM) of the worldwide governing body of organic farming with 750 members in 116 countries shows the purpose of organic farming: ‘Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the
shared environment and promote fair relationships and a good quality of life for all involved' (IFOAM, no date). Similar fundamentals contain the current EU-Eco regulation that entered into force as from 2009: It illuminates the concentration of the organic sector on sustainability and food quality and describes principles as the retention of natural resources, the saturation of natural processes, the limited usage of external production goods and the compliance of high animal welfare standards (EG Nr. 834/2007).

According to the literature there are different perspectives concerning the definition of ‘organic’. Some definitions contain the purpose of organic agriculture, while others concentrate on the organic consumers and again others illustrate the different valid production means. Nevertheless there is extensive unity that organic food are products of organic farming that feature the following characteristics: Organic agriculture seeks for a sustainable production that changes the natural haunt of plants and animals as little as possible in order to offer an alternative to conventional products for environment- and health-conscious consumers.

In order to get the allowance to label or describe products by the claim ‘organic’ they are subjected to the above mentioned EU-Eco regulation, which became law in 2009. The EU regulation No. 834/2007 is mandatory for all member states of the European Union. This regulation contributed substantially to the reduction of uncertainty and scepticism on behalf of consumers towards the nature and origin of organic food and thereby increased the acceptance and demand for organic food (Menrad and Blind, 2006). The current regulation contains besides general principles as sustainable agriculture, the maintenance of organic variety, the responsible dealing with energy and resources as well as the compliance of high standards of animal welfare and further specific provisions and standards that have to be fulfilled in order to name a product ‘organic’ (EU No. 834/2007). The most important and most often cited regulation is that at least 95% of the ingredients of the product have to be of agricultural origin from ecological farming. Moreover the regulation prohibits the usage of genetically modified organisms, the utilization synthetic fertilizer and soil conditioners as well as the hormonal treatment of animals. The regulation contains further principles for the conversion of conventional agriculture to ecological agriculture, the labelling and classification of organic food as well as for controls of organically farmed holdings (EU No. 834/2007).

2.4 What are the motives for organic food consumption?

There are several studies that have been conducted in order to identify personal motives encouraging organic food purchase. According to Michaelidou and Hassan, personal motives can be classified in individual and selfless motives. For the individual side, taste, food safety and health care seem to be the most important motives (Michalidou and Hassan, 2008). Food safety refers to the degree to which organic products are perceived as trustworthy, certified and natural (Zanoli and Naspetti, 2002) as well as free of chemical residuals and not genetically modified. The motive of health care is referred to the absence of pesticides and chemical substances in organic products which contributes to avoid diseases (Williams and Hammitt, 2001). These findings are again confirmed by Lea and Worsley (2005) that show in their study that the majority of organic food consumers consider these products as safer, healthier and more nourishing than conventional food. Also Litwinschuh argues that the factor
‘health’ is the most important buying motive as nutrition is seen as the basement of healthiness (Litwinschuh, 2007). Due to the minimum part of chemical residuals and the higher level of nutritional value, organic food is perceived as healthier than conventional food (Pearson, 2002). Since Plöger et al. the consumption of organic products primarily takes place for the concern of the own well-being (Plöger et al., 1993), as the choice of nutrition strongly influences well-being. Many consumers believe that organic products in this respect have a more positive influence than conventional food (Litwinschuh, 2007). This can be related to taste and texture of the product, as organic food is considered to be better, more authentic and of better taste than conventional food (Zanoli et al., 2004). Aim is often not just to prevent diseases but to gain a comprehensive well-being that can be related to psychological and spiritual aspects or the holistic perception of the world (Litwinschuh, 2007). Depending on the age the health motive seems to express differently. For young consumers Spiller et al. could have observed an enjoyment-wellbeing-orientation, for young parents responsibility-security-importance and for elderly people a health maintaining perspective (Spiller et al., 2004).

According to the focus groups of European organic consumers of Zanoli et al. (2004), different factors are mentioned as main motives for the purchase of organic nutrition. Nevertheless health is in all European countries the most often mentioned reason for the consumption of organic food products. This is on the one hand side related to product attributes as the renunciation of pesticides or additives and production methods and on the other hand side they relate the health aspect to the health of consumers or other humans, as their children. Consumers believe that they can retain their health by consuming organic food. Adults want to be an example especially for their descendants and care for the health of their children. Other respondents started consuming organic nutrition in order to cure illnesses (Zanoli et al., 2004).

Since Lüth et al. other personal buying motives are aesthetic, setting off from crowd, skinniness and fitness (2004). The ‘Sinus’ study shows that the ‘bourgeois middle class’ thinks about organic products as a societal trend but also as trustful products. Trust into the ‘brand organic’ is an important factor in terms of the ongoing food scandals. Plöger et al. observed that the trust of consumers into the quality of conventional products declines with decreasing age and increasing purchase intensity (Plöger et al., 1993). The ‘Sinus’ study also explains that for the core target group besides the societal objective, enjoyment, taste and wellness are of importance. The origin of these motives is less the need for security and well-being than for hedonism. The motive of enjoyment is possibly a new development as it breaks away from environmental protection and health protection (Litwinschuh, 2007). However the ‘upper class’ buys organic products for the reason of rationality or status against the mentality of ‘miserliness is sexy’. Moreover there is shown that a relatively small but high involved target group can be found in the conscious and critical part of our society. This consumer group buys organic products for the reason of regionalism, freshness and neutrality (Wippermann, 2006).

The other category of motives includes selfless motives. According to Preisendörfer, the purchase of organic products is often a phrase of environmental awareness. Thereby the term environmental awareness is seen as value orientation or lifestyle that constantly affects the pattern of thinking and behaviour (Preisendörfer, 1999). Here the environmental protection, the low degree to which organic...
agriculture impacts the environment and the reduction of pollution plays an important role in the purchase decision of an organic consumer (Zanoli and Naspetti, 2002). Due to the fact that the environment is polluted more and more by consequences of the increasing consumption, consumers seek for products that are less harmful for the environment of the agriculture as well as for the production of nutrition (Litwinschuh, 2007). Nevertheless Zanoli et al. (2004) observed in their study that this motive seems to be of less importance than individual values as health or enjoyment (Zanoli et al., 2004).

According to Schröder and McEachern also animal welfare plays an important role in organic consumption, as human breeding methods (McEachern and Schroder, 2004) and the absence of drugs and hormones in food production contributes to the improvement of animal well-being and health as well as to the respect of their rights (Honkanen et al., 2006). However Zanoli et al. (2004) state that the motive animal welfare carries less weight than the other motives. The laddering study shows differences in product groups: For the purchase of dairy products animal protection is an additional motivation whereas it is a main motive for the purchase of meat. Besides the altruistic concern of the well-being of animals, other consumers seek for selfish aims as better meat quality is related to better taste and healthy nutrition (Zanoli et al., 2004).

However egoistic motives dominate altruistic motives especially for occasional and rare customers (Plöger et al., 1993; Spiller, et al., 2004). According to Plöger et al. environmental protection often only gets a crucial motive if there is no huge extra effort as higher prices, worse taste or less comfort (Plöger et al., 1993). The rank order of buying motives of organic food can be interpreted in relation to Maslow hierarchy of needs. According to that for the most of the people security and self-preservation needs are prioritized to social or altruistic values as environmental protection (Fricke, 1996). Nonetheless for young consumers the criterion environmental protection is of relatively high importance. For intensive consumers environmental protection, less residuals and better taste is ranked higher than for occasional buyers (Plöger et al., 1993). However for rare and occasional customers the structure of motives for faunal and herbal products is different (Spiller et al., 2004). Environment and sustainability aspects are only prioritized when consuming herbal products. In contrast to that security and responsibility for the basement of health, quality of life and well-being are more important values for the consumption of faunal products. The argument for environment is primarily related to personal health perception and not the environmental protection in the proper sense. Thus the ranking of values is dominated by personal motives (Spiller et al., 2004).

In the course of a study of AC Nielsen (2006) 21.100 consumers from Europe, Asian-Pacific, North America and South Africa were interviewed concerning their organic food consumption. The findings of this study can confirm the above mentioned results. 51% worldwide mentioned health as the first argument for the purchase of organic nutrition and 17% of the respondents buy organic products because they are healthier for their children. The third most often ranked motive was the selfless motive environment, followed by animal protection. Also in Europe health played the most important role with 41% (AC Nielsen, 2006).
However Bonti-Ankomah and Yiridoe (2006) argue that sensory features are often not sufficient enough for the purchase of organic products. Evaluation can be supported by quality signals, such as organic product labels as they positively contribute to the differentiation of these kinds of products. According to the literature it can be said that there are several motives that encourage people to purchase organic food. Nevertheless the most important individual motive seems to be the health factor. Thus in this research the health motive will be focused. Moreover it can be said that the evaluation of products can be positively influenced by for example labelling. Based on the above mentioned theories this study will show whether the sensory features can be positively influenced by health claim advertising on organic products and thus help differentiating from alternative products or not.

2.5 Who buys organic food?

Based upon the motives for organic food consumption analysed above, this paragraph deals with the consumer group. However consumers of organic products are so far not uniformly identified (Herker, 1993). Moreover there could have been observed different identification techniques. Spiller et al. (2004) classify organic consumers in different target groups and extended target groups. The extended target audience is characterized by higher income and higher level of education. Another finding is that the core target group mostly buys organic food in specialized shops or in any form of direct distribution. However both groups are featured by a definite higher percentage of women. Moreover the consumers are characterized by a marked interest in food and healthy nutrition as well as simply have fun cooking and enjoying, whereas the third group is more difficult to describe. Characteristics are interest in functional food and convenience products (Spiller et al., 2004).

Another consumer segment of organic products are the so called LOHAS (Lifestyle of Health and Sustainability), a group of consumers that seek for healthy, environmental friendly and social product attributes. Organic products as well as ones that originate from fair trade conditions are preferred by them (Haas et al., 2010).

A further study was conducted by the institute for socio-ecologic research questions (ISOE) (2003) for the determination of organic target groups in Germany. Thereby socio-economic factors were of importance. They observed that the biggest percentage of organic customers is an older consumption group at the age of 40 to 69, among them a bigger percentage of women and a medium level of educational achievement. Applying a factor and cluster analysis five target groups for organic products were identified (ISOE, 2003):

- The Holistic Convinced Consumer: 42%
- The Successful and Demanding Consumer: 23%
- The 50+ Health Oriented Consumer: 17%
- The Cautious and Sceptical Consumer: 13%
- The Young and Undecided Consumer: 5%
Although these target groups show different attitudes, motives and preferences for organic food and they participate in the market with different shares, every group is of importance for the further development of the market (ISOE, 2003).

The strongest target group with the highest buying frequency are the ‘Holistic Convinced Consumers’. These will include with a two thirds percentage of women, mainly empty-nesters at the age of 40 to 60 featuring middle to high level of education and income. They are characterized by the sense of responsibility towards environment, social and political engagement and appreciation of enjoyment. For them healthy nutrition is important as they preferably cook regional, seasonal and fresh. This group informs other consumers about organic nutrition, knows organic brands and labelling as well as the offer of organic products. The ‘Holistic convinced consumers’ know where to buy certain products and approve longer distances. Basically they favour purchasing in organic and wholefood shops, on weekly markets, in health shops and in organic-supermarkets (ISOE, 2003).

The second most important group is the one of ‘Successful and Demanding Consumers’ that contains about 80% women. The 30 to 50 years old metropolitans are partly non-working women that educate children, or part-time working women who are able to spend time on wellness, sports and social matters. The high educated consumers feature most of the time high income. Nutrition is important although they consume organic-convenience products during the week for practical reasons. Organic products are consumed for the reason of the well-being of their children as well as due to health aspects and status symbol. The purchase locations are similar to the ones of the ‘Holistic Convinced Consumers’ plus conventional supermarkets (ISOE, 2003). The ‘50+ Health Oriented Consumers’ are an older consumer group that lives in the countryside in small towns in one- or two-persons households with low to middle income. Traditional values, family and home are highly important for them. Reflecting concerns of health they actively allocate nutrition. The naturalness of organic products is an incremental advantage for this target group that pays attention to ingredients and packaging information. Due to medium to low budget they have to mind the price when purchasing organic products. They also buy their products at weekly markets, health shops, fruit- and vegetable shops and supermarkets (ISOE, 2003).

All in all, for all three explained target groups a high significance of nutrition and selection of nutrition can be observed. Another study conducted in Germany by AC Nielsen (2006) confirms the high significance of organic products for elder target groups of empty-nesters and seniors. In the context of the EU project OMIRAD (Zanoli et al., 2004) focus groups and laddering-interviews were hold with occasional and constant organic consumers in Austria, Germany, Denmark, Finland, France, Italy and Great Britain. Thereby organic consumers were defined as good educated humans with a relatively high awareness for health, social issues and environment. Moreover families with young kids were associated with eco consumers. Income was on the one hand side estimated middle to high but there could have been also identified organic consumers with relatively low income whose attitude was of higher importance than their budget. Furthermore in many countries organic consumers are related to alternative humans, in others to elitism and snobbism.
However there are several other studies that describe further classifications and potential target groups: Yiridoe et al. (2005) for instance state among others environmentalists, people with phobia of food, nutrition conscious people, humanists, socially minded humans and hedonists as buyer groups of organic food. Nevertheless Spiller et al. (2004) identify ‘high achiever singles’, ‘Dinks (Double Income no Kids)’, ‘young families with small children’ as well as ‘seniors’ as target groups for organic nutrition (Spiller et al., 2004, p.16). According to Zanoli et al. (2004) especially the presence of (small) children in a household are influencing factors to buy organic food. Furthermore Zanoli at al. (2004) state that the constant European organic consumer is more educated, knows more about organic food and was probably converted to organic not because of coincidence or fad but for the reason of critical occurrences (Parenting or health problems). Food scandals and trends might be of importance for occasional consumers.

Zanoli et al. (2004) confirm that high income is an important characteristic of consistent organic consumers. Nevertheless this perspective is not represented in every country. Especially for constant organic consumers the consumption of organic food is more a question of attitude than high available income (Zanoli et al., 2004). The available income seems to rather influence the amount of purchased organic products than the general willingness to buy (Fotopoulos and Krystallis, 2002). Moreover Zanoli et al. (2004) argue that the majority of organic consumers are in the age of 25 to 60 years. Neither employment status nor gender seems to influence the consumption of organic food (Zanoli et al., 2004). In contrast to that many other studies describe that women in general are the typical organic consumers (Fotopoulos and Krystallis, 2002; Yiridoe et al., 2005).

2.6 Summary of the chapter

To summarize, health claims can be defined in different ways. Nevertheless the most appropriate one for this research topic seems to be the one of the EU ‘Health Claim regulation’ which states that health claims are “any claims that explain, suggest or imply that a relationship exists between a food category, a food or one of its constituents and health” (Asp and Bryngelsson, 2008, p. 1211S). Concerning the perception of health claim advertising on conventional food it could have been observed that there is a correlation between both variables (Jew et al., 2008). Nevertheless this correlation depends on the formulation of the claim and the type of product that is promoted (Hailu et al., 2009). Moreover it could have been determined that the positive correlation is often linked to the promoted health factor (Trijip and Lans, 2007). Regarding the definition of the second main term, ‘organic’ the researcher identified the following key characteristics: Organic agriculture seeks for a sustainable production that changes the natural haunt of plants and animals as little as possible in order to offer an alternative to conventional products for environment- and health-conscious consumers. On the subject of buying motives for organic nutrition there could have also been observed many different perspectives. Basically the motives can be divided in individual and selfless motives encouraging purchasing organic nutrition. While for instance taste, well-being, food safety and health belong to individual motives, animal welfare and environmental protection belong to selfless motives (Michaelidou and Hassan, 2008). Nevertheless one can say that individual motives dominate selfless motives (Spiller, et al., 2004), whereby health plays the most important role (AC
Nielsen, 2006). Also the typical consumer group for organic nutrition cannot be uniformly identified. Nevertheless in most of the investigations, women are seen as more consistent organic consumers than men (Fotopoulos and Krystallis, 2002; Yiridoe et al, 2005).
3. Literature Review

This section describes the theory of consumer behaviour in general, followed by a paragraph containing consumer behaviour in the context of ecologic consumption and finally an explanation of the Øko-foods-models with its various variables. The Øko-foods-model is applied later on in the empirical investigation on the current research topic.

3.1 Consumer behaviour

According to Engel, Blackwell and Miniard (1993) consumer behaviour concerns actions that are directly related to the purchase, the usage and the removal of goods and services. Included are decision making processes that precede and determine these actions. However Kroeber-Riel and Weinberg (1999) extend this term by differentiating consumer behaviour in a proper and in a wider sense. This differentiation is reasoned by the fact that the term consumer behaviour is used in different senses. Consumer behaviour in a proper sense means human behaviour during the purchase and the consumption of economic goods. In contrast to that consumer behaviour in a wider sense deals with the general behaviour of end-consumers of material and immaterial goods. The authors point out that it is difficult to isolate such a complex term against other human manners. In their view a rough conceptual distinction of the research area is enough.

According to Schulz (1997) the explanation of the past and current behaviour as well as the proximate prediction of the future behaviour of the consumer is quite important for the scope of consumer behaviour research. In order to better describe and explain consumer behaviour, there were created several models. As all models they are simplified images of the reality. In order to explain and clarify consumer behaviour, influencing factors have to be identified and related to each other. The most important models can be systematized by means of different criteria. Among others by the philosophy of science, by the level of abstraction and by the explanatory approach of the different models.

**Figure 3: Models of consumer behaviour (Schulz, 1997, p. 35)**

Since the philosophy of science one differentiates between economic and non-economic models. Economic models can be again subdivided into macro- and microeconomic approaches. Thus either the unity of all consumers in a national economy or single households are seen as decision unities. Thereby purchase decisions are reasoned by monetary variables as price of the good and income.
(Meffert, 1971). However non-economic models are approaches that come from behavioural science as sociology and psychology. Here human behaviour in the market is prioritized (Strecker et al., 1996). According to the level of abstraction there are total and partial models. Total models consider all influencing factors on the consumption behaviour simultaneously trying to explain the whole purchase and decision behaviour. In contrast to that partial models are just related to different phases of consumer behaviour and thereby do not consider all influencing factors (Berndt, 1996).

Trying to mould consumer behaviour shows that only sections of the behaviour of consumers are visible for the observer. Visible are factors as socio-demographic characteristics or environmental influences (stimuli) that impact on the consumer and his concrete purchase actions (reactions). However the purchase decision itself that occurs in the consumer (organism) cannot be observed. Therefore the organism is seen as a not visible ‘black box’ (Meffert, 1991). The differentiation of visible and not visible segments builds the distinction of structural models and stochastic models. Whereas structural models (S-O-R models, stimulus-organism-response models) illuminate and reconstruct the black box by relating stimuli and reactions (Weinberg, 1991), stochastic models substitute the black box by random mechanisms. The last ones therefore leave inner processes out of consideration and are called S-R models (stimulus-response models) (Berndt, 1996).

3.1.1 General consumer behaviour models

Two famous general consumer behaviour models are the one of Howard and Sheth (1969) and the one of Blackwell, Miniard and Engel (2001), who tried to integrate all important determining factors in one behaviour model and therefore developed according to the classification above total models. Howard developed the first consumer decision-model in 1963, which was evolved further in 1969 by Howard and Sheth to become the ‘Theory of Buyer Behaviour’ (Howard and Sheth, 1969). According to Foxall (1990) it delivers “a sophisticated integration of the various social, psychological and marketing influences on consumer choice into a coherent sequence of information processing” (Foxall, 1990, p.10). It was the authors’ intention to create a comprehensive model to analyse a wide range of purchasing scenarios (Loudon and Della Britta, 1993). Input variables are environmental stimuli that influence the consumer. These stimuli can either be significant stimuli as products and brands that the buyer confronts (Loudon and Della Britta, 1993), or symbolic stimuli as the representation of products and brands constructed by marketers or social stimuli as the influence of family or other reference groups (Howard and Sheth, 1969). The intervening variables can be classified in two categories which are described as perceptual and learning constructs. The former includes sensitivity for information, perceptual bias and search for information which serve to filter, control and process the received stimuli. The six learning constructs are the following: Motive, evoked set, decision mediators, predispositions, inhibitors and satisfaction. This process of learning influences the extent to which the consumer considers future purchases and seeks for information. According to Howard and Sheth (1969) consumer decision making differs in light of the attitude towards the brand which is often regulated by the consumer’s knowledge and familiarity with the product. Exogenous variables contain a number of external variables that can tremendously influence the purchase decision. Since Howard and Sheth (1969) these variables contain the history of the
buyer up to the beginning of the period of observation. The five output variables attention, comprehension, attitude, intention and purchase behaviour in their progressive steps outline the buyer’s response.

According Loudon et al. (1993) the coverage of how the variables of the model interact with each other is a key strength. Moreover the model was praised for its coherent integration of social, psychological and marketing influences as well as for the reason that Howard and Sheth cater for different types of purchase decisions (Loundon and Della Bitta, 1993). However Neman (1972) states that the model’s validity is often challenged due to the lack of empirical work, employing scientific methods, examining the organisation of the model and the integration of individual constructs. Moreover explicit measurement of the purchase decision is difficult for the reason of the many unobservable intervening variables (Loundon and Della Bitta, 1993). Whereas Howard and Sheth tried to develop a generalizable theory Loudon at al. (1993) criticised the unsuitability to explain joint decision making.

The consumer decision model of Blackwell, Miniard and Engel (2001) was originally developed in 1968 by Engel, Kollat and Blackwell and has gone through numerous revisions. Many of the elements of the model are similar to those presented in the theory of buyer behaviour of Howard and Sheth (1969); however the structure and relationships between the variables differ. The model is structured by a decision process consisting of seven different stages: need recognition, information search, evaluation of alternatives, purchase, post purchase reflection and divestment. Thereby the consumer is influenced by two main factors. First of all by stimuli that are received and processed by the consumer with memories of past experiences and secondly by external variables as environmental influences or individual ones. Environmental influences contain social class, culture, personal influences, family and situation. However individual influences include consumer resources, motivation and involvement, knowledge, attitudes, personality, values and lifestyle (Blackwell, Miniard et al., 2001).

One key strength of the model is that the scientists had continued to evolve it since the original publication. Thereby they improved the explanatory power of the model considering advances in consumer behaviour theory. One progression was the integration of the facts consumption and divestment which play important roles in contemporary definitions of consumer behaviour (Peter and Olson, 2008). According to Foxall (1990) the model provides a clear figure describing the process of consumption thus making it easy to comprehend. However Erasmus et al. (2001) argue that the mechanistic approach is too restrictive to consider the variety of consumer decision situations appropriately. Loudon and Della Bitta (1993) criticised the environmental and individual variables for the reason of the vagueness of their definition and role within the decision making process. They state for example that the influence of environmental influences is realised but their affecting role in relation to the behaviour is not well developed. Moreover the influences of individual motives for the purchase are just hinted at the need recognition stage.

Basically both general models are applicable on the examination of ecologic consumption behaviour (Balderjahn, 1986). Furthermore both models feature similarities in relation to the influencing variables (Klausegger, 1995). However this statement has to be relativized as only parts of the described
theories are empirically verified. Thus one can assume that these theories seem to be very difficult to investigate. Moreover these models are most of the time concepts that show influencing factors but do not explain the correlation of the intervening variables (Pepels, 2005).

3.1.2 Ecological consumption behaviour models

As we have seen in the previous segment, general models as the two above are applicable to the measurement of ecological consumption behaviour. Nevertheless scientists suggest more specific models that consider value orientation (Ester, 1985). Value orientation is an important variable in the light of ecologic consumption behaviour as it is seen as behaviour-forming in relation to lifestyle, beliefs and attitudes (Balderjahn, 1986). One model that suits for the measurement of ecologic consumption behaviour is the value-behaviour model of Vinson, Scott and Lamont (1977) and Dahlhoff (1980) which served for several investigations concerning environmental conscious buying behaviour (Klausegger, 1995). Central component of the theory of ecologic consumption behaviour is the value-behaviour system. Global values are perceptions of desirable things that express individual life goals. Moreover values serve for the formation of evaluation criteria and as guideline for purchase decisions (Dahlhoff, 1980). This aspect is for the analysis of ecologic consumption of high importance since product attributes as environmental consciousness compete with price, performance and comfort. Balderjahn (1986) differentiates between global values themselves as e.g. a wish for comfort or a wish for harmony with the environment and the meaning of the global values (e.g. strength of the wish for comfort). Area-specific values are in comparison to global values more numerous and relate to constrained areas of human life as e.g. social or religious areas. In contrast to values, attitudes are related to concrete objects as products and are rooted weaker than values. Due to the fact that the transitions between global and area-specific values and attitudes are fluent, these three levels cannot be delimited. On the behavioural level, the examined action, e.g. the purchase of a specific product occurred. Between the different levels there is a reciprocal interference detectable as global values influence area-specific values and attitudes. However the model contains a mutual causal relationship whereas the converse direction is significantly less strong (Dahlhoff, 1980).

Another model for the examination of ecologic consumption behaviour is the one of Balderjahn (1986). Balderjahn structures the variables in antecedent variables that contain demographic and socio-economic variables, different socialization influences, the influence of media and theoretical concepts. These theoretical concepts include a value system consisting of eight personal values, a three-dimensional concept of attitudes, four psychographic personal characteristics, the locus of control and five different types of ecologic conscious consumption behaviour.

According to Klausegger (1995) also the last two models are applicable to examine consumption behaviour of organic food. Nevertheless they are also just partly empirically verified which again indicates that these theories are difficult to investigate. Furthermore focus of the current investigation is the identification of the influence of health claim advertising on the consumption of organic food products. In order to answer this research topic the structural model developed by Suzanne C. Grunert (1990), which considers besides environmental aspects also nutrition awareness, seems to be the appropriate one.
3.2 Øko-foods consumption model

Figure nine illustrates the adapted so called structural model of Suzanne Grunert (1990) which explains the relevant constructions and variables of the model as well as their causal relationships to each other.

![Figure 4: Structural model (Adapted from: Grunert, 1990)](image)

The basement of this model is the hierarchy system of values, attitudes and behaviour. Value orientation is abstract social cognitions that enable the adaption of an individual to his/her environment. They serve as the base of which attitudes and behaviour can be deduced. Differences in value orientation lead to distinct differences in attitudes and behaviour. However attitudes are less abstract social cognitions which develop similar as value orientation from the absorption, organization, integration and the processing of relevant information. They support the interaction between individual and environment with the aim of optimal functioning. Attitudes are seen as mediators between abstract cognitions and general dispositions on the one hand side and specific behaviour on the other hand side (Grunert, 1990). Thus one can assume that aesthetic, ethical and religious attitudes influence the choice of nutrition (Grunert, 1989). Attitudes are often understood as a 3-component-construction, consisting of a knowledge component, an emotional component and an action component.

For the application of the hierarchy system of values, attitude and behaviour on the organic food consumption two different types of attitudes can be differentiated: First of all the attitude towards ecological relationships which is here environmental consciousness and secondly the attitude towards nutrition in general and especially healthy eating habits, thus nutrition awareness (Grunert, 1990). The differentiation between these two attitude constructions is theoretically reasoned by the perception that different motivations underlie specific behaviour. Thus consumers can buy organic products for personal reasons as health, hence nutrition consciousness or for societal reasons as environmental protection, so environmental consciousness. Nevertheless Grunert assumes that both attitude constructions are related to each other (Grunert, 1990). For this investigation environmental consciousness is neglected as nutrition awareness is more relevant to answer the research topic. This model shows that the perception and evaluation of product attributes is affected by value
orientation and the above explained attitude construction. Behaviour is defined as observable acting. Basically consumer behaviour can be observed at the level of purchase and usage or consumption of the product (Grunert, 1990). The construction of the socio-economic situation consists of demographic and socio-economic characteristics of the consumer as age, gender, level of education, professional status, income and so on. These facts are important for the segmentation, e.g. for multiple group comparisons. Moreover several studies showed that age, educational level, family status or the size of households influence organic consumption patterns to different degrees (Grunert, 1990).

3.2.1 Value orientation

The basic structure of the structural model is grounded on the hierarchy system of values, attitudes and behaviour of the human personality which is used for the explanation of the human behaviour (Grunert, 1990). According to Balderjahn values are aims and wishes in life. Values are passed from generation to generation and build the base for societies. However Howard (1977) argues that for some people values serve as a norm for judgement or guidance, which is for the examination of the consumption of organic food of high importance as nutrition and environmental conscious product attributes have to compete with price, comfort and performance. Values appear as influencing factors on the lifestyle of consumers and thereby indirectly determine the attitude in respect of a product and the purchase intention. Thus on the one hand side they influence lifestyle and on the other hand side there is regeneration with societal institutions and norms. However Rokeach (1973) defines values as beliefs for terminal values and instrumental values that feature temporary stability, relation to objects and centrality. Nevertheless the most common definition of values in relation to behavioural scientific literature is the one of Kluckhohn (1962). He defines values as the explicit or implicit characteristic conception of desires for an individual or a group that influences the choice of available action-types, -means and -goals.

In this structural model values are placed over the other relevant variables attitude and product requirements (Grunert, 1990). Thus these variables are dependent on values and their characteristics can be explained by values (Windhorst, 1985). The relationship between values and other behaviour influencing variables are empirically proven by Lessig (1975) and are illustrated in the following figure and hierarchy. Also Rokeach (1973) presents in his hypothesis of value-attitude dimension, values as a superior category in which attitudes are embedded. Therefore values can be seen as reference system for attitudes, thus determining attitudes.
3.2.2 Nutrition awareness

The health business was growing extremely during the last decades. Also food providers concentrate more and more on the positioning of the product and thereby focus the health factor. Nowadays one can buy almost every product as a ‘light’ version with added vitamins, whole food or as ‘organic’ (Zühlsdorf and Spiller, 2012). Nutrition consciousness is as environmental consciousness a complex, multi-layered and multidimensional construction that is related to global values and conceptions concerning life goals, performance and society (Klausegger, 1995). The construction nutrition awareness does not involve the behavioural level but is related to a complex of values and attitudes concerning healthiness. A survey of the household panel of G&I research community for Marketing in Nürnberg, Germany concerning nutrition awareness and their real behaviour showed a positive correlation between attitude and behaviour. Thus the statements of the households concerning nutrition behaviour were not just lip service but the attitude of consumers concerning nutrition really does influence buying behaviour (Klausegger, 1990). The nutrition awareness construction is divided into four segments: general interest in food, subjective perceived impact of meals, interest in healthy nutrition and general knowledge about food. General interest in food is considered as the level of interest for the quality of food, thus also as condition for a perceived difference between conventional products and organic products. Subjective perceived impact of meals is strongly related to the interest in food. Thereby it is vital to understand how respondents feel after having had a meal. The interest in healthy nutrition is seen as a good predictor for the interest in organic food. It shows the knowledge concerning nutritional value of food in contrast to the just mentioned enjoyment factor (Grunert, 1990).

3.2.3 Perceived product attributes

The perceived and as relevant evaluated product attributes are key variables for this model. (Grunert, 1990). One important product attribute for nutrition is food quality. According to Hoffmann (1987) food quality is traditionally defined as an expression of all observable and naturally measurable substance priorities in respect of different demand profiles. This definition does consider the consumer but not to the extent as it is needed for this work. Therefore the consumer oriented definition which summarizes
that quality is the expression of all positive influencing factors on consumer vitality is prioritized here (Hoffmann, 1987). According to Meier-Ploeger (1988) nutritional quality is in respect of the classic nutrition science primarily determined through trade requirements as wage, format, size, colour and accuracy. Moreover it is evaluated through a high percentage of positive ingredients as vitamins, minerals, roughage, proteins, fats and carbohydrates and simultaneously a low percentage of negative substances as heavy metals, pesticides, nitrates and toxins. Thus quality is defined by chemical analysis concerning existence or lack of specific substances (Leitner, 1992). Klausegger (1995) argues that the norm of consumers for the judgement of food quality is on the one hand side enjoyment (sensory values as taste, smell, appearance and consistency) and on the other hand side usage and adequacy (storability and cooking characteristics). Nevertheless food quality contains beside objective criteria also subjective components that are affected by social and societal values that result from product environment and product image. These ideal characteristics contain the quality parameters social values (image and prestige components as young, dynamic or healthy that are artificially developed by marketing activities), ecological values (eco-friendly agriculture) and political values (Klausegger, 1995).

In order to explain the demand for ecological food it is necessary to know which product features are perceived by the consumer (Klausegger, 1995). This work focusses on the nutritional quality in respect of health and nutritional benefit. Important influencing factors for the increasing demand of organic nutrition is prevailing dissatisfaction regarding quality of conventional food, the assumed taste advantages of organic food, food safety and health care which entirely contribute to the perception of attributes as ‘organic’ or health claims. (See paragraph 2.2.2).

3.2.4 Attitude

An attitude is according to Triandis (1975) a mental and neutral state that is grounded on experiences and has a steering and dynamic influence on individual reactions towards all objects and situations. Thereby almost every psychological condition in which the individual has readiness to act can be embraced. Nevertheless he does not consider the necessity to combine attitudes with objects. However Thurstone regards this aspect by defining an attitude as the level of positive or negative feeling that is tied with an item (Six, 1980). A further conceptual attitude theory is the so called ‘Three-component-model’. According to this model an attitude consists of an affective, a cognitive and a conative component. The cognitive component subjects the part of an attitude that is based on knowledge and implicates a subjective evaluation of an object. The affective component considers emotions and therefore leads to an emotional or instinctive evaluation. The third component, the behaviour intention expresses the willingness of an individual to behave in a certain way. Since these three components, individuals are predisposed to react on environmental stimuli affectively, cognitively and by willingness to act (Six, 1980).

As we have seen in paragraph 2.2.1 attitudes and values are very close to each other. Nevertheless attitudes can be isolated, as they relate to specific circumstances therefore display a point of reference. Due to the fact that the transformation between attitudes and values is fluent, Irle (1983) argues that the differentiation between the two of them is gratuitous. However in the context of the
underlying structural model, values are separated and superior to the other variables. Therefore the remaining variables, as attitudes are dependent on values and can explain their degree by values (Windhorst, 1985).

**3.2.5 Socio-economic situation**

Although there could have been proved several times that the influence of socio-demographic characteristics as age, gender, household size, income and education on consumer behaviour is not uniformly clarified (Buder et al., 2010; Hoffmann and Spiller, 2010), they still constitute classic criteria to segment the market (Frank, 2008).

**3.3 Summary of the chapter**

To summarize there are many different perspectives of consumer behaviour depending on the sense. Consumer behaviour in a proper sense means human behaviour during the purchase and the consumption of economic goods. In contrast to that consumer behaviour in a wider sense deals with the general behaviour of end-consumers of material and immaterial goods (Kroeber-Riel and Weinberg, 1999). Nevertheless in order to explain and clarify consumer behaviour in general, influencing factors have to be identified and related to each other. The most important models can be systematized by means of different criteria, which are among others philosophy of science, level of abstraction and explanatory approach of the different models (Schulz, 1997). Two famous general models explaining consumer behaviour are the ‘Theory of Buyer Behaviour’ of Howard and Sheth (1969) and the one of Blackwell Miniard and Engel (2001). Basically both of them are applicable on the examination of ecologic consumption behaviour (Balderjahn, 1986). Nevertheless there are also special ecological consumption behaviour models, as the one of Vinson, Scott and Lamont (1977) and the one of Balderjahn (1986). According to Klausegger (1995) also the last two models are applicable to examine consumption behaviour of organic food. Nevertheless all of them are just partly empirically verified which indicates that these theories are difficult to investigate. Furthermore focus of the current investigation is the identification of the influence of health claim advertising on the consumption of organic food products. In order to answer this research topic the structural model developed by Suzanne C. Grunert (1990), which is based on the hierarchy system of values, attitudes and behaviour, seems to be the appropriate one as it considers besides environmental aspects also nutrition awareness.
4. Methodology

This chapter presents a review of the research methodology which was used in this work. To answer the following research question and objectives, a systematically measurement and research sequence methodology had to be constructed.

Research question
Do organic consumers imply the requirements to perceive health claims on organic products positively?

Research objectives
1. To describe how the socio-economic characteristics of the consumer influence purchase of organic nutrition
2. To describe how the socio-economic characteristics of the consumer influence the nutrition awareness of organic consumers
3. To explore the relationship between value orientation and nutrition awareness which in turn affects the perception of attributes of organic food
4. To identify the links between perceived attributes of organic food and consumer attitudes towards the purchase of organic food

Thereby the different alternatives of the research philosophies, approaches, strategies, choices, time horizons and sampling designs were analysed and gauged. Besides them the data collection and the data analysis are described. The sequence of the methodology is embarking from research developing knowledge towards research finding (Saunders et al., 2009).

4.1 Purpose of the research

The classification of research purposes are usually exploratory, descriptive and explanatory studies (Saunders et al., 2012). Considering the purpose of this work it can be clearly stated that it followed a descriptive research design. The main purpose of a descriptive research is to “portray an accurate profile of persons, events or situations” (Robson, 2002, p. 95). In other words it is aimed to estimate and describe certain phenomena of a population with certain characteristics (Saunders et al., 2009). In this regard this investigation focussed on the potential perception of health claim advertising on organic food of organic consumers; thus a phenomenon of the population. In other words this work intended to investigate in the relationship between the two variables, health claims and consumption behaviour in a descriptive way. Thereby it was important to investigate the requirements and the profile of the organic user.
4.2 Research philosophy
According to Saunders et al. (2009) there are the following four research philosophies, which are all related to the development of knowledge and the nature of that knowledge: Interpretivism, realism, pragmatism and positivism. Research philosophies show the way of viewing the world, by choosing the research strategy and methods as part of the strategy.
For this investigation positivism was applied. The positivism research philosophy is the most suitable one to observe social reality. Inherent in this philosophy is the view that it is possible to measure social behaviour independent of context and that these social phenomena are ‘things’ that can be seen objectively, in a value-free way (Saunders et al., 2009). This measurement of social behaviour was conducted in the present work as the phenomenon of how organic consumers can perceive health claims on organic products was investigated. Furthermore as the researcher was concerned with gaining this knowledge in a world which is objective, using scientific methods enquiry by handing out questionnaires to a complete neutral test group and evaluating the findings via analytical statistics, positivism was applied. Moreover as the emphasis of positivism is among others to measure attitudes, behaviour and opinions via surveys and questionnaires, which were needed for this work to answer the research question and objectives, positivism research philosophy seemed to be appropriate here.

4.3 Research approach
According to Saunders et al. (2009), research projects always involve the use of theory. The design of the research is dependent on the extent to which theory exists at the beginning of the research. This fact determines which of the two approaches was used in the work. For this research the deductive approach, in which a theory and hypothesis is developed and a research strategy designed in order to test hypothesis (Saunders et al., 2009) was applied. According to Hussey and Hussey (1997, p.19) deductive research is “a study in which a conceptual and theoretical structure is developed which is then tested by empirical observation; thus particular instances are deducted from general influences.” The reason for this choice was that there existed already theories about buying behaviour of ecological food (Suzanne Grunert, 1990), theories about the perception of health claims on conventional food (Williams, 2005; Trijip and Lans, 2007) and theories about organic consumption motives (Michaelidou and Hassan, 2008) on which hypothesis and objectives could have been based. Moreover this research required quantitative research in order to reach a large amount of samples to make a generalization of the organic consumption behaviour. As the inductive approach, in which data are collected and afterwards develop a theory as a result of the data analysis are basically linked to qualitative research, this was a further reason for choosing the deductive approach (Saunders et al., 2009).

4.4 Research strategy
The research strategy of a work is the approach of how the researcher will answer particular research questions and meet the objectives. According to Saunders et al. (2012) there are the following seven research strategies: experiment, survey, case studies, action research, grounded theory, ethnography and archival research.
For this dissertation the survey seemed to be the appropriate research strategy to answer the research question and objectives. Surveys allowed the collection of a large amount of data from a sizeable population to generate findings that were representative for the whole population. Moreover by using a questionnaire data could have been standardized, which allowed easy comparison. Besides that the survey strategy enabled collecting quantitative data which could have been analysed quantitatively using descriptive and inferential statistics and suggested possible reasons for particular relationships between variables. Furthermore applying this strategy gave more control over the research process and when sampling was exerted, findings that were representative for the whole population could have been generated. All these facts were definitely needed in order to answer the research question as well as the research objectives. In order to generalize the organic consumption behaviour in terms of health claim advertising, a large amount of data from the end-user population was required, which could have been realized by surrendering questionnaires. Moreover these data could have been gained in a highly economical way in comparison to other research strategies as e.g. experiments which are much more time and budget consuming. As there was a strict time and budget constraint this was a further reason to choose the survey as the appropriate research strategy for this dissertation (Saunders et al., 2012).

4.5 Sampling technique

According to Saunders et al. there are two different sampling techniques: Probability and non-probability sampling (2009). For this dissertation non-probability sampling was applied. Although probability sampling is the technique which allows taking the needed generalizations by means of statistically random selection of samples within a sampling frame, the non-probability technique was chosen for this work (Suanders et al., 2009). A reason for this decision was that there was no sampling frame available that could have been used for the investigation. Moreover probability sampling is much more time and budget consuming than non-probability sampling. Consequently the sample had to be selected by non-probability sampling which provides several alternative techniques to select the sample. Thus the so called quota sampling technique which also allows generalizing about the population, was applied (Saunders et al., 2009).

Defining the technique

For the reason that there was no sampling frame available and there were limitations concerning time and budget, non-probability sampling was applied in this dissertation. Moreover due to the fact that the topic implied a generalization of consumer behaviour, quota sampling was chosen for this topic as it is the only non-probability technique which allows representing the population and generalizing in a statistical sense. The representation of the whole population was based on the premise that the variability in the sample for various quota variables was the same as that in the population. Quota sampling is therefore a type of stratified sampling in which selection of cases within strata is entirely non-random (Saunders et al., 2009). The calculations of quotas were based on relevant and available data and were usually relative to the proportions in which they occurred in the population. The quota stated the number of how many data had to be collected of each specific group. The collected data combined provided the full sample. The literature criticizes this sampling technique, arguing that due
to the fact that interviewers can choose within quota boundaries whom they interview, the quota may be biased. However, this research sought to understand drawing data from a representative sample and making generalizations which could have just been done via quota-sampling as there was no sampling frame available (Saunders et al., 2009). For this dissertation the stratification that was used, was gender. According to the German National Nutrition Survey II in which 13,074 Germans participated, 54% females and 46% males, 61% women are organic consumers while only 39% of the German men are organic consumer (Hoffmann and Spiller, 2010). This result might be caused by the different nutrition behaviour of females and males. Statistics show that women are in general more interested in eating healthy than men are (Focus, 2012). Based on these numbers the quotas for this dissertation were calculated. Hence there were asked 61% female organic consumers and 39% male organic consumers.

![Figure 6: German National Nutrition Survey II (Adapted from: Hoffmann and Spiller, 2010)](image)

**Defining the population and the sample size**

Concerning the samples that were surveyed it can be said that all respondents were organic consumers that partly or exclusively buy organic products. It was important to exclusively interview organic customers as it had to be analysed if organic consumers imply the requirements to perceive health claims on organic products positively. Moreover the group of respondents had to display the requirements given by the quota sampling technique, explained in the previous paragraph and therefore looked like the following:

61% of the participants were female while 39% were male. Concerning age the respondents were rather older than younger consumers. Hence 48% were between 46 and 55 years old and even 21% of the respondents were older than 55 years. Nevertheless there was also significant group of younger respondents between 36 and 45 years old. Concerning the educational level of the participants by far most of them had a university degree with 68% followed by apprenticeship with 19%. In terms of income it showed up that the range of a monthly net income was rather moderate. Consequently 44% had a monthly net income between 1100€ and 1500€ and 41% had an income between 600€ and 1000€. The research of this work considered only organic consumer. Thus it was not surprising that all of the respondents purchased organic products anyhow. However 51 of the 103
respondents mentioned that 26% up to 50% of their groceries are organic products whereas 19% said that they even buy more 50% organic products.

Besides that in general the researcher had to spend time ensuring that the sample was representative, had to design and pilot the data collection instrument and had to ensure a good response rate. Concerning sample size, decisions were basically governed by the need to have sufficient responses in each quota in order to enable subsequent statistical analyses to be undertaken. According to Saunders et al. this size often amounts 2,000 to 5,000 samples (Saunders et al., 2009). Nevertheless the sample size for this work was about 100 filled questionnaires as there were time and budget constraints.

4.6 Research choice
To recap, we have noted that this work represented a descriptive research design, was following the positivism research philosophy and was conducting a deductive research approach by testing certain hypothesis through survey. However it still needs to be clarified if findings were drawn by a quantitative or qualitative approach.

There are several choices of research methods. In choosing the research method one will either use a single data collection technique and corresponding analysis procedure, the so called mono method or one can use more than one data collection technique and analysis procedure to answer the research question. The last method is called multiple methods.
Quantitative research in a mono-method way was considered to be the appropriate method for this dissertation topic. Mono-method is a single data collection technique that can either be quantitative, such as questionnaires with a numerical data analysis or qualitative, such as in-depth interviews with qualitative data analysis. As it was needed to generalize if organic consumers imply the requirements to perceive health claims on organic products positively whereby the population should have been represented, a high amount of data from end consumers was required. For this purpose data were gathered through self-administered questionnaires that could have been easily compared after the collection. Qualitative research would not have been appropriate for this investigation as a high amount of data was needed in order to answer the research question which does not allow qualitative research. This fact reasoned why the mono-method way with quantitative research was applied.

4.7 Time horizon
With regards to time horizons according to Saunders et al. (2012) there are two different types of time horizons. These are cross-sectional and longitudinal. In this research the cross sectional time horizon, in which researches are taken of a particular phenomenon at a particular time, seen as a ‘snapshot’ was applied. One reason for this choice was that there was a restricted time frame to finish the dissertation which could not have been satisfied by using longitudinal time horizon in which research is taken over a period of time, seen as a series of snapshots in a ‘diary’ perspective. Moreover the advantages of observing people or events over a longer time are evaluated differently. For instance Malhota and Birks et al. (2006) argue that the sample in longitudinal research in contrast to cross-sectional research remains the same over time. Hence the same people are studied over a long period of time. Nevertheless Saunders et al. (2012) state from a critical perspective that the major disadvantage of using a cross-sectional time horizon is that it does not allow detecting changes. However the restricted time period to finish the dissertation predominated the advantages mentioned by Saunders et al. concerning longitudinal studies and therefore cross-sectional time horizon was chose.

4.8 Data collection

Primary and secondary data
Data can be achieved from primary and secondary data collection. Primary data is information which is gathered by the researcher because of the interest in the specific motive of the study. In contrast to that secondary data is information gathering from already existing sources (Saunders et al., 2009). Saunders et al. (2009) suggest that secondary data should be exhausted before primary research is conducted to help the researcher developing a good understanding and insight into previous studies and emerging trends that could be relevant to the research subject. In order to answer the present research question and the objectives of this study, primary data collection was employed, whereby new information that could have been added to theories discussed in the literature review were gained. However, secondary data such as articles and research papers also provided a useful source, as the time was limited, they were of high quality and they were a good comparison to the new collected data (Saunders et al., 2009). According to Saunders et al. (2009) surveys and observations
are the two techniques for the collection of primary data. However since Malhota and Birks et al. (2006) both of them need a procedure for standardization of the collected data in order to analyse them uniformly in a consistent way. For the purpose of this dissertation, questionnaires were distributed to organic consumers in order to understand their perceptions of health claim advertising on organic food. The questionnaire was the most appropriate tool to gain primary data for this dissertation as each person was asked to respond to the same set of questions which provided an efficient way of collecting responses from a large sample and enabled easy comparison of data (Saunders et al., 2009). Moreover the only way to evaluate buying behaviour was observing or asking the consumers directly. Furthermore a high amount of data was needed in order to make generalizations. All these requirements could have been fulfilled by using questionnaires.

Framework of the questionnaires

The design of the questionnaire differs according to the way it is administered and the amount of contacts the researcher has with the respondents. Basically there are two types of questionnaires: for one thing there is the self-administered questionnaire and for another thing there is the interviewer-administered questionnaire. Self-administered questionnaires are either administered electronically via Internet or Intranet or they are posted to the respondents that return them via post after having them completed, or they are directly delivered by hand to the respondent and collected later on. However all of them are usually completed by the respondents (Saunders et al., 2009). All of them feature advantages and disadvantages. Some are more reliable and of more control and some less. The choice of the type of questionnaire depends on several facts. At first the choice is related to the research question and the objectives that had to be answered. Moreover it depends on the characteristics of the respondent from whom the researcher wants to collect the data and the importance of reaching a particular person. Other important facts are the importance of respondent’s answer not being contaminated or distorted and the size of sample the researcher requires for the analysis. Furthermore the type of questions that are going to be asked to collect the data and the number of questions that need to be asked are influencing factors (Saunders et al., 2009). Besides that there are also administrative influencing factors as available time to complete the data collection, financial implications, availability of interviewers and the ease of automating data entry (Saunders et al., 2009).

For the reason of time and budget constraints as well as the need for a relatively high amount of responses for this work primary data were collected by self-administered questionnaires. They were administered in the internet-mediated way and the delivery and collected way. The second method, the conventional paper written format supported the reliability by giving the opportunity to control the completion process as one could have get sure that the right person was filling the questionnaire. Moreover moments of doubt during the completion of the questionnaire could have been clarified. Thereby questionnaires were handed out in front of a special organic grocery supermarket called ‘basic’ in ‘Schleißheimer’ street 158-162, Munich, in front of the health shop called ‘Vitalia Reformhaus GmbH’ in Hohenzollern street 88, Munich and in front of the supermarket called ‘Rewe’ that offers organic products in ‘Schleißheimer’ street 137, Munich on the 17th, 18th and 19th of April as
well as on the 25th and 26th of April. As this investigation should only encompass organic users, respondents were asked whether they consume organic nutrition before handing out the questionnaire. Nevertheless this fact was ensured by a further question in the questionnaire. The internet based email method gave the opportunity to cover a wider geographical reach and thus allowed making generalizations. An email with a hyperlink to the questionnaire was sent to the participants. Thereby the resulting data could have been seen as a credible representation of the German population and were therefore able to represent a reliable answer on the research questions. Another advantage of the internet based method was that the respondent could have chosen the moment of answering in a comfortable and private space (Sekaran and Bougie, 2010).

The design of the questionnaire plays an important role as response rate and the data that need to be collected depend to a large extent on it as well as on the structure of the questionnaire and the rigour of the pilot testing. A valid questionnaire enables accurate data to be collected and a reliable one means that data are collected consistently (Saunders et al., 2009). According to Foddy (1994, p.17) validity and reliability mean that questions and answers are making sense. In particular, that "he question must be understood by the respondent in the way intended by the researcher and the answer given by the respondent must be understood by the researcher in the way intended by the respondent". In order to prevent distortion and to guarantee validity and reliability the questionnaire was designed in an objective, value-free way and handed out to a neutral test group. As the sample was the German population the questionnaire was designed in the German language. The type of questions that were asked, were closed questions that provided a number of alternative answers from which the respondent was instructed to choose one. It was a mixture of list questions, category questions and rating questions. Thereby the questions usually could have been answered quicker and easier and the responses were easier to compare as they had been predetermined. Besides the type of questions also order and flow are of importance. They should be logical to the respondent rather than follow the order in which data are needed (Saunders et al., 2009). Moreover the layout, the cover letter, the introduction, closing and the length of the questionnaire are of importance concerning attractiveness, perception and ease of filling in responses (Saunders et al., 2009). Please see appendix figure 1 the original German version of the questionnaire and appendix figure 2 the translated English version of the sample questionnaire.

Pilot testing
Prior to using the questionnaires in order to collect data from the respondents it should be pilot tested. According to Saravanavel (1987), the pilot study enables the researcher to get a systematic knowledge of the universe and its population on which the investigation is based. Moreover he argued that it helps identifying the variables that are involved in the research, eventual difficulties in the procedure for asking or responding the questions, the nature of the problem as well as the nature of respondents. Furthermore he states that it helps identifying aspects or even errors the researcher was unaware of before the pilot study took place and can incorporate them for the final questionnaire version. Besides that the needed time to fill the questionnaire can be checked.
For these very reasons a pilot study has been conducted for this work. Therefore ten samples were chosen from a pool of friends and colleagues who participated already at several studies. In order to get the same conditions and to validate the pilot test, the test groups were chosen similar to the main group of respondents concerning their characteristics. The result of the test showed that for one thing the questionnaire was too long. The number of questions was too high and particular questions had too many answer opportunities to fill the questionnaire in a proper time frame. Therefore the questionnaire was shortened by four questions from 18 to 14 questions as well as the answer opportunities of some of the questions were reduced. Thereby it was important to not loose important information that would have contributed to answer the research question and its objectives. When excluding these five questions, the researcher watched out for questions that were similar to other questions and answered more or less the same content but by another way or questions were summarized. Thereby almost no valuable information got lost. An example was that, in the premier questionnaire the respondent was requested to answer if he/she strongly disagrees, disagrees, is undecided, agrees or strongly agrees with certain statements as ‘I try to eat a lot of fruits and vegetables’ or ‘I eat a lot of sweets because I like it’ . A second question was if the respondent especially seeks for healthy nutrition. These two questions should have determined whether the respondent is nutrition aware or not. To shorten these actions and to make it clearer, both questions were eliminated in the new exemplar and a new question was designed by pleading the respondent to rate on a scale from one to five, how nutrition aware he/she is. For another thing the pilot testing revealed that the questions were too complex to calculate the different correlations between the variables to answer the research objectives in a proper sense. Therefore some constructions of questions and their answer opportunities were changed in order to calculate and analyse relationships and interdependencies more easily. Moreover some answer opportunities had to be rephrased to make them a bit more precise in nature as they were partly misunderstood by the test respondents. Besides that the structuring and sequence of the answer alternatives of some questions was changed in a little manner in order to avoid steering the respondent in a certain direction. All in all the pilot testing enabled avoiding several mistakes that would have influenced the results of the investigation negatively.

Data Coding
According to Malhotra and Birks (2006) coding is the process of assigning a code, usually a number, to each possible answer opportunity of a question. An example could be a question on the gender of the respondent for which answer opportunity ‘female’ is coded by ‘1’ and ‘male’ is coded by ‘2’. This procedure has been conducted for all 14 questions, which enabled illustrating the collected data by graphics to represent and analyse the results.

4.9 Ethical issues in the research
According to Saunders et al. (2009, p. 183) ethics “refer to the appropriateness of the behaviour in relation to the rights of those who become the subject of the work or are affected by it”. Research ethics is therefore related to the formulation of the research topic, to the design and access of data, to
the way of collection, to the storage and to the analysis of data as well as to the moral way findings are reported. Thus the researcher has to ensure that the way he designs research is both methodologically sound and morally defensible to all persons that are involved in the investigation (Saunders et al., 2009).

The avoidance of harm can be seen as the essential point of ethical issues that has to be considered by the researcher. The first key stage at which ethical problems arise is when one seeks for access (Saunders et al., 2009). In this dissertation no pressure was exerted on participants in order to grand access as individuals are entitled to have privacy and should not feel coerced into participating. Moreover it had to be considered that consent to participate in a research project is not straightforward (Saunders et al., 2009). For this dissertation the returned questionnaires were taken to have implied consent. However once participants have consented to participate, their rights still had to be taken into account. Another ethical principle was objectivity (Saunders et al., 2009). The analysis and the report of data were treated in a complete neutral and objective way to not distort the findings. Moreover confidentiality and anonymity had to be guaranteed as information about a particular person could harm the person. For the stage of data processing and storage, data protection played an important role as personal data had to be stored securely (Saunders et al., 2009).

Overall the information gained through the questionnaires was only used for the dissertation purpose. They were treated confidentially by storing them safely and disposing them properly after the submission of the dissertation. Moreover the participants were clearly informed about the purpose of the research and knew in advance the information required. Furthermore there was no pressure exerted to convince anybody to participate. Thereby everybody could easily decide whether he/she wants to publish his/her information and whether he/she wants to participate or not. Moreover it could have been ensured that the participation was voluntarily. By the confidential behaviour and voluntarily created participation the right of privacy was respected.

4.10 Limitations of the research

There were some limitations for the research that have to be considered. Due to the fact that there was a time limitation, results could have been only taken in a cross-sectional way, thus as a snapshot. Changes during the time and differing results with regard to different situations could not have been covered here. A further limitation caused by time was that only a limited amount of samples could have been asked for their information. This could have in turn influenced the validity of the generalization. Regarding generalization a further limitation was the sampling technique. In quota sampling the sample has not been chosen using random selection, which made it impossible to determine the occurring sampling error. Indeed it was possible that the selection of units to be included in the sample were based on ease of access, resulting in sampling bias. A further limitation was the understanding of the target market. As the questions of the questionnaire were closed questions with a limited number of answers, ‘why’ questions could have been only answered limited which led to a constrained understanding of the sample. Besides, a barrier was that people refused participating in this research. Moreover respondents might have partly given answers of which they think they had to give to satisfy the expectation of the researcher. Furthermore participants surely
misunderstood one or another question and therefore answered in the wrong way. These facts might have led to a distortion of the findings.
5. Data Analysis

As stated above the purpose of this dissertation is, to determine if organic consumers imply the requirements to perceive health claims on organic products positively and if health claims can therefore support the purchase of organic products. In order to answer the primary research question the collected data are analysed in the following chapter.

Correlation Analysis

In order to verify the research objectives and finally the research questions, a linear correlation analysis was applied. This technique was used in order to explore the relationship and the correlation between several variables. Basically it allows identifying the interdependency of the score of one variable from the score of another variable. This interdependency should imply a linear relationship among variables, as Y is predicted from X. In general it might be said that correlation analyses go beyond descriptive statistics and thus are appropriate for the investigation of more theoretical and complex questions (Tabachnick et al., 2007). The strength of the statistical coherence is expressed by the correlation coefficient that amounts between +1 and -1. If the correlation coefficient accounts between 0 and +1, one speaks about a positive correlation. If the correlation coefficient is between 0 and -1 there exists a negative correlation (Hilbert, 1998).

Data analysis of research objective 1: To describe how the socio-economic characteristics of the consumer influence purchase of organic nutrition

Concerning the first research objective it can be said that socio-economic characteristics influence the purchase of organic nutrition differently. Rising age as well as increasing level of education influences the consumption of organic food positively, whereas there is no distinctive correlation between income and organic food purchase. Detailed data to prove this argument will be shown later on in this paragraph.

As a first step the typical organic consumer that crystallized by the data collection is determined in order to portray the general target group. According to the survey the typical organic consumer is female, is 46 to 55 years old, has a university degree and has a net income of 1100€ to 1500€ a month (See appendix, figures 1,2,3 and 4). Concerning the factor gender, it has to be mentioned that the majority of women is linked to the sampling technique as the defined quotas contained 61% women and 39% men that had to fill the questionnaire, resulting from the ‘German National Nutrition Survey II’. Nevertheless the characterization of the target group does not give indication about the relation of the different variables with organic purchase. In order to understand the interdependence between gender, age, level of education and income on organic purchase, correlations between former variables and the percentage of organic food that is purchased by the organic consumer were calculated. These results helped proving the above given argument and gave an understanding of the mutual interference of the different variables. Calculations showed that the percentage of organic food that is purchased increases with rising age. This fact can be proven by the correlation coefficient that amounts to 0,46 which implies a positive correlation between these two variables.
Moreover the survey indicated that the percentage of purchased organic food rises with the increasing level of education. As the correlation coefficient between these two characteristics accounts 0.63 one can assume that there is also a positive interdependence between these variables (See appendix, figure 5). However in terms of the relation of monthly net income and the percentage of purchased organic food, the results were different. The very slightly negative correlation coefficient of -0.18 brought along a declining line indicating a marginal negative interference of the monthly net income on the amount of purchased organic food, although not distinctive but still declining.
Nevertheless there is no real correlation between these two variables existing as the correlation coefficient is less marked. That allows concluding that people are not buying organic food due to high income, buying motives could be rather conviction and attitude towards lifestyle and the product. Apparent from the survey was, that there are consumers with a monthly net income of 600€ - 1000€ that buy above 50% of their groceries organic although most of the organic products are more expensive than conventional food.

To sum up, the results show that socio-economic characteristics influence the purchase of organic food differently as there appeared a positive correlation between rising age and increasing level of education in relation to the amount of purchased organic food, while there was shown almost no interdependence of the amount of purchased organic food and increasing income. These findings can be affirmed for the most part by other empirical studies conducted in the past. The study of ISOE in 2003 for instance showed that the strongest target group of organic consumers includes two thirds percentage of women (ISOE, 2003). Zanoli et al. (2004) had similar results in his study as definitely more women were organic consumers than men. These results might be caused by the different nutrition behaviour of females and males. Statistics show that women are in general more interested in eating healthy than men are (Focus, 2012). Concerning the variable age, findings from the literature compared to this study were also similar. According to the ISOE (2003) study the strongest target group includes mainly consumers of the age of 40 to 60 and the second strongest target groups mainly contains people older than 50 years. This fact might be caused by rising concerns regarding health, as according to Zanoli at al. (2004) consumers believe that they can retain their health by consuming organic food. Nevertheless Spiller et al. (2004) argue that young families are also a main group of organic consumers, which might be reasoned by the fact that they want to be a prototype for their children and want their children to nourish healthy. Regarding the variable education, ISOE (2003) as well as Zanoli (2004) mirror the findings of this work that organic consumers most of the time feature a high level of education. This result might have eventuated because the higher educational qualification supports responsibility and awareness. With regard to this it can be assumed that higher educated people perceive more benefits of organic food as they have deeper understanding of nutrition (Dustmann, 2006). However regarding the interdependence of income and purchased organic food, results in the existing literature are partly different. According to Zanoli et al. (2004) income on the one hand side was estimated middle to high but there were alsoidentified many organic consumers with relatively low income. This statement could have been confirmed by the ISOE (2003) study. Reasons for these results might be for one thing that in general organic food is more expensive than conventional food which causes the target group featuring high income and for another thing the consumer group with lower income can be reasoned by the attitude and conviction towards organic products which might be of higher importance than their budget (Zanoli et al., 2004). Thus opinions regarding the relation of income and purchased organic food cannot be unified.
Data analysis of research objective 2: To describe how the socio-economic characteristics of the consumer influence the nutrition awareness of organic consumers

Concerning the second research objective it can be said that socio-economic characteristics influence nutrition awareness in a similar way as the purchase of organic food. Rising age as well as increasing level of education has a positive impact on nutrition awareness, whereas there is almost no influence of available budget on nutrition awareness. These arguments will be proven in the second part of this paragraph.

At first the most important buying motives of organic consumers to purchase organic nutrition that crystallized by this investigation shall be clarified as they give a first indication regarding the general nutrition awareness of the respondents. According to this survey the two most important buying motives are for one thing the healthiness of organic nutrition and for another thing the lower amount of residues in organic food in comparison to conventional food. The first motive was chosen by 50% and the latter one by 29%.

As these two motives can be related to nutrition awareness one can assume that organic consumers in general are relatively nutrition aware. This argument can be confirmed by the results of question number eight of the questionnaire as in total 93% respondents ranked themselves either as ‘nutrition aware’ or ‘very nutrition aware’ (See appendix figure, 6). Nevertheless these results do not answer the second research objective as they do not give an explanation about the interdependence of socio-economic characteristics and nutrition awareness. In order to gain an understanding of the relation of socio-economic characteristics and nutrition awareness one needs to take a look at the correlation of the variables age, education and income on nutrition awareness. These results do not only help understanding the interdependence of the variable but they also support proving the arguments above. Calculations showed that the level of nutrition awareness increases with rising age. This fact can be proven by the correlation coefficient of these two variables which accounts 0,59 and therefore implies a positive correlation.
Moreover the investigation indicated that nutrition awareness rises with the increasing level of education. Since the correlation coefficient between these two variables amounts 0.52 it can be assumed that there is also a positive correlation between nutrition awareness and level of education (See appendix, figure 7). However with regards to the relationship of income and nutrition awareness there could not have been ascertained a distinctive correlation as the correlation coefficient amounts to -0.18 (See appendix, figure 8). After having analysed the results it was conspicuous that there are similarities between research objective one and research objective two, as the positive correlation of rising age and increasing level of education with nutrition awareness mirrors the typical organic consumer from objective number one. This fact implies that there is cohesion between nutrition awareness and the typical organic consumer, indicating that organic consumers are usually nutrition aware.

To sum up, rising age and increasing level of education correlates positively with the amount of purchased organic food, while there is almost no interdependence of the amount of purchased organic food and income. Thus socio-economic characteristics influence nutrition awareness in a similar way as they influence the amount of purchased organic food. Hence those variables that characterize an active organic consumer do also characterise nutrition aware people. Consequently one can assume that usually organic users are nutrition aware. Also Spiller et al. (2004) show in their study that organic consumers are characterized by a marked interest in healthy food and nutrition awareness.
Data analysis of research objective 3: To explore the relationship between value orientations and nutrition awareness which in turn affects the perception of product attributes of organic food

Regarding the third research objective it can be said that certain value orientations as security and control, healthiness and certainty have significant higher correlations towards nutrition awareness than others and that the increasing level of nutrition awareness affects the perception of informative product attributes, such as ingredients or organic label on organic nutrition positively.

Results show that the value orientations ‘security/control’, ‘healthiness’ and ‘certainty’ were most often ranked as ‘very important’ or ‘important’ by the respondents. It can be said that these specific values even correlate positively with nutrition awareness as all of them displayed correlation coefficients above 0.41. However ‘enjoyment’, ‘adventure factor’ and ‘aesthetics’ showed up a rather negative relation with nutrition awareness, displaying a correlation coefficient of -0.29 up to -0.56 (See appendix figure, 9-15). In order to evaluate the interdependence of nutrition awareness and perceived product attributes, it is interesting to see which product attributes were most of the time ranked as ‘very important’ by the respondents. The product attribute ‘ingredients’ was ranked by 80 respondents as ‘very important’, followed by ‘beneficial product attributes’ which was perceived by 68 persons as very important and ‘organic label’ by 63 users. In contrast to that product attributes as ‘price’ or ‘brand’ were rated as much less important as they were most of the time evaluated as ‘neutral’ or even ‘unimportant’ (See appendix, figure 16). This result is not that surprising as those product attributes that were ranked as (very) important are again features that fit to nutrition aware consumers that were displayed in the findings above (See appendix, figure 6).

However in order to understand the factual interdependencies between particular product attributes and nutrition awareness, correlations have to be examined. Results show that those respondents that ranked themselves as nutrition aware or very nutrition aware in question eight, rated ‘ingredients’ as ‘important’ or ‘very important’, thus indicating a positive correlation. This can be proved by a correlation coefficient of 0.57.
Concerning nutrition awareness and beneficial product attributes there could have also been detected a positive correlation as there revealed a correlation coefficient of 0,49 (See appendix, figure 17). In other words the higher the nutrition awareness of the respondent the more important are beneficial product attributes. And a further positive correlation coefficient of 0,57 exposed for nutrition awareness and organic label. Thus the importance of the organic label rises with increasing level of nutrition awareness.

All in all it could have been observed that certain value orientations have a significant positive correlation with nutrition awareness which in turn directs the perception of certain product attributes to a specific manner. It was conspicuous that those who rated themselves as ‘nutrition aware’ or ‘very
nutrition aware’ rated especially product attributes that support nourishing aware as ‘important’ or ‘very important’.

**Data analysis of research objective 4: To identify the links between perceived attributes of organic food and consumer attitudes towards the purchase of organic food**

Concerning research objective number four it can be said that basically product information concerning special product attributes of organic nutrition are perceived as positive, trustful and supportive and therefore create a positive attitude in the consumers’ mind towards the product. In order to answer this research objective and to prove the argument given above, it first of all had to be clarified how organic products and their product information are perceived in general. The survey showed that basically organic products are perceived as trustful products by 92% of the respondents which is the absolute majority.

Moreover the study exposed that 89% of the respondents argue that they believe in the product information given on the packaging (See appendix, figure 18) and 79% of the respondents perceive the product information positively, as supportive (see appendix, figure 19). As the majority answered that they perceive organic products as trustful products as well as that they believe in the product information and notice it as helpful, a positive attitude towards the products and their information can be assumed. In order to understand what kind of product information they effectively perceive positively, it was interesting to see why they perceive it positively. Those respondents that stated to perceive product information as positive justified their answer most of the time with the reason ‘To support my nutrition awareness and therefore my health’ or with the reason ‘To get an idea about the product location (Fair trade)’. The former answer alternative received 56% of votes while the second one received 30%.
The given reason and the entire findings reflect the results of question nine in which product attributes as ‘ingredients’, ‘organic label’ and ‘beneficial product attributes’ were rated as ‘very important’, as they can all be related to nutrition awareness (see appendix, figure 16). Thus the survey could indicate that product attributes featuring information were rated as important and perceived as positively and supportive which leads to a positive developing attitude towards the product. This positive arising attitude might in turn support the purchase of the product. To wrap up, basically organic products as well as product information are perceived as trustful and positive especially with regard to product attributes supporting nutrition awareness. This trustful perception of the organic product and its information can be confirmed by Zanoli and Naspetti (2002) and Plöger et al. (1993).

Moreover the positive perception of product information supporting nutrition awareness can be affirmed by at least some studies conducted with regard to conventional food. Grunert et al. (2000) for instance argued that product information makes it easier to convince the consumer as they observed that without this information, the interest in the food product is relatively low. They also stated that by e.g. the usage of health claims, information is getting more accessible and easier to process for the consumer. Also Bech-Larsen et al. (2001) and Tuorila and Cardello (2002) showed with their findings that there is a higher purchase intention on food with health related statements. However there are also studies that observed negative perceptions of product information. Bhaskarans and Hardley (2002) for instance argue that consumers are sceptical towards claims as they perceive them as advertising messages. Nevertheless this finding might be partly linked to the missing trust of consumers towards conventional food. As many studies as well as this study proved that organic food is basically perceived as more trustful (Plöger et al., 1993), it can be assumed that product information and especially health claims on organic food would not be perceived as advertising messages, rather as trustful and supportive information on the product.

Figure 15: Reasons for a positive perception of product information
Summary of the chapter

To summarize, the analysis of the study has shown that socio-economic characteristics influence the purchase of organic food differently as there appeared a positive correlation between rising age and increasing level of education in relation to the amount of purchased organic food, while there was shown almost no interdependence of the amount of purchased organic food and increasing income. Moreover the survey showed that socio-economic characteristics influence nutrition awareness in a similar way as they influence the amount of purchased organic food. Moreover it could have been observed that certain value orientations have a significant positive correlation with nutrition awareness which in turn directs the perception of certain product attributes. It was conspicuous that those who rated themselves as ‘nutrition aware’ or ‘very nutrition aware’ rated especially product attributes that support nourishing aware as ‘important’ or ‘very important’. Besides that the survey indicated that product attributes featuring information were rated as important and perceived as positively and supportive which leads to a positive developing attitude towards the product. This positive arising attitude might in turn support the purchase of the product. To wrap up, basically organic products as well as product information are perceived as trustful, positive and supportive especially with regard to product attributes supporting nutrition awareness.
6. Conclusion

This work provides insight into whether organic consumers perceive health claims on organic nutrition positively and if health claims therefore can support the purchase of organic products or not. The topic is based upon the tremendous changes within the food industry. Currently, there is a trend towards values concerning nutrition. Food should not only satisfy hunger and offer a taste adventure but also support our health, as it is widely accepted that eating the ‘right’ food extends life expectancy and improves quality of life (Bundesministerium für Bildung und Forschung, 2010). As a consequence, German citizens increasingly favour healthy and fairly traded nutrition. This trend is driving the increasing demand for natural and regional products and thus the growth of the organic food market (Weindlmaier et al., 2001). Moreover, statistics show that Germany is currently behind Japan and USA in terms of the third biggest market for health-enhancing nutrition (Fend, 2011). In this regard, more conventional food is promoted by health claims that feature the health-enhancing aspects of those products. Thus, a potential increasing competition for organic products could arise, which are perceived as ‘healthier’ than conventional food (Gedrich et al., 2005). In response to this, one can assume that providers of organic products could also consider the usage of health claims on their packaging. Based on this emerging situation, this work analysed the interdependence of health claim advertising on organic products and the behaviour of organic consumers. Thereby, it was of great interest to find out if organic consumers imply the requirements to perceive health claims on organic products positively and thus create a positive attitude towards the products which in turn might support the purchase of the product.

The research of this work has shown that socio-economic characteristics do have an influence on the consumption of organic products. In general, it could have been observed that organic consumers are female, above 40 years old, with a good educational background and are more likely to purchase high amounts of organic products. The same characteristics, especially a good educational background and age, correlated positively with high nutrition awareness of organic consumers. Moreover, this present work identified a causal relationship between the values orientations of consumers until the final attitude towards a product. Thereby, this causal relationship was proven by the following results: Customer values such as security/control, healthiness and certainty showed a significant positive correlation with nutrition awareness. Further, the results showed that high nutrition awareness comes along with the higher appreciation of informative product attributes such as ingredients, organic label and beneficial products attributes. Product attributes that are perceived as supportive, trustful and informative in turn create a positive attitude towards a product (Grunert, 1990). Thus, create higher chances of purchasing a product. This causal relationship showed that the potential of purchasing organic products increases when consumers are confronted with product attributes such as ingredients, organic label and beneficial product attributes (textual information/ labellings) rather than price, brand and design. This can be reasoned by the fact that the survey showed a significant negative relation of nutrition awareness and aesthetics. Moreover, this finding can be supported by the fact that the investigation revealed that organic consumers are seeking for healthy nutrition primarily. In order to identify those products that contribute to a healthy nutrition, consumers are especially seeking for supportive product information such as ingredients and beneficial products attributes. In
this regard the EU ‘Health Claim regulation’ defines health claims in general as ‘any claims that explain, suggest or imply that a relationship exists between a food category, a food or one of its constituents and health’ (Asp, Bryngelsson, 2008, p. 1211S). Following this definition health claims seem to fulfill the general facts to attract organic consumers when seeking for products that fulfill their needs. Consequently organic consumers imply the requirements to perceive health claims on organic nutrition positively and thus create a positive attitude towards the product. This might in turn lead to a potential purchase.
7. Limitations and recommendations

The last chapter is concerned with limitations of this present work and suggests direction of future research as well as recommendations on the organic food industry.

7.1 Limitations and recommendations on future research

This dissertation analysed whether organic consumers imply the requirements to perceive health claims on organic nutrition positively and thus create a positive attitude towards the products which in turn might support the purchase of the product. However each research can only cover a certain scope and therefore faces limitations. Based upon these limitations and on the discussion presented in the section prior there are further directions that future research could follow.

This work showed that health claims on organic food have the potential to create value by evoking a positive awareness of organic consumers towards the product and therefore create a positive attitude. However this statement can only be related to current active organic consumers, which is the first limitation of this work, as the perception of non-organic customers was not investigated here. A prospective research project could be to research whether health claim advertising on organic products can create a new buying motive for so far non-organic consumers and thereby expand the target group.

As mentioned above the dissertation demonstrated that health claims on organic food have the potential to create value by evoking a positive awareness of organic consumers towards the product and therefore create a positive attitude. However a further limitation is that the researcher did not compare the different perceptions of health claim advertising on organic food and on conventional food. The literature showed that health claims can also be useful to make conventional food more successful in the market (Jew et al., 2008). However according other studies health claims on conventional food can also be perceived negatively as consumers evaluate them as advertising messages (Bech-Larsen et al., 2001; Tuorila and Cardello, 2002). Besides that literature showed that organic food is most of the time perceived as much more trustful than organic food (Plöger et al., 1993). Due to these facts a further interesting prospective research could be to analyse whether the organic segment is more susceptible for health claims than the conventional segment hence whether health claims are even better positioned on organic food than on conventional food.

As already mentioned this present work found out that organic consumers imply the requirements to perceive health claims on organic products positively and thus create a positive attitude towards the products. However the research did not demonstrate the perception of any special formulation of the claim or the perceptions of health claims on different types of food. According to the literature the evaluation of health claims on conventional food is also depending on the product type. Hailu et al. (2009) observed that consumers tend to have a more positive attitude towards health claim products if these products have a long history of safe consumption and healthiness as e.g. yogurt and margarine. Moreover Devcich et al. (2007) argue that the formulation of the claim plays a significant role. However these facts are only related to conventional food. Therefore it could be of interest to find out whether the positive perception of health claims also depends on the formulation of the claim or on the type of product that is promoted.
7.2 Recommendations on the organic food industry

Regarding the results of this present work it shows a tendency that organic consumers could be a highly relevant target group for organic nutrition products promoted by health claims. This finding is derived by the fact that organic consumers mainly purchase organic nutrition due to their high nutrition awareness and their desire for healthiness. Connected to this finding, this work revealed as well that consumers are especially seeking and favouring product attributes that support them to satisfy those needs. Following these findings it is reasonable to advice companies to rather focus more on promoting their organic products with attributes that are informational and textual in character and thus are able to enlighten the consumer about the specific requirements he/she demands for organic products than on design and aesthetics. In this manner health claims seem to be an appropriate and strategic mean to attract organic consumers even more by highlighting the health enhancing features of organic products.
8. Reflection on learning

The following chapter talks about the researcher’s own learning during the MBA programme. Thereby the first paragraph contains the dissertation with its crucial events as a learning experience, followed by Kolb’s learning style model and the rediscovered researcher’s own learning style. Moreover it deals with the skills she gained as a researcher during the programme, especially during the period of writing the dissertation and finally with the future application of these learnings.

8.1 The dissertation as a learning experience

Basically conceptualizing a dissertation is a process. A process can be defined as the ‘sequence of interdependent and linked procedures which, at every stage consume one or more resources to convert inputs (data, material, parts, etc.) into outputs. These outputs then serve as inputs for the next stage until a known goal or end result is reached (Business Dictionary, 2014). More simply it can be also defined as ‘a series of actions or steps taken in order to achieve a particular end’ (Oxford Dictionaries, 2014).

Thus every single step or event of the process of writing a dissertation served as the input for the next step. Hence the defined topic contained the scope of information that had to be searched. The secondary research which was done on the base of the defined title and the research question in turn helped conducting the needed primary research in order to reach the final results for the investigation to answer the research topic. The following paragraph contains a series of these crucial events during the process and the researcher’s learning experience during these stages.

8.1.1 Defining the topic

The stage of defining the topic was more or less the most important step as every further step was based on this stage. Therefore for this process the researcher took time in order to find a topic that could have been investigated academically thoroughly on the one hand side and that was interesting for the researcher on the other hand side. Concerning the interest of the researcher it was important that the topic was a marketing one, as she had the most experience theoretically as well as practically in this subject. Moreover she is highly interested in this scope. After having decided the broad field she considered her interests more specifically. One year ago the researcher did an internship in the marketing department of Danone Ltd. where she was confronted with marketing strategies of functional food. Thereby health claim advertising played an important role. As it was of high interest to her, she researched this topic thoroughly internet based and tried to gather all the facts surrounding on consumer behaviour and the nutrition market itself. Hence she reflected on where the gap in the research lay, making an informed decision to conduct research into the area of how consumers react on health claim advertising of organic food. During this stage the researcher learned weighing her own interest and the possibilities to deliver a valid and reliable work in the given time frame.

All in all the process of defining the topic proceeded funnel-like. Beginning very broad, creating a basic frame to contain the scope and continuing more and more specifically to reach the final title.
8.1.2 Synthesizing findings and drawing conclusions
In order to write a well-founded literature review different themes had to be illuminated from various perspectives. Thus it was important to read many different books and articles to work out similarities and differences. Thereby the researcher was confronted with a huge amount of data that required her to decide which of them were important to the research. This turned out to be challenging as the researcher had to learn reflecting the literature critically to synthesize the most valuable information. Concerning the analysis of the data collected primarily she was faced with the struggle to remain analytical and not to cherry-pick answers to suit how she thought the research should go. Moreover it was always a challenge narrowing down what was useful to the investigation and what was not. Therefore she took a few attempts to come to the final conclusions. However learning reviewing things critically and drawing conclusions were two of the most valuable learnings of this project related to the researcher’s future.

8.1.3 Conducting primary research
This primary research was the first one the researcher conducted and was therefore a challenging but very rewarding task. Firstly, she had to design the investigation in the right way in order to be able to answer her research questions appropriately and to draw conclusions afterwards. Therefore the pilot testing was very useful. A further challenge was that she had to work to other people’s schedules and was not able to progress without the participation of others. She is aware that this impatience is a weakness of her working style. Moreover she had to ask unknown people to fill her questionnaire which was not always easy as she is inherently a shy person and asking people for responding a questionnaire did not come naturally to her. The fact that the researcher was aware of how other people may feel about having to spend their time and participating in a survey did not facilitate that task. However these challenges were valuable experiences as they influence characters and promote personalities. After having conducted the primary research the researcher thought about things she would do differently if she had to do it again. For one thing she would have handed out the questionnaires earlier in the given time frame, as it took long time to gather the required data and they were needed to go on working on the dissertation. Another fact she would change for a prospective research is that she would chose different moments for handing out the survey. It was conspicuous that respondents were much more relaxed during the weekend and where therefore more willing to fill the questionnaire. Hence the researcher would in future exclusively conduct surveys during the weekend, when people have more time and are more relaxed.

8.2 Learning style
According to Kolb (1984) “learning is the process of whereby knowledge is created through the transformation of experience” (Kolb, 1984, p.38). Kolb’s learning theory has four different learning styles which are all based on the ‘four-stage learning cycle’. This cycle is seen as a central principal in which ‘immediate or concrete experiences’ provide a basis for ‘observations and reflections’. These observations and reflections are in turn transformed into concepts with implications for action. Thereby they can be actively tested and in turn create new experiences. According to Kolb this cycle
ideally represents a learning cycle where the learner touches all four bases. Thus it is a cycle of experiencing, reflecting, thinking and acting. Therefore Kolb’s learning style model works on two levels: On the one hand side on the four-stage cycle (Concrete Experience – CE; Reflective Observation – RO; Abstract Conceptualization – AC; Active Experimentation – AE) and on the other hand side on the four-type definition of learning styles of which nevertheless each represents the combination of two preferred styles. Therefore Kolb used the following terms: Diverging (CE/RO), assimilating (AC/RO), Converging (AC/AE) and accommodating (CE/AE) (businessballs, 2013).

![Kolb's Learning Styles Diagram](image)

**Figure 16: Kolb’s learning styles (Kolb, 2006)**

The researcher realized that over the course of this investigation, there had been developing a partly transformation in her role. Based on Kolb’s learning cycle she initially considered herself as a ‘theorist’ but later on she turned out to be a ‘reflector’ since in moments of important decisions she considered all options offered to her before taking a decision. She observed and reflected carefully and critically in order to choose the best option. Thus this learning style helped avoiding mistakes. Hence before making any primary research in this dissertation, drawing conclusions and making recommendations it was the researcher’s intention to fully understand health claim advertising and the consumer behaviour of organic users in order to deliver a consistent and accurate study and response to the research topic. Nevertheless due to the fact that the researcher also tried to underpin and prove her findings by theoretical models she also stayed in her role as ‘assimilating’ or a ‘theorist’.

### 8.3 Skills development

The following section aims pointing out the different skills the researcher developed by different modules she attended during the MBA programme of Dublin Business School, especially during the work with the dissertation.
Based on the above illustrated model of Kolb, the skills development of the researcher looks as the following: As she identified herself as ‘reflector’ she explicitly elaborated on research and investigative skills, thus ‘information gathering’. Due to the resulting developing high amount of data she inevitably developed critical skills, hence ‘information analysis’. However the dissertation as well as the other modules of the MBA programme enabled besides developing communication, language and team working skills also personal management skills as setting goals, keeping motivated and taking the initiative.

**Research & Investigative Skills**

During the academic programme a large number of assignments as well as the dissertation had to be written. Therefore the researcher developed high research and investigative skills. Building up a literature review required gathering data from academic databases and the ability to synthesise. Thereby the researcher learned managing a high amount of information by filtering and summarizing in order to provide conscious, valuable and relevant information. Moreover the researcher discovered the referencing system and the importance of copyright as well as intellectual property. Thereby she learned how to apply the Harvard referencing style appropriately. Furthermore it was the first primary research she conducted. Thereby she learned structuring an investigation as well as the execution with respondents via questionnaires itself in order to reach the answer on the research topic.

**Critical Skills**

Besides investigative skills the researcher also adopted critical skills. This work as well as all the others that had to be drawn up during the MBA programme required the researcher to read many books and articles. By comparing and confronting the various perspectives of the different authors
she learned how to think and evaluate critically. This skill was especially required for the literature review of the dissertation where it was task to oppose many different opinions.

*Communication & Language Skills*
Among others the researcher also developed communication and language skills. Due to the fact that the researcher was located in Germany while the supervisor was in Dublin during this work the researcher learned how to communicate via email and skype in a way to not letting arise misunderstandings and to effectuate instructions of the supervisor appropriately. Also the many team works during the MBA programme required communication skills as there were many different nationalities that all had to find common ground in order to reach their goals. Moreover the dissertation as well as all other courses helped undoubtedly to improve the English language of the researcher as she spent considerable time reading books and academic articles in order to write works that meet the expectations of the lecturers as well as the standards of a level 9 degree.

*Personal Management Skills*
One key variable for writing a dissertation is time management. The researcher has the tendency to complete easy tasks first and leave more difficult parts for later on. In the early stage she realized that she spent too much time in reading and reviewing the literature. Therefore and due to the fact that writing a dissertation requires managing multi-tasks she felt a project plan was essential to move the project forward and to ensure that it stayed on track. Thereby she set deadlines for certain tasks and completion of tasks before others began. The most important deadline was to send the questionnaire out punctually in order to avoid losing time by waiting on responses. In order to keep motivated during the whole working phase the researcher always tried to stop writing on the dissertation with having an idea for how to go on the next day. Thereby she avoided difficult phases without knowing how to go on when starting again writing on the thesis. These phases could have been triggers to become unmotivated. Furthermore she learned to become initiative and proactive. As she had to find her topic for the thesis by herself, created an own structure for the investigation and to get an idea how to reach the objectives she learned working independently. Thereby she had to take responsibility in reporting initiatively and proactively to the supervisor in order to get feedback and to stay on track. Moreover she learned overcoming her shyness and approaching others for help and information realizing that it is as strength rather than a weakness.

*Team Working Skills*
During the MBA programme a large number of assignments were group based. Indeed while studying in Germany the researcher was not really used to work in teams, especially not in international teams. Therefore she learned gathering and sharing ideas, communicating with different nationalities, finding a common ground with people that have another way of thinking, compounding as well as representing the own opinion. Indeed all these learnings contribute to good team working conditions.
8.4 Future application of learning

Doing this MBA programme at Dublin Business School was the most rewarding accomplishment with challenges and experiences that mold the researcher’s life. Indeed the researcher learned a lot during the programme and improved her highly valuable skills that contributed tremendously to her personality developments. These newly acquired capabilities shall be applied in her private as well as in her professional life.

First of all the personal management skill ‘time management’ will be very useful for the researcher as it will help finding a good work life balance. She will be able to manage personal and professional life efficiently. Moreover the capability of time management will help sticking to deadlines in her professional life. Furthermore the researcher developed the ability to synthesize and to think critically which are two key skills that are nessecary to deliver work of high standards. Also the team working skills will be very useful for her career. Working in a team, thereby representing the own opinion but also accepting and respecting others is the foundation for being successful as most of the time one is dependent on colleagues to reach the own goals. Having this fact in mind, approaching others is inevitable. She will need to ask for information and for feedback in order to deliver valuable work. The communication and language skills are also very valuable for her professional life. She will leverage these skills for communicating with different departments in project works in order to share information. Especially the English language is of high importance as companies are increasingly getting international thus requiring the ability to speak foreign languages. Speaking the English language is of course also valuable for her private life, as for travelling.

All in all the MBA programme helped the researcher to develop in key skill areas for her personal as well as for her professional life. These newly acquired capabilities help her to become a better individual both academically and personally. Nevertheless it is well known that one never stops learning to turn weaknesses into strengths and that one is always dependent on others to get criticised to develop further.
Bibliography


Appendix

Figure 1: Original German Questionnaire

Lieber Teilnehmer, 

mein Name ist Laura Wels und ich absolviere aktuell meinen Master-Studiengang an der Dublin Business School in Irland.


Alle Informationen, die Sie uns freigeben werden vertrauensvoll behandelt, bleiben anonym und werden ausschließlich zum Zweck dieser Arbeit gebraucht.

Bitte beachten Sie, dass Ihre Teilnahme freiwillig ist und Sie die Umfrage jederzeit beenden können. Bitte wählen Sie zu jeder Frage, die für Sie passende Antwortmöglichkeit aus.

Vielen Dank schon im Voraus für Ihre Teilnahme!

1. Welches Geschlecht sind Sie?
   - [ ] Weiblich
   - [ ] Männlich

2. Wie alt sind Sie?
   - [ ] < 18
   - [ ] 19-25
   - [ ] 26-35
   - [ ] 36-45
   - [ ] 45-55
   - [ ] > 55

3. Was ist Ihr höchster Ausbildungsgrad?
   - [ ] Hauptschulabschluss
   - [ ] Realschulabschluss
   - [ ] Abitur
   - [ ] Ausbildung
   - [ ] Universitätsabschluss

4. Wie hoch ist Ihr monatliches Nettoeinkommen?
   - [ ] < 500€
   - [ ] 600€ - 1000€
   - [ ] 1100€ - 1500€
   - [ ] 1600€ - 2000€
   - [ ] 2100€ - 2500€
   - [ ] > 2500€
5. Kaufen Sie Bio Lebensmittel?
☐ Ja  
☐ Nein

6. Wie groß ist der Anteil der Bio Produkte bei Ihren Lebensmitteleinkäufen?
☐ < 5%  
☐ 6% - 25%  
☐ 26% - 50%  
☐ > 50%

7. Wie wichtig sind Ihnen die folgenden Werteorientierungen beim Kauf von Lebensmitteln?

<table>
<thead>
<tr>
<th>Wertekategorie</th>
<th>Sehr unwichtig</th>
<th>Unwichtig</th>
<th>Neutral</th>
<th>Wichtig</th>
<th>Sehr wichtig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sicherheit/Kontrolle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genuss</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Ernährungsfaktor</td>
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</tr>
<tr>
<td>Gesundheit</td>
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<td></td>
</tr>
<tr>
<td>Gewissheit</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ästhetik</td>
<td></td>
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</tr>
</tbody>
</table>

8. Aus welchem Grund kaufen Sie Bio Lebensmittel?
☐ Gesunder als konventionelle Produkte  
☐ Weniger Rückstände als bei konventionellen Produkten  
☐ Bessere Geschmack als konventionelle Lebensmittel  
☐ Umweltfreundliche Produktion  
☐ Meine Freunde und Familie kaufen Bio Lebensmittel (Trend)  
☐ Prestige

9. Auf einer Skala von 1 bis 5, wie ernährungsbewusst sind Sie? (1 = Ich bin überhaupt nicht ernährungsbewusst, 5 = Ich bin sehr ernährungsbewusst)

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

10. Wie wichtig sind Ihnen die folgenden Produktattribute von Bio Lebensmitteln?

<table>
<thead>
<tr>
<th>Produktattribute</th>
<th>Sehr unwichtig</th>
<th>Unwichtig</th>
<th>Neutral</th>
<th>Wichtig</th>
<th>Sehr wichtig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutzenbringende Produktinformationen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bio-Label</td>
<td></td>
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</tr>
<tr>
<td>Inhaltsstoffe</td>
<td></td>
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</tr>
<tr>
<td>Herkunft</td>
<td></td>
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<tr>
<td>Ware</td>
<td></td>
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<tr>
<td>Geschmack</td>
<td></td>
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<tr>
<td>Kalorien</td>
<td></td>
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<tr>
<td>Preis</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
11. Vertrauen Sie Bio Produkten?
   - Ja
   - Nein

12. Glauben Sie an die Verpackungsinformationen auf Bio Produkten?
   - Ja
   - Nein

13. Wie nehmen Sie Produktinformationen auf Bio Produkten wahr?
   - Positiv (Zusätzliche unterstützende Information)
   - Negativ (Sie wollen mir das Produkt einfach nur verkaufen) - Sie sollten die Frage mit 'Negativ' beantwortet haben, beantworten Sie bitte die letzte Frage nicht.

14. Warum nehmen Sie die Produktinformationen positiv wahr?
   - Um das Preis-Leistungs-Verhältnis beurteilen zu können
   - Um mein Ernährungsbewusstsein und damit auch meine Gesundheit zu unterstützen
   - Um die Produktions Herkunft sicherzustellen (Fairer Handel)
   - Aus keiner der oben aufgeführten Gründe

Vielen Dank für Ihre Teilnahme!
Dear respondent,

My name is Laura Weis and I am postgraduate student obtaining a master degree at Dublin Business School in Dublin, Ireland.

As part of my program, I am writing a dissertation to assess how health claim advertising affects organic food purchase from consumers’ perspective.

All information you will release will be kept strictly confidential and you will remain completely anonymous. The information you will provide will be exclusively used for the dissertation’s purpose.

Please note that your participation is voluntary and that you may withdraw at any time. Please select for each question the answer that suits you best.

Many thanks in advance for your participation.

1. What is your gender?
   - Male
   - Female

2. What is your age?
   - < 18
   - 19 - 25
   - 26 - 35
   - 36 - 45
   - 46 - 55
   - > 55

3. What is your highest education?
   - Lower Secondary Education
   - Middle School
   - A-levels
   - Apprenticeship
   - University degree

4. What is your monthly net income?
   - < 500€
   - 600€ - 1000€
   - 1100€ - 1500€
   - 1600€ - 2000€
   - 2100€ - 2500€
   - > 2500€
5. Are you purchasing organic nutrition?
- Yes
- No

6. What percentage of your food purchase is organic?
- < 5%
- 6 - 25%
- 26 - 50%
- > 50%

7. Please rate the importance of the following value orientations in terms of nutrition purchase

<table>
<thead>
<tr>
<th>Security/Control</th>
<th>Very unimportant</th>
<th>Unimportant</th>
<th>Neutral</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Adventure Factor</td>
<td></td>
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</tr>
<tr>
<td>Healthiness</td>
<td></td>
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<td></td>
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<tr>
<td>Certainty</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetics</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

8. For what reason do you purchase organic food?
- Healthier than conventional food
- Less residues than in conventional food
- Better taste than conventional food
- Environmental friendly production
- My family and friends buy organic food (trend)
- Prestige

9. By a scale from 1 to 5, how nutrition aware are you? (1 = I am very nutrition unaware, 5 = I am very nutrition aware)
- 1
- 2
- 3
- 4
- 5

10. Please rate the importance of the following product attributes of organic food:

<table>
<thead>
<tr>
<th>Beneficial product attributes</th>
<th>Very unimportant</th>
<th>Unimportant</th>
<th>Neutral</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic label</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ingredients</td>
<td></td>
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</tr>
<tr>
<td>Origin</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Brand</td>
<td></td>
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</tr>
<tr>
<td>Taste</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Calories</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. Do you perceive organic products as trustful products?
- Yes
- No

12. Do you believe the information on the packaging of organic products?
- Yes
- No

13. Do you perceive product information on organic food as:
- Positively (Extra support and information of the product)
- Negatively (They are just trying to sell me a product) - If your answer is 'negatively' please do not answer the last question

14. Why do you perceive product information positively?
- To get an idea about the cost-benefit ratio
- To support my nutrition awareness and therefore my health
- To get an idea about the production location (Fair trade)
- Nothing from the mentioned above

Thank you for your time!

Figure 3: Gender

![Gender Pie Chart]

- Female: 39%
- Male: 61%
Figure 4: Age

![Age Distribution](image)

Figure 5: Education

![Education Distribution](image)
Figure 6: Income

![Income](image)

Figure 7: Education vs. % of organic food purchase (correlation coefficient: 0.63)

![Education vs. % of organic food purchase](image)

y = 0.5814x + 0.1786

R² = 0.3969
Figure 8: Nutrition Awareness

Figure 9: Education vs. Nutrition Awareness (correlation coefficient: 0.51)
Figure 10: Income vs. Nutrition Awareness (correlation coefficient: -0.18)

\[ y = -0.1283x + 4.7458 \]

\[ R^2 = 0.0331 \]
Figure 11: Value Orientation

Value Orientation

Security/Control

- Very unimportant: 1
- Unimportant: 4
- Neutral: 6
- Important: 41
- Very Important: 51

Enjoyment

- Very unimportant: 0
- Unimportant: 2
- Neutral: 25
- Important: 47
- Very Important: 29

Adventure Factor

- Very unimportant: 0
- Unimportant: 67
- Neutral: 28
- Important: 8
- Very Important: 0

Healthiness

- Very unimportant: 0
- Unimportant: 4
- Neutral: 5
- Important: 46
- Very Important: 48

Certainty

- Very unimportant: 0
- Unimportant: 6
- Neutral: 8
- Important: 61
- Very Important: 28

Aesthetics

- Very unimportant: 0
- Unimportant: 9
- Neutral: 59
- Important: 28
- Very Important: 7
Figure 12: Security/Control vs. Nutrition Awareness (correlation coefficient: 0.41)

![Security/Control vs. Nutrition Awareness](image)

\[ y = 0.3221x + 2.9937 \]

\[ R^2 = 0.1651 \]

Figure 13: Healthiness vs. Nutrition Awareness (correlation coefficient: 0.48)

![Healthiness vs. Nutrition Awareness](image)

\[ y = 0.4274x + 2.5335 \]

\[ R^2 = 0.2346 \]
Figure 14: Certainty vs. Nutrition Awareness (correlation coefficient 0.48)

\[ y = 0.4192x + 2.6789 \]

\[ R^2 = 0.2347 \]

Figure 15: Enjoyment vs. Nutrition Awareness (correlation coefficient -0.29)

\[ y = -0.2419x + 5.3561 \]

\[ R^2 = 0.0816 \]
Figure 16: Adventure Factor vs. Nutrition Awareness (correlation coefficient -0.45)

\[ y = -0.4632x + 5.5127 \]
\[ R^2 = 0.1989 \]

Figure 17: Aesthetics vs. Nutrition Awareness (correlation coefficient -0.56)

\[ y = -0.5111x + 6.0853 \]
\[ R^2 = 0.3197 \]
Figure 18: Product Attributes

<table>
<thead>
<tr>
<th>Product Attributes</th>
<th>Very Important</th>
<th>Important</th>
<th>Neutral</th>
<th>Unimportant</th>
<th>Very unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>45</td>
<td>12</td>
</tr>
<tr>
<td>Calories</td>
<td>0</td>
<td>5</td>
<td>22</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>0</td>
<td>18</td>
<td>25</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Brand</td>
<td>2</td>
<td>8</td>
<td>36</td>
<td>45</td>
<td>12</td>
</tr>
<tr>
<td>Origin</td>
<td>0</td>
<td>12</td>
<td>11</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Ingredients</td>
<td>0</td>
<td>16</td>
<td>2</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Organic label</td>
<td>0</td>
<td>32</td>
<td>8</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Beneficial product attributes</td>
<td>0</td>
<td>32</td>
<td>3</td>
<td>68</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 19: Nutrition Awareness vs. Beneficial Product Attributes (correlation coefficient 0.49)

Nutrition Awareness vs. Beneficial Product Attributes

\[ y = 0.3993x + 2.8786 \]

\[ R^2 = 0.2365 \]

Figure 20: Belief in packaging information of organic products
Figure 21: Perception of Product Information

Perception of product Information

- Positively: 79%
- Negatively: 21%