# Adding more value to added-value. An exploration of consumers' perceptions and attitudes towards improved animal welfare standards in organic meat production processes

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#### Abstract

The expansion of the organic food market and the growing competition are factors that fuel the differentiation of organic food products. Differentiation may be achieved by developing "organic-plus" products that integrate other value-adding characteristics beyond the organic quality. In this context, the aim of this study was to explore whether consumers would notice and value further improvements in the animal welfare standards than those imposed by organic regulation. The results of three focus groups designed as a concept test reveal positive attitudes towards the proposed production process from both regular and occasional organic buyers. The results further indicate that the proposed "organic-plus" products would probably be valued by a niche of regular organic meat consumers, provided that the products also offer good overall quality and that the animal welfare aspect is clearly communicated.

#### **1** Introduction

The global organic food market has expanded rapidly in the last decade (Cottingham, 2014), but the growth rates and the market shares of organic food products differ substantially across countries (Organic Monitor, 2010; Thøgersen, 2010). The maturing of the leading organic markets highlights the importance of organic producers' ability to satisfy consumers' demand for more than the mere "organic quality" (Schleenbecker & Hamm, 2013). Moreover, the fact that conventional food products are becoming more diversified, some of them by incorporating sustainable product attributes thus reducing the perceived gap between organic and conventional products (Naspetti & Zanoli, 2012), also creates an extra "push" on the diversification of organic food products. A better differentiation of organic products, as well as a more diversified offer, might increase customer loyalty and help develop the organic food market further.

One way to differentiate organic products and increase their value to (at least some) consumers is to add extra ethical attributes (Jensen, Denver, & Zanoli, 2011; Zander, Stolz, & Hamm, 2013). Ethical considerations are often linked to positive attitudes towards organic products (Honkanen, Verplanken, & Olsen, 2006) and positive ethical attributes are often the reason why consumers buy organic food products (Ritson & Oughton, 2007). Despite the fact that they are credence characteristics and consumers cannot ascertain them before or after consumption, ethical product attributes play an important role in consumers' overall product quality evaluations (Marian & Thøgersen, 2013; Oude Ophuis & van Trijp, 1995).

Consumers' concern about the way food products are produced has increased over recent decades, leading to an augmented interest in organic production, animal welfare and "natural" production methods (Grunert, Bredahl, & Brunsø, 2004). Specifically, it seems to be a widespread sentiment among European consumers that there is a need for further improvements in the welfare of farmed animals (European Commission, 2007). Consumers' interest in and concern for animal welfare could therefore motivate the development of new, differentiated meat products.

Recent studies found positive consumer responses to the proposition of "organic-plus" products with additional ethical and sustainability attributes (Howard & Allan, 2006), especially in terms of higher animal welfare standards (Zander, et al., 2013). In general terms, "organic-plus" products are those that have additional beneficial qualities and value-adding product attributes (Harrison, 2008) which differentiate them from "regular" organic products and also from conventional ones. The regulations for organic farming and food production are mostly process related and not so much

related to the final products, yet consumers also expect an added value in the products themselves as compared to conventional products (Załęcka et al., 2014) (Figure 1).

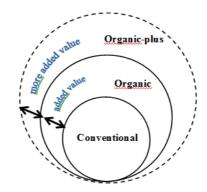
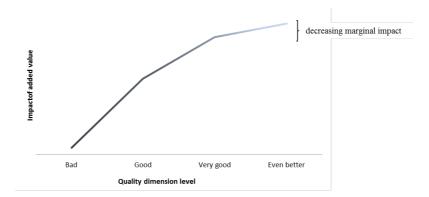


Figure 1. Value-based differentiation of organic-plus products

In a customer-oriented perspective, value should be added to a product to the extent that the target consumers actually perceive the products as better or as having a higher quality (Grunert, 2005). On this backcloth, this study aims to explore consumers' perception of and attitude towards "organicplus" meat products from production systems with improved animal welfare standards beyond those imposed by standard organic regulations. As imposed by European regulations, animal welfare standards are higher in organic production systems compared to conventional production systems, (European Council of Agricultural Ministers, 2007). The question is, given that organic livestock production systems already provide relatively high welfare for farm animals (Lund & Röcklinsberg, 2001; Tuyttens et al., 2008; Veissier, Butterworth, Bock, & Roe, 2008), whether consumers will notice and value further improvements in the animal welfare standards over and above those currently imposed by organic regulations? In this study, a preliminary answer to this question is sought by means of a qualitative concept test aimed at obtaining an in-depth understanding of consumers' perceptions of organic meat products from production systems with improved animal welfare standards. Unless consumers notice the difference between the new production system and the standard organic system, it is unlikely that they will perceive any added value or the added value will have a very small impact on their product evaluation (Figure 2). If this were the case, then the change in the production system would neither have an effect on consumers' perceptions nor on their behaviour, and the market potential of such products would be small.

**Figure 2.** Hypothesized decreasing marginal customer value of increasing a product's quality in a given dimension (e.g. animal welfare)



Recent studies suggest that consumers respond favourably to "organic-plus" products with additional ethical attributes. However, there is a lack of empirical evidence backing assessments of the perceived consumer value of "organic-plus" products. Research on the topic is still limited and is thus mostly based on experimental and quantitative studies, which fail to provide a more thorough understanding of consumers' viewpoints. The present study contributes a richer understanding of consumers' perceptions and evaluation of "organic-plus" products specifically regarding further improvement of animal welfare as a production-related ethical attribute. Furthermore, the study explores the difference in perceptions among consumers who differ in their behaviour regarding organic food.

#### 2 Research background

Process characteristics (i.e. the way a food product is produced) have become a major quality dimension satisfying consumers' values and food purchase motives (Grunert, 2006). Even though they are not visible, such characteristics may be associated with a product and play an important role in consumers' perceptions and overall evaluation of the product (Oude Ophuis & van Trijp, 1995). Although how a food product is produced may not directly affect core quality dimensions such as taste or healthiness, it may still play an important role for both expected and experienced quality (Brunsø, Fjord, & Grunert, 2002; Grunert, Bech-Larsen, & Bredahl, 2000; Marian & Thøgersen, 2013). It is therefore essential that the way a food product is produced is appreciated by consumers (Grunert, 2007). Consumers' concerns regarding the production processes of food products have

stimulated increasing interest in "natural" production methods and the development and marketing of e.g. organic, animal-welfare and GMO-free products (Grunert, et al., 2004).

Previous research shows that most consumers hold positive attitudes towards organic food products (Saba & Messina, 2003; Thøgersen, 2009b), they associate a range of benefits with organic food products, such as superior taste, health, and food safety (Hughner, McDonagh, Prothero, Shultz, & Stanton, 2007) and they have higher quality expectations for organic products compared to conventional ones (Grunert & Andersen, 2000; Marian & Thøgersen, 2013; Scholderer, Nielsen, Bredahl, Claudi-Magnussen, & Lindahl, 2004). Consumers' attitudes towards purchasing organic food products are also influenced by altruistic values (Chen, 2009; Dreezens, Martijn, Tenbult, Kok, & Vries, 2005; Krystallis, Vassallo, Chryssochoidis, & Perrea, 2008; Thøgersen, 2009b, 2011). Specifically, the concern for animal welfare has been found to be an important purchase motivator particularly for organic meat products (Aertsens, Verbeke, Mondelaers, & Van Huylenbroeck, 2009; Bech-Larsen & Grunert, 1998; Harper & Makatouni, 2002; Hughner, et al., 2007).

The importance of animal welfare for consumers has been growing in the last two decades. Consumers perceive both an ethical and a nutritional result from animal welfare (Harper & Makatouni, 2002), using it as an indicator of food quality and food safety, in addition to humane treatment of livestock (Hughner, et al., 2007). Consumers are negative towards what they consider excessive manipulation and lack of naturalness in the production and processing of meat products (Verbeke, Pérez-Cueto, de Barcellos, Krystallis, & Grunert, 2010). Hence, criteria related to animal well-being are used to discriminate between "good" and "bad" meat production practices (Krystallis, de Barcellos, Kügler, Verbeke, & Grunert, 2009). On behalf of the consumers, retailers have been demanding more and more transparency and in-depth auditing of production and processing facilities (Troy & Kerry, 2010) to ensure that the products comply with both legal standards and consumers' animal welfare demands. As public pressure regarding environmental and welfare standards increases, more and more meat producers engage in practices that extend beyond those formally required by environmental and welfare regulations (Siegford, Powers, & Grimes-Casey, 2008). Improving animal welfare standards is not an easy process for producers, who are faced with many barriers such as system lock-ins, insufficient willingness to pay and competition with other social pressures (Immink, Reinders, Tulder, & van Trijp, 2013).

#### **3** Theoretical framework

The long-term competitiveness of a product depends on consumers' perception of its value, which is the combined result of many different product attributes and characteristics (Lagerkvist, Carlsson, & Viske, 2006). Customers receive value when the benefits of a product exceed the perceived sacrifices connected to the product (Horovitz, 2000; Zeithaml, 1988). The benefits can be improved by focusing on one or more product attributes and improving them over their current state (Horovitz, 2000). Lancaster (1966) views a product as a set of attributes driving consumers' preferences and choices and consumers are expected to prefer products whose attributes provide the highest perceived utility. Whichever attributes are added or enhanced in a new product development process, it is essential that the new product incorporates qualities that are desired by consumers.

One way to ensure that "the voice of the consumer" (Costa, Dekker, & Jongen, 2000) is heard when new products are developed is by taking point of departure in consumers' needs and wants in the new product development processes (Costa & Jongen, 2006; Grunert, Baadsgaard, Hartvig Larsen, & Madsen, 1996). In a customer-oriented perspective, the central goal of new product development is to satisfy consumer needs and to create a product with superior consumer value (Brock Smith & Colgate, 2007; Slater & Narver, 2000; Woodruff, 1997). The added value of incremental product improvements is generally less clearly perceptible than in the case of a truly new product (Costa & Jongen, 2006). As with most of the new products that are launched in the food market, "organic-plus" products are incrementally enhanced products.

In marketing, a product's benefits to the consumer are often classified into three levels: the core value of the product, the actual product and the augmented product (Pickton & Masterson, 2010). The *core value* is the essential benefit the product provides to the consumer, given its main characteristics (e.g., a food product feeds the consumer). The *actual product* is the level where the core value is embedded in a physical product. According to Kotler and Keller (2012), the *augmented product* not only adds value to the core product, it may delight consumers and exceed their expectations by adding value beyond the characteristics that consumers normally expect to get from the product.

Product augmentation is often used to ensure product differentiation and as a tool to capture consumers' interest. As all competitors eventually provide augmented characteristics, thereby raising consumer expectations for the product, the attributes of the augmented product can become a part of the actual product or even the core product (Oliver, 1997). Marketers should therefore expect the value dimensions of a product to change over time and also to vary across consumer segments (Woodruff, 1997). For example, organic buyers can either see improved animal welfare standards as an enhancement of the "actual" organic product, which would make it a valuable attribute, or they can see it as something that falls within their expectations, making it a less valuable attribute.

#### 4 Methodology

A company striving to deliver customer value first needs to learn from consumers what is valuable, how value is delivered and which attributes should be in focus (Woodruff, 1997). Both quantitative and qualitative research can be useful for this purpose. For this study, a qualitative approach is chosen in order to obtain an in-depth understanding of consumers' perceptions without imposing the researcher's values and evaluation criteria on them. Focus group discussions were adopted as the method of enquiry because the participant interaction can generate insight that might not be generated through other qualitative methods, e.g. in one-to-one interviews (Silverman, 2005). The method presents a more natural environment than that of an individual interview because participants influence and are influenced by others "just as they are in life" (Krueger & Casey, 2000).

This study was designed as a qualitative concept test. One of the main focuses of a concept test is to have the participants talking freely about a proposed concept in order to get insight into whether or not a product or a concept is attractive (van Kleef, van Trijp, & Luning, 2005) and to determine how consumers perceive and relate to the concept (Iuso, 1975). In a concept test consumers are presented with the concept and their reaction to the presented concept is measured (Tauber, 1981). The production system proposed and tested in this study is new and products based on this system are in an early development stage. Consumers' knowledge of the proposed concepts is thus limited.

Three focus groups were organized in a large town in Denmark in May 2013. The focus groups were conducted in a meeting room at the university campus. The participants were asked to sign a consent form for their participation and full confidentiality of their personal information was guaranteed. In order to facilitate the comparison of the three focus groups during data analysis, a common protocol (Appendix A) with pre-defined questions was designed and used in all three focus groups. However, the natural flow of the conversation among the participants was not disrupted making the approach semi-structured. The protocol was written in English and translated into Danish. The focus groups were conducted in Danish. One interviewer and two assistants (one of which was the first author) were present during the focus group discussions. The meetings lasted between 80 and 90 minutes each. The discussions were audio and video-recorded with the consent of the participants. The interviews were transcribed verbatim in Danish and then translated into English for the analysis. The method used to analyse the focus groups was content analysis, i.e. a systematic classification of the large amount of information into codes and the identification of themes and patterns among the codes that represent similar meanings (Hsieh & Shannon, 2005; Weber, 1990). The analysis followed an inductive approach with data being read word by word in order to derive open codes (Miles &

Huberman, 1994). This approach was used in order to gain direct information from the participants without imposing any preconceived theoretical perspectives (Hsieh & Shannon, 2005). Coding and analysis of the transcripts were conducted using the NVivo 10 software for qualitative data analysis.

#### Protocol and stimuli

The focus group discussions started with all participants introducing themselves. The participants were first asked to describe their typical dinner and to discuss the importance of meat in their diet and daily lives. Afterwards they were presented with pictures of animals in their natural environment (Appendix B) and they were asked to present their first impressions of what they had just seen. Then the interviewer read production stories relating the living conditions of the animals and describing different characteristics such as feed, sheltering conditions, rearing conditions, growth rate and slaughter age (Appendix C). The participants were asked again to share their impressions and also their expectations regarding the meat that would be obtained from such animals. The third part of the discussion focused on meat. In order to get insight into how consumers responded to the appearance and what expectations consumers derived from these products, the participants were presented with illustrations of whole chickens and pork chops (Appendix B). In the final part of the discussion, the participants were asked to talk about the importance of animal welfare as well as their experience with organic meat products in general. The participants were debriefed at the end of the meeting, and they were given a small compensation for their participation.

#### **Recruitment and sampling**

Respondent selection requires special consideration when designing a concept test (Klink & Athaide, 2006). Hence, purposive sampling was used for recruiting the focus group participants: the participants were selected based on their expected contribution and on the research aim (Miles & Huberman, 1994). The participants were screened for their organic food purchase frequency, which was determined based on a mall-intercept survey that a total sample of 291 consumers had previously answered. The respondents were recruited outside four supermarkets, which were chosen for their large assortment of organic products. When they answered the survey, respondents were asked to give their contact information if they would agree to participate in a follow-up focus group discussion. The survey respondents were assigned to the three focus groups based on their scores on two indexes: one for organic food purchase and one for organic meat purchase. The selection among the respondents, who were willing and able to participate, was made in a way that allowed for as much variation as possible within each group and a balance in gender and age (Table 1). Of 26 persons recruited, 18 participated in the focus groups.

		Focus group	Focus group 2	Focus group 3
		1 (n=7)	(n=6)	(n=5)
Gender	Male	4	3	3
	Female	3	3	2
Age	20-30	5	2	1
	31-45	0	3	1
	46-65	2	1	3
Education	Primary	0	0	0
	Secondary	2	1	0
	Vocational	0	0	0
	Undergraduate	0	0	1
	Graduate	2	3	2
	Doctoral	2	2	2
	ousehold income			
(Danish kro				
	< 24,999	5	2	1
25,000 - 49,999		1	1	0
50,000 - 74,999		0	2	3
75,000 – 99,999		0	0	0
100,000 - 124,999		0	0	0
125,000 - 149,999		0	0	0
>150,000		0	1	0
I don't know		0	0	0
Confidential		1	0	1
Organic inc	lex			
Organic food <sup>&amp;,a,c</sup>		2.5 (1.3)	3.7 (1.4)	4.3 (0.9)
Organic meat *,b,c		2.0 (1.0)	2.5 (1.2)	3.9 (1.1)

**Table 1**. Socio-demographic characteristics and organic food purchase index across each focus

 group

Focus group 1 - Occasional organic food/ occasional or non-organic meat buyers; Focus group 2 – Regular organic food/ occasional organic meat buyers; Focus group 3 – Regular organic food and also regular organic meat buyers. a Organic food index based on the self-reported buying frequency (in the last ten shopping occasions) of thirteen

product categories - never (1); a few times (2); approximately half of the times (3); most of the times (4); always (5).

b Organic meat index based on the self-reported buying frequency (in the last ten shopping occasions) of five meat and meat-based products - never (1); a few times (2); approximately half of the times (3); most of the times (4); always (5).

c Index values calculated based on the self-recorded purchase frequency scores, excluding missing values and cases where the product category is never purchased.

& Thirteen food categories, none of them meat-based.

\* The product categories included are chicken, pork, beef, liver paste, cold cuts and sausages.

Participants in a concept test should ideally possess a moderate to high degree of product knowledge (Schoormans, Ortt, & de Bont, 1995). In order to satisfy this condition, the participants of this study were first selected from respondents with medium to high involvement with organic food products<sup>1</sup>. Then, the participants were allocated to three groups based on their purchase behaviour of organic meat and other organic food products. The main requirement was that the participants would have to be at least occasional organic buyers (with a more relaxed requirement for organic meat<sup>2</sup>), as these consumers are expected to be the target group for the proposed new products. The three groups were formed as follows: Focus group 1 included occasional organic food buyers that are only occasional organic meat buyers; Focus group 3 consisted of regular organic food, but only occasional organic meat buyers. This design makes it possible to investigate whether there is a difference in perception and attitude between participants with different behavioural characteristics with regard to organic food.

#### **5** Results

This section outlines the main findings of the study. Four common themes were identified inductively in the analysis. One theme is related to the reactions and the quality expectations that the participants associated with the production process and the resulting meat products. Another theme relates to the participants' concern with and opinions about meat production processes. A third theme is related to price considerations and the fourth theme relates to improved animal welfare in conventional production processes. Each theme is outlined and the essence of the discussions around them summarized in the following subsections.

#### **Reactions and expectations**

As a response to hearing the production stories and seeing the pictures with the animals in their living environment, the participants described the new production system as *idyllic*, *wonderful* and *fantastic*, drawing connections to their childhood. In the group of occasional and non-organic meat buyers some of the participants admitted getting a bad conscience after hearing about the production process, because they did not buy meat that comes from animals that have similar living conditions. One reaction to hearing the production stories was the wish to be able to eat such meat products every

<sup>&</sup>lt;sup>1</sup> Involvement with organic food products was measured in the survey on a ten-item scale (Cronbach's  $\alpha$  = .93) adapted from Zaichkowsky (1985).

<sup>&</sup>lt;sup>2</sup> Organic meat products have low market shares in Denmark (Organic Denmark, 2013), so it is more difficult to find regular and even occasional organic meat buyers among consumers compared to other products.

single time. One of the participants mentioned that, if confronted with this, anybody would say that they wanted to buy such products:

I don't think that there is anyone who would think, "No, such a chicken that has lived outside and is happy and healthy, I don't want that one. I'd rather have one that wasn't able to walk and couldn't hold its own body. (female, 28y, focus group 1).

The participants expressed positive taste and quality expectations based on the descriptions of the production process. They mentioned expectations such as darker and firmer meat, maybe more tender and with a more compact structure for the final meat products. The slower growth rate, the longer life and less stress, the freedom to move freely in the outdoor were seen as factors which influence the quality of the meat directly. The question regarding taste expectations generated mixed answers, with more positive than negative expectations. Taste expectations were generally inferred from the living conditions and the well-being of the animals. Participants who were regular organic meat buyers stated that their expectations were based on their previous experience with organic meat. Most of them expected the taste of the resulting meat products to be significantly better.

An animal that is allowed to grow up in a natural pace will also have a firmness and flavour that is different and more intense than something that just grew and weighed two pounds within a week (male, 53y, focus group 3).

Some potentially negative influences on the taste of the meat products were also brought into the discussion revealing that taste is an important quality attribute, also for regular organic meat buyers. The taste might become too *concentrated* or the physical exercise could decrease the fat percentage, negatively affecting the taste.

If it is [an animal] that is outside all the time and really gets a lot of exercise, the level of fat may get to be so low that it can damage the taste. Then I must say, yes to animal welfare, but I don't want meat that tastes like cardboard (male, 32y, focus group 3).

The occasional and non-organic meat buyers based their taste expectations on assumptions rather than on their own experience with organic meat products. Their opinions on this issue were mixed, some expecting a better taste and some not. Some participants thought that one would be able to detect a difference in the taste due to the organic feed that the animals are given; others, by contrast, thought that this would not be the case. For the participants in this group it seemed that a different (but not necessarily improved) taste could be expected. The expectations were also dependent on the

reference point: meat from these animals was expected to be much better compared to the meat from animals that do not have access to an outdoor area.

*I also would expect that if you give [the animals] organic feed they will taste better. But I don't really know why (female, 66y, focus group 2).* 

I think that the chicken is healthier, but I don't think that there is a taste difference. I don't expect a taste difference at least; I expect that there may be a nutritional difference (female, 44y, focus group 2).

The taste will not be anything to cheer for (female, 56y, focus group 1). It may well be a placebo [in taste] if one knows that it has [had a good life] (male, 56y, focus group 1).

The participants' reactions to the pictures of the actual meat products were mixed. The differences in the appearance of the pork chops and the whole chickens (in colour, size, leanness) were noticed and commented on by the participants in the three groups, especially in the groups with occasional or non-organic meat buyers. It seemed that one could have both positive and negative reactions to similar meat products with different appearance-related characteristics. For example, the fat rim of a pork chop can be positively associated with *a better flavour*, but one gets *more meat value for money* from a pork chop that has less fat and more meat. Most of the participants said that they would choose the product with less fat. Choosing between the different whole chicken alternatives was more difficult and also the way the participants evaluated the chickens differed. With regard to the whole chickens, the participants generally noticed that they were *skinny, slim, more slender*, some of them darker and others lighter in colour. It generally seemed that a skinny chicken with less meat would be avoided.

In the group of regular organic meat buyers, the participants did not go into too many details with their impressions of the meat pictures. They reiterated that they expected the meat to taste good because of the way the animals lived. Several participants thought that the appearance of the products they were presented with was not much different from other meat products and they did not look more appetizing. In this context, they mentioned that the different labels and the trust in the manufacturer were key factors in differentiating products in a shopping setting.

I do not think there is much difference between these and other meat products. Therefore you really depend on the different labels in one way or another (male, 32y, focus group 3).

It also depends on the faith you have in the manufacturer and what is printed on [the package] (female, 59y, focus group 3).

The participants thought that clear communication of the level of the animal welfare standards used in the production process would be useful. They presented the case of chicken eggs and their different labelling codes as an example<sup>3</sup>.

#### Meat production

A general concern for animal welfare was expressed during the discussions. The participants in all three focus groups problematized the intense industrialization of meat production. This was considered an *ugly*, upsetting trend, i.e., meat production is *going in the wrong direction* in terms of wellbeing and living conditions for farm animals. Although they expressed it differently, the participants in each group suggested that consumers have the power to make a difference in this respect. It was the common view that the majority of people could afford the right choice if they wanted to, but that it would require a change of attitude and priorities. It was mentioned that it is important for consumers to understand the impact of their choices and the difference each one could make by not buying meat products made with practices that are not animal-friendly.

It is the consumers who have to do something [...] I think that it is just a matter of time. [...] I think if we are just patient, more and more people will move towards [buying such products] (female, 59y, focus group 3).

For regular organic meat buyers, eating meat products from animals that have had a bad life was not an option. For them, food choices are not related only to taste but also to ethics. Purchasing organic meat products was seen as a way to preserve natural values and to also give something back to nature. A caged chicken for example, no matter how tasty, is something *absolutely terrible*.

The occasional organic meat buyers felt less involved when picking meat products in the store (compared to the more elaborate debate during the focus group discussion) and they expressed that their purchase decisions were less elaborate. The distinction between the different production standards (e.g. organic and free-range) was less clear to these participants. The discussion among them revealed a certain level of confusion about the different production requirements.

<sup>&</sup>lt;sup>3</sup> The European Commission (2008) requires different labelling codes for organic, free range, barn and caged laying hens.

[In response to another participant:] Yes, there are requirements both for caged chickens and free-range chickens. And yes, I think that one might be tempted to believe that it is the same for cows, but I'm not sure about that (male, 31y, focus group 2).

#### Price and willingness to pay

Different views regarding the price of organic products were expressed in the three focus groups. Regular organic buyers expressed that quality costs money and that one gets what one pays for. The low price of meat products can also be an indicator of something not being right.

I can understand that you are going through a period in your life where you cannot afford to buy so much. But over the years I've become more suspicious if something is too cheap rather than if something is too expensive. So I think quite differently. If there is some meat that is so cheap, I think, no, something must be wrong with it (female, 59y, focus group 3).

The regular organic buyers seemed less price-sensitive than occasional buyers and they expressed a willingness to pay a higher price for organic meat products. Several participants explained that they coped with the high price of organic meat by choosing a cheaper organic alternative or by buying less meat altogether. A small portion of good meat is appreciated more than bigger amounts of average-quality meat. Some of the participants admitted that they did not consistently buy organic meat. As one of the participants explained, one can be ecstatic over spending money on a delicious organic or free-range piece of meat, but one also gets excited about getting a good deal when finding a cheap, yet delicious meat product.

*I sometimes spend more money there* [i.e. buying meat straight from a farm where animals live a happy life] *and other times I will find cheaper entrecotes and then get ecstatic about that (male, 32y, focus group 3).* 

The participants in the other two groups seemed more price sensitive. The ones who occasionally or never buy organic meat products admitted that they would consider buying such products (i.e. organic-plus meat products) only if they were on special offer. Some firmly stated that they would not pay a lot more money for organic or free-range meat products. Several participants from each group expected the high price of products to be a barrier hindering a large consumer demand for such products. One of the participants in the group of regular organic meat buyers explained how consumers would react to such production processes and meat products:

There is no doubt that if there was a market of people that would pay what those [meat products] cost, you would see that a very large proportion of Danish agriculture would also produce it. But it is also a question of a realistic bottom line, if all Danish produced pork meat was like that, it would after all be so expensive that people would begin to buy foreign products instead (male, 32y, focus group 3).

One of the participants in the group of occasional buyers thought that 80 per cent of the adult population can afford the right choice if they want to, [but] it is a matter of priorities (male, 56 y, focus group 1). Of course, disregarding the high price and money not being an issue, such meat products would be preferred over other products which are made in the conventional way. Even then, animal well-being would not necessarily play the key role in making this choice:

Animal welfare is not the primary cause [of buying the product] for me. It is that it is not filled with pesticides and drug residues and that I believe that it is the best option for nature (female, 44y, focus group 2).

#### An "organic-minus" option?

Although it is outside the main focus of the study, it is interesting that the participants in all three focus groups touched on the possibility of products in-between current conventional and organic standards in terms of animal welfare; i.e., "organic-minus" rather than "organic-plus" products. In the group of regular organic meat buyers, one of the participants suggested that production systems that use fewer standards than the ones presented, but that are still high in animal welfare, would be sufficient, as long as the quality of life of the animals was good and the meat quality was reasonable.

I can live with the fact that the cattle are not organic if they have access to the outdoors, for example. If they are outdoors all summer, but they are not organic, I think that you get some of the same benefits. [...] And if it is a quality issue, you can get really good quality ... traditionally produced agricultural products ... almost everything Danish produced is of a reasonably high quality, except chicken (male, 32y, focus group 3).

Similar opinions were voiced in the group of occasional organic buyers:

I think that it means more to me that I know that the animal has had a good life than that it is organic. Definitely. [...] So that the animal has a good life, maybe somewhere in between the organic and the conventional (male, 56 y, focus group 1). I don't necessarily need everything to be organic. Many things I could certainly buy that are not organic, but it is that we know that the animals have had a good life; it might just be enough for me. I think I would feel better buying it than those chicken fillets [from chicken that were] never able to walk (female, 28y, focus group 1).

In the group of regular organic buyers that are occasional and non-organic meat buyers, the participants also engaged in a debate about raising the minimum standards for conventional production systems. While this was suggested by one of the participants, the proposition was not supported by the rest of the group, who pointed out possible negative consequences such as increased prices due to higher production and certification costs and increased demand for cheaper meat products from other countries with less strict standards. It was argued that the consumers would still demand cheaper product options negatively affecting the demand for regional and national products. The only possibility to make it "safer" for the local products would be to enforce such a rule at the European level where all countries would have to comply. However, some of the occasional organic meat buyers expressed opinions in favour of production systems with lower than current organic standards, for example: cows have decent living conditions in conventional production systems as well; good quality is not an exclusive trait for organic product, it could be obtained from conventional meat as well; organic meat is hard to get, product assortments are small and supply is limited. Free-range chickens were mentioned as an option that is cheaper than organic chicken and better animal welfare-wise than conventional chicken.

#### 6 Discussion

The participants who were regular organic meat buyers related to the production stories based on their own experience, they showed a bigger interest in animal welfare in general and they seemed to have a higher level of organic meat-related knowledge. This is consistent with previous studies, which found that animal welfare is more important for regular organic buyers than occasional buyers (e.g. Magnusson, Arvola, Hursti, Åberg, & Sjödén, 2003; McEachern & Schröder, 2002). The occasional buyers pondered on the proposed production system from a more detached position. Although the participants in all groups showed a generally positive attitude towards the living conditions of the animals under the proposed new production systems, occasional and non-organic meat buyers seemed less inclined to actually purchase such products. However, the attitudes individuals form about meat production systems as citizens may be weakly reflected in their actual behaviour as consumers (Grunert, 2006). The expected high price of the final products was mentioned by both regular and occasional organic buyers. It is highly probable that stricter or higher animal welfare standards would cause additional production costs, which in the end must be covered by higher prices (Henson & Traill, 2000). From the focus group discussions it would seem that only a niche of potential buyers exists for such products, as suggested by previous literature (Krystallis, Grunert, de Barcellos, Perrea, & Verbeke, 2012; Verbeke, 2009), most likely among regular organic meat buyers.

Following the multi-attribute perspective (Lancaster, 1966), the findings of this study suggest that consumers would probably not evaluate a single enhanced product characteristic in isolation but together with other characteristics and qualities. In this case, how the change in animal welfare standards affects other value-providing qualities (e.g. taste, appearance, price) needs to be given special consideration as this may influence its ability to add more value to the final products (at least in terms of consumers' perceived value). In addition, it should also be considered how these changes (i.e. the improved animal welfare standards and their effect on other product characteristics) affect the product's overall customer value. Animal welfare and product quality should both be optimized as the added value of enhanced individual product characteristics can be overshadowed by a failure to contribute to an increased overall product quality.

The discussions about the price and the industrialisation of meat production, as well as some of the participants' ethical considerations, brought up various references to an "in-between" alternative, i.e. products that are high in animal welfare but which are not organic. Besides the free-range option, which is already available in several countries, at least for chicken and pork products, some countries have implemented a supplementary labelling scheme for an in-between conventional and organic option. For example, in order to satisfy consumers' latent demand by reducing the trade-off that many consumers make between animal welfare and price, researchers have developed concepts for products produced at above regulatory animal welfare standards and offered at an acceptable price for the Dutch market (de Jonge & van Trijp, 2013). This option might be particularly appealing to occasional and non-organic buyers that are concerned about animal well-being (Harper & Makatouni, 2002). Previous studies suggest that such in-between organic and conventional products would be more likely to compete with conventional products (Janssen, Heid, & Hamm, 2009; Stolz, Stolze, Janssen, & Hamm, 2011). However, even some of the regular organic meat buyers in the present study seem to value animal welfare more than the overall organic quality. Previous studies found that organic consumers are selective and focus on individual criteria (Stolz, Bodini, Stolze, Hamm, & Richter, 2009; Stolz, et al., 2011) and that many consumers rate the overall organic production system as less important than individual characteristics (i.e. animal welfare, GMO free etc.) (Stolz, 2005).

Therefore, there is a risk that consumers, who buy organic meat products because they want the most animal-friendly option and lack other alternatives, might switch to an "organic-minus" option when available.

#### Limitations and future research

As with all qualitative studies, the aim of this study was not generalization or statistical significance. Focus groups are useful for exploratory studies where the purpose is to get a deeper understanding of consumers' perceptions. The method allows the participants to interact and to react to each other's viewpoint, but it also has some limitations in terms of potential group effect biases and certain participants taking lead of the discussion or others being more drawn back. Lastly, a focus group study cannot be entirely predetermined no matter how well it is planned and implemented (Eriksson & Kovalainen, 2008). This study was conducted in Denmark, the most mature organic market in the world (Cottingham, 2014). Exploring consumers' perceptions of "organic plus" products is therefore more appropriate here than it would be for countries with a less developed organic food market. However, a cross-cultural study would be worth considering for future research as different perceptions can exist among consumers in different countries. This study is limited to one product category, i.e. organic meat (chicken, pork and beef). There are other animal-based organic products where improved animal welfare standards could be valuable for consumers and which would be worth investigating (e.g. dairy products).

An experimental set-up or a conjoint design would make it possible to quantify the trade-offs and choices that consumers make between the different types of products, i.e. "organic plus", organic, "organic minus" (as an in-between conventional and organic option) and conventional. A similar design could be used to determine which process and animal welfare-related characteristics (e.g. feed, outdoor access, slaughter age) are the most relevant for differentiating the final products and for targeting different types of consumers. Research in the "organic-plus" area is still limited. Future research can help determine which other product attributes should be enhanced or combined in order to ensure added-value product differentiation.

#### 7 Conclusion

The aim of this study was to explore consumers' perception of and attitude towards "organicplus" meat products from production systems with improved animal welfare standards beyond those imposed by standard organic regulations. Although we do not have direct evidence about this from the current study, one might speculate that "organic-plus" products would be valued more when the improvement of production-related characteristics (e.g. animal welfare) positively influences other product qualities which satisfy personal needs, such as taste or healthfulness, which are often found to be important choice motivators for organic food (Hughner, et al., 2007; Marian & Thøgersen, 2013). This is consistent with previous studies finding that egoistic and altruistic considerations simultaneously drive consumers' attitudes and purchase intentions for organic food (Kareklas, Carlson, & Muehling, 2014). It seems that the new production systems create positive quality expectations and a generally positive attitude among the participants. The positive expectations should not be disconfirmed by the experience with the actual product. Small differences between expected and experienced eating quality might not be problematic as quality expectations can raise the level of experienced quality until they are aligned (Scholderer, et al., 2004). Yet a big gap between the expected and the experienced quality for "organic-plus" products with improved animal welfare, especially in terms of sensory characteristics, would jeopardize the success of such products. Previous studies have suggested that the organic food market could be developed further by adding "extra ethical" attributes to organic products, such as increased animal welfare standards (Jensen, et al., 2011; Zander, et al., 2013). The results of this focus group study indicate that "organic-plus" meat products would be valued only by a small niche of consumers, most probably from the regular organic meat buyers, whose choices are guided by a broader set of ethical values. The differentiating production-related characteristics should nevertheless be clearly communicated, e.g. through labels.

### Appendices Appendix A: Interview guide

1. Warm-up questions

i)What do you usually eat for dinner?

ii) How important is it for you to have meat as a part of your dinner? Why yes/no?

iii) Please describe your habits regarding meat consumption: what products do you prefer, how much meat do you eat in a week, do you eat meat daily?

iv) How do you decide what meat product to buy when you go to the supermarket? Is there something specific that you look for? Are there any specific products you look for?

v) Which product characteristics do you especially pay attention to when deciding what to buy? Are they different for pork, chicken and beef products?

2. Production systems: pictures and stories – chicken, pigs, cattle (separately for each type)

i)What are your impressions of what you see/hear?

ii) What do you expect the meat to be like?

iii) Why do you have these expectations for the meat?

iv) Would you like to buy meat products that come from animals that are reared this way? Would you prefer them over products that are produced in other ways you can think of?

3. Meat: pictures – chicken, pork (separately for each)

i)What are your impressions [of the meat]?

ii) How would you expect these chickens/ pork chops to taste?

iii) Why do you have these expectations?

iv) Would you like to buy these chickens/ pork chops? Why/why not?

4. Closing questions

i)As you were probably guessing, the meat we just showed you is organic meat. The animals are reared according to the organic regulations. In some aspects, their lifestyle exceeds the organic regulations. Now that you know this fact, does that have any influence on your opinion about the meat?

ii) Would you be more or less likely to buy it now that you know that the products are organic? Please elaborate on why yes or why not.

iii) How important is animal welfare to you? Is animal welfare something you think about when you choose meat products?

iv) Do you ever purchase organic meat? What types of organic meat products do you buy? (chicken/ beef/ pork)

v) Why do you buy organic meat products?

vi) For those of you who never (or only rarely) buy organic meat, what is the reason behind this?

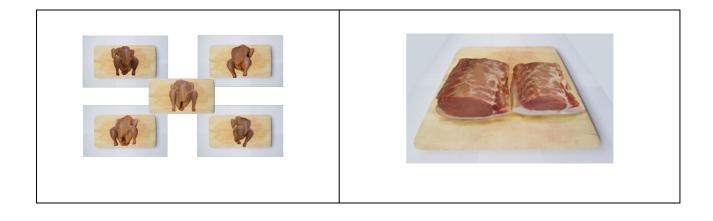
vii) What is your experience with organic meat products that you have bought?

# **Appendix B: Pictures**

# Example of illustrations of animals in their living environment



Illustrations of meat



# **Appendix C: Production stories**

Chicken	The chickens are fed 100% organic feed of Danish origin and are locally produced. Each chicken is given access to approximately 10 m <sup>2</sup> range area. This area offers them protection from birds of prey. On this area, there are different types of herbs and insects, which satisfy the nutritional requirements for the period of the time when they are outside. The chickens are not produced during winter time, when there is no vegetation. The chickens have a slower growth rate, which means fewer leg problems, more activity and fewer wounds. The growth rate depends on the race, but approximately $28 - 34$ grams/day is expected. The slaughter age is high, which means that the chickens spend a lot more time outside.
Pigs	The pigs are born outdoor in small huts. The piglets stay together with their mother until 8 weeks of age, where they are moved to paddocks with grass clover. When they are about 12 weeks old they are moved to areas with different crops that they graze or find by rooting below soil surface. They find a large part of their food directly on the fields they occupy. Some pig breeds are very active, lively and highly motivated to forage. The pigs are fed restrictedly with concentrated organic feed (cereals, soya etc.), which stimulate their foraging behaviour. The pigs have a slower growth rate but a high meat percentage.
Cattle	The cattle are crossbred animals between beef and dairy breeds. The young calves are born in the dairy herd. The characteristics of the dairy breed is a high feed intake capacity and generally good growth rate which is then combined with the better growth rate and higher carcass weight , i.e., higher muscularity, of the beef breed. The cross-bred is a good genetic combination, assuring healthier animals. In order to explore maximal growth potential, the bulls are not castrated. Bulls are expected to grow 15-25% more than steers. The cattle obtain a high growth rate during the grazing period. While they are outside, the cattle graze on high-yielding pastures. In the winter periods the cattle are fed an organic roughage-based (almost 90% grass-based feeds) ration ad libitum but with a low energy density to 'prime' the feed intake capacity and avoid making the cattle fat. In case of low grass production, the cattle will be fed supplementary grass-clover based roughage of good quality before slaughtering to assure a high growth rate. The cattle are slaughtered at the age of 18 months, directly after they have been grazing outside during the second summer.

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