

Superb and Marketable Meat from Efficient and Robust Animals
Markedsdrevet, højværdi økologisk kødproduktion med robust dyr

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Report on qualitative concept tests

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Executive summary

This report presents the findings of the qualitative concept tests, conducted as a part of WP6 of the SUMMER project. The main objective of the study is to explore consumers' response to improved animal welfare standards in organic production systems. More specifically, the report intends to offer insights into how consumers perceive the production system, how the perception of the production system influences the perceived quality of the final products and the expectations people have from the final products.

The report starts with an introductory section, where the purpose and objectives of this study are explained. Moreover, short literature reviews of concept testing and animal welfare in food research are also included.

The methodology is described in the next section, which includes: an explanation of the choice of method, a description of the procedure used for conducting the focus groups, a description of the sampling method, as well as the interview guide and the stimuli used in the discussions.

The findings of qualitative studies are usually vast and difficult to summarise in few pages. In this report, the findings are presented separately for the three focus groups that were conducted, where participants were split into groups based on their organic food and organic meat purchase rates, as follows: regular organic food buyers; regular organic food buyers-occasional organic meat buyers; occasional organic food buyers-occasional and non-organic meat buyers.

A general overview the findings is included in the last section, where they are discussed and implications of the study are presented.

Introduction

Consumers show increasing interest in how food products are produced. Topics of interest that have been rising in this context include organic production, animal welfare and “natural” production methods (Grunert, Bredahl & Brunsø, 2004). The issue of animal welfare has gained significant importance over the last couple of decades. Hubbard and colleagues (2007) note that there is no precise definition of the concept, even amongst animal welfare scientists. On the one hand, animal welfare can be seen as a multi-level construct, which has both a physiological and a symbolic component: good animal welfare produces both an ethical result and a nutritional one for the consumer (Harper & Makatouni, 2002). On the other hand, animal welfare is used by consumers as an indicator of food quality, food safety and humane treatment of livestock (Hughner, McDonagh, Prothero, Shultz & Stanton, 2007). There are several studies reporting the finding that animal welfare is an important motivator of organic meat purchase (Bech-Larsen & Grunert, 1998; Harper & Makatouni, 2002; McEachern & Willock, 2004; Hughner et al., 2007; Aertsens, Verbeke, Mondelaers & Van Huylenbroeck, 2009). In a more recent study, which set out to explore consumers’ preferences regarding organic food with additional ethical attributes, researchers found a strong preference for higher animal welfare (Zander, Stolz & Hamm, 2013). Based on the overall results of several studies, the authors suggest a great potential for product differentiation in the organic sector through using production standards that have higher ethical standards than those required by basic regulations.

The research context of the present study is based, firstly, on the fact that consumers generally make positive associations between organic products and animal welfare and, secondly, that organic production systems have special requirements regarding the living conditions of animals and the standards are already higher than conventional production standards. This study is based on the premise that it is uncertain whether or not consumers would perceive any surplus added value in

organic meat that incorporates supplementary animal welfare standards. The aim is to explore consumers' perceptions of and expectations from a production system where animals experience living conditions which exceed the required organic standards. More specifically, the study explores:

- How consumers perceive the organic meat production system;
- How the perception of the production system influences the perceived quality of the final products; and
- What expectations people have from the final products.

Based on the assumption that not all consumers would value increasing animal welfare standards the same way, the current study investigates the difference in perceptions between regular and occasional organic food buyers, as well as between regular and occasional organic meat buyers. A qualitative approach was considered to be more suitable to the exploratory nature of the study and facilitates the gain of an in-depth understanding of people's perceptions.

The contribution of this study is twofold. Firstly, the study contributes to previous literature on animal welfare from the perspective of improved production standards and increased ethical attributes of the final products. Previous findings from quantitative studies will be supplemented with information about consumers' underlying perceptions. Secondly, the study is used as a test of new, high-value organic meat product concepts that result from improved production systems. The study is thus expected to have both theoretical and practical implications.

Animal welfare in food research

Consumers' concern about the way food products are produced has been increasing over the last decades. From this perspective, consumers have mainly been showing interest in organic production, animal welfare and "natural" production methods (Grunert et al., 2004). In the early 1990s, consumers paid little attention to how meat was produced and what the effects on animal

welfare were, yet a minority of people was increasingly concerned about farming practices and production processes (Harrington, 1991). Eventually, the necessity of adapting production, distribution and processing systems to consumers' concerns, as well as to inform and educate consumers on animal welfare matters, became more clear (Hughes, 1995). Despite the relatively small importance of animal welfare in the mid-1990s, scholars foresaw its upcoming importance as a key issue in orienting consumer preference (Issanchou, 1996; Verbeke & Viaene, 1999).

Changes have indeed taken place. Retailers increasingly demand transparency and in-depth auditing of production and processing facilities (Troy & Kerry, 2010). By doing so they ensure that the products comply with legal standards and that they satisfy consumers' minimum animal welfare demands. Many industrialized countries have already created laws for administering and controlling welfare standards, especially in Europe (Fraser, 2006). As public pressure regarding environmental and welfare standards increases, meat producers find themselves engaging in practices that extend beyond those formally required for compliance with environmental and welfare regulations, in order to meet consumer demand (Siegford, Powers & Grimes-Casey, 2008). Consumers who show interest in production attributes such as "animal welfare" and "regional production" also exhibit a positive willingness-to-pay for these issues (Zander and Hamm, 2010). It has been suggested that the public image of animal welfare would benefit from providing animals with more space relative to reducing animal group size (Vanhonacker, Verbeke, Van Poucke, Buijs, & Tuytens, 2009).

Criteria related to animal and environmental well-being are used by consumers to discriminate between "good" and "bad" production practices (Krystallis, Barcellos, Kügler, Verbeke & Grunert, 2009). While consumers find the state of animal welfare problematic, farmers evaluate the condition of animal welfare more positively. The discordance in beliefs between farmers and consumers was found to be mainly related to aspects such as pain, stress, space availability and the ability of animals to engage in natural behaviour (Vanhonacker, Verbeke, Van

Poucke & Tuytens, 2008). Consumers have a negative view of what they consider as excessive manipulation and lack of naturalness in production and processing of meat products (Verbeke, Pérez-Cueto, Barcellos, Krystallis & Grunert, 2010). When evaluating meat quality, Korzen and Lassen (2010) make the distinction between the “everyday” context and the “production” context. In the everyday context, consumers focus on characteristics such as taste, texture and health. The production context is focused on production related qualities, such as animal welfare and organic production.

Animal welfare plays an important role in consumers’ perceptions not just from the production perspective, but also in terms of production related qualities. In this context, it has been found that consumers derive product quality expectations from the well-being of the animals. Bredahl and Poulsen (2002) revealed a clear perceptual link between meat quality and the applied production method, with extensive, outdoor production generally being perceived as resulting in higher quality than intensive, indoor production. Perceived quality was influenced by several production factors, such as animal keeping at the farm, feed, general welfare of the animals etc. Similarly, Scholderer et al. (2004) found that consumers expected pork from outdoor grown animals to have higher quality both in terms of “soft” parameters, like animal welfare, and “hard” quality parameters, like sensorial quality. Consumers gave substantially higher ratings to pork from outdoor production systems on all dimensions of expected quality, apart from price, creating a “halo” effect in consumers’ quality expectations.

Consumers make positive inferences about animal welfare from the organic label (Grunert et al., 2004). Consumer motivations and attitudes towards organic meat are supported to a high extent by concerns about animal welfare and the belief that organic standards are higher than those of conventional livestock producers (McEachern & Willock, 2004). Toma et al. (2011) found that the stronger the welfare-friendly attitudes, the more frequent the consumption of free-range and organic

meat. Generally speaking, altruistic values, such as animal welfare and protection of the environment, influence consumers' attitude and the behaviour towards organic food (Dreezens, Martijn, Tenbult, Kok & de Vries, 2005; Thøgersen, 2007; Krystallis, Vassallo, Chryssohoidis & Perrea, 2008; Chen, 2009).

When it comes to meat and meat production, individuals adopt dual roles. On the one hand, as citizens, people have views about different types of meat production, which are weakly reflected in their actual behaviour as consumers. On the other hand, as consumers, people buy, prepare and consume meat products. Individuals form attitudes about production systems from their role as citizens (Grunert, 2006). Small and well-defined segments of consumers who pay attention to specific farming attributes, such as animal welfare, can be identified (Krystallis, Grunert, Barcellos, Perrea & Verbeke, 2012). Studies have more specifically been looking into the importance of animal welfare in connection to organic food consumption. For example, a distinction has been made between organic consumers with low or high involvement (McEachern and Schröder, 2002). Low-involvement consumers do not pay attention to intangible attributes, animal welfare included, but they are very interested in tangible attributes, such as visual characteristics or price. In contrast, high-involvement consumers, who buy organic products regularly, require more intangible quality attributes. Harper and Makatouni (2002) report that buyers of organic food are more likely to be concerned about ethical issues such as animal welfare compared to non-buyers, even though concern for the wellbeing of the animal is considered a motivator to purchase animal-friendly products by both organic and non-organic buyers. Magnusson et al. (2003) similarly find that consumers with a strong intention to purchase organic foods give higher importance ratings for the consequences of animal welfare compared to consumers that have weaker intentions.

The current study contributes to previous studies related to animal welfare in food production processes in specifically looking at increased animal welfare in the organic food context. The

objective is to focus on how consumers understand and interpret an organic meat production process where animal welfare standards are beyond the ones required by “standard” organic production regulations, and if consumers perceive additional “amounts” of added value in such production systems that would lead to premium prices willingly paid for acquiring “extensive animal wellbeing” organic meat.

Concept testing

“A product concept is an elaborated version of the initial product idea, expressed in meaningful consumer terms” (Fraser, 1994). Testing a product concept is one of the most important phases of new product development. The central goal of new product development is to create a product with superior consumer value so that consumer needs will be satisfied (Slater and Narver, 2000). Conducting consumer research helps raise the odds of a product’s success on the market. For this reason it is important to understand how consumer needs are shaped, how they perceive products and how they make product choices. Direct contact with consumers is imperative when the product concept is developed and refined. After identifying the most attractive ideas, management has to understand how to position a certain idea in order to appeal to prospective buyers (McQuarrie & McIntyre, 1986). Concept tests are used for many purposes, like the identification of the various market segments, the identification of potential improvements to the concept and the identification of appropriate positioning strategies (Moore, 1982; Fraser, 1994).

Among the multitude of methods that can be used for testing new concepts, focus groups are particularly appropriate when testing incremental new products. In concept tests, qualitative methods are often product-driven, which often limits the insights given to the particular product(s) included in the study. This is due to the fact that consumer needs are elicited within an existing framework of what is already available on the market. The advantage of these methods lies in their capacity to capture current needs and desires and to optimise existing products (van Kleef, van Trijp

& Luning, 2005). Iuso (1975) advocated the use of qualitative methods for testing product concepts, stating that “the consumer must be allowed to think and talk about a conceptualized product or service idea, not only to evaluate it abstractly, but, in the course of considering and discussing it in various ways, ultimately, to relate personally to it [...]. It is these conversations, and not enigmatic scale points, which provide the most reliable and complete indicators of market reactions to an idea, its strengths and weaknesses, as well as understandings and insights regarding how consumers perceive and relate to the stimulus.”

Methodology

Focus groups

Focus group discussions were adopted as method of enquiry (Silverman, 2005), with the consideration that interaction among participants can generate insights that might not be generated in one-to-one interviews. Focus groups involve carefully planned discussions with two to ten participants, which are developed to elicit participants’ range of opinions across several groups (Eriksson & Kovalainen, 2008). 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). The purpose of focus group discussions is not to collect individual opinions on a subject matter, but to see how people react to each other’s questions and statements and how shared conceptions are constructed during the discussion (Eriksson & Kovalainen, 2008). Focus groups are interactive discussion groups, where statements of preference and perceptions of one participant can trigger comments by others (McQuarrie & McIntyre, 1986). Getting insight into whether or not a product or a concept is attractive to prospective consumers is one of the main focuses of qualitative concept tests (van Kleef, van Trijp & Luning, 2005).

The production system tested in this study is new, and its final products are in an early development stage. Consumers' knowledge of the proposed concept is thus limited, even though knowledge about organic production and products can be expected to be moderate to high among Danish consumers. In this context, a qualitative method was considered to be appropriate for testing the new concepts, as participants can be expected to form attitudes towards the production system while being exposed to information about it and while interacting with other participants.

The data for this study were collected through three focus groups (N=5 to 7), conducted in May 2013. The participants were asked to sign a consent form for their participation and full confidentiality of their personal information was granted. The topics of discussion were clearly defined beforehand and then included in a discussion protocol, thus facilitating semi-structured data collection. The same order and sequence of topics was used in all focus groups, while the natural flow of the discussion was not obstructed. The protocol was written in English and translated into Danish. The focus groups were conducted in Danish, in a meeting room at the Aarhus University campus. The discussions were audio- and video- recorded. One interviewer and two assistants were present during the focus groups. The discussions lasted between 80 to 90 minutes each. The interviews were fully transcribed in Danish and translated into English. Coding and analysis of the transcripts was conducted with the qualitative analysis software NVivo 10.

Scholars have previously noted on several things which need to be taken into account when planning a concept test, all of which can have great impact on the quality and the consistency of concept evaluation: selection of the participants and their prior experience or expertise, as well as the stimuli design and product representation (Schoormans, Ortt & de Bont 1995; Engelbrektsson, 2002; Klink & Athaide, 2006; Ozer, 2011). The following sections will elaborate on the protocol and the stimuli used in the focus groups and the sampling technique.

Protocol and stimuli

Past literature advocates that concepts should be presented in a clear and realistic way, either in a commercial or non-commercial format, without trying to oversell them, yet making a credible and unambiguous difference from existing alternatives in the marketplace. Presenting prototypes or final products instead of merely describing the concept may increase the validity of a concept test (Crawford & Di Benedetto, 2003).

As an opening to the group discussions, participants were asked to introduce themselves. They were then asked to describe their typical dinner and to discuss the importance of meat in their diet and daily lives. The second part of the discussion focused on animal well-being and living conditions of three types of animals: chicken, pigs and cattle. The participants were first presented with pictures of the animals in their natural environment (Appendix B) and they were asked to present their first impressions of the pictures they had just seen. Then, production stories depicting the living conditions of the animals were read by the interviewer (Appendix A). 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. Illustrations of whole chickens and pork chops (Appendix B) were shown to the participants, in order to get insight into how consumers would respond to their appearance and what expectations they would derive from these products. The chickens differed in protein intake and breed, hence the difference in size and colour of the whole chickens. The pork chops were taken from pigs of two different breeds that had the same living conditions, yet one of them produced more fat than the other. 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 purpose of the study was revealed to the participants at the end of the session, when they also received a small compensation for their participation.

Sampling

Purposive sampling was used for recruiting focus group participants: the participants were selected based on their expected contributions and on the research aim (Miles & Huberman, 1994). The participants were screened for their organic food purchase rate and organic meat purchase rate. Information about the purchase rates was obtained through a mall-intercept survey. One of the questions in the survey was: “How often in the last ten times you bought the following products were they organic?” Respondents would have to rate 18 food product categories on a scale from 1 (never) to 5 (always) or choose the option “I never buy this product”. Five out of the 18 food products were meat and meat-based products. The respondents were asked to give their contact information if they wanted to participate in the focus group study. All the respondents who showed interest in participating were included in a list of potential participants. Two indexes were calculated, in order to make the split into three groups: one for the overall organic food purchase rate, and one for the organic meat purchase rate. Each person was attributed to one of the three databases based on their score on the two indexes. The three groups were formed as follows: one group included regular organic food and organic meat buyers, one group included consumers who frequently buy several organic food products, but rarely buy organic meat, and the last group included consumers who rarely or almost never buy organic food products. The final selection aimed at obtaining as much variation as possible within each group and balance regarding gender and age (see Table 1). The participants were contacted via telephone and invited to the focus group interviews. Out of a total of 26 persons recruited, 18 participated in the focus groups.

Schoormans et al. (1995) found that consumers with moderate to high levels of expertise are beneficial to the validity of the results from concept tests. The authors recommend that consumers who are invited to participate in a concept test should possess a degree of product knowledge. The present study is conducted in Denmark, where there is generally high awareness with regards to

organic food and the organic label among consumers. Therefore, it is highly probable that participants would have some prior knowledge about organic products in general, yet a somewhat more limited experience with organic meat products compared to other organic product categories.

Table 1. Participants’ socio-demographics across each group

	Focus group 1 (N=5)	Focus group 2 (N=6)	Focus group 3 (N=7)
Gender			
Male	3	3	4
Female	2	3	3
Age			
20-30	1	2	5
31-45	1	3	0
46-65	3	1	2
Education			
Secondary school (Gymnasial uddannelse)	0	1	2
Undergraduate (Kort videregående uddannelse)	1	0	0
Graduate school (Mellemlang videregående uddannelse)	2	3	2
Post graduate (Lang videregående uddannelse)	2	2	2
Monthly household income (Danish crowns)			
< 24,999	1	2	5
25,000 – 49,999	0	1	1
50,000- 74,999	3	2	0
>75,000	0	1	0
Confidential	1	0	1

Results

The description of the results is organized around the different types of consumers that were included in the study. Consumers’ perceptions are presented within each group, while general findings across groups presented in the conclusions section.

Focus group 1: Regular organic food/ organic meat buyers

The participants in group 1 found the new production system “inviting”, yet it might be *“a bit of a fictional one, because if you look at what it objectively takes in order to call something organic, then there is no guarantee that it is like this [as presented] that they have it. So you can get away with not as nice environments as that.”* One of the participants stressed the idea that

production systems that use fewer standards than the ones presented, but that are still high on animal welfare, might be sufficient: *“I still believe that less [standards] will be able to do it. If the quality of life of the animal is sensible and the meat quality is reasonable, well, then I think it is something that works. If the animals have not been fixed all their lives, and have been out on the fields, then I am on board. It does not have to be quite as much as those ones [presented].”* During the discussion, the participants expressed concern with regards to production trends: *“I am afraid that things are going the wrong way with production with decent conditions”*. However, it was mentioned that consumers have the power to make a difference: *“That is for as long as we do not buy it. As long as we do not demand it [production with bad practices]. It is the consumers who have to do something.”*; *“I just think that it is a matter of time. I think that it takes time to get used to it and I think if we are just patient, there will be more and more people that move to it [buying such products].”*

For these participants, eating meat from animals that have had a bad life was not an option because *“it is about more than taste and ingredients. Food is also ethics.”* One of the participants explains: *“If I know that it is something that is absolutely terrible with regards to animal welfare, I just do not eat it at all. I really do not care how tasty you can make a caged chicken. I would not touch that.”* The participants also explained how they coped with the high price of organic products by purchasing less or by choosing a cheaper organic alternative: *“Especially with chicken, I just opt out, if I cannot get it where I know it is either free-range or organic, then it is just off the list. [...] I would not buy it at just any price. So I choose something else. But then it may be that I find some pig or something.”* Participants also have expressed environmental concerns regarding meat production and consumption: *“A lot is used up before that [coming up with the final meat product], also if you think on a global scale, and CO₂, and I cannot help but think of that when I go shopping, too.”*; *“What you save in pesticides [when producing organic products], you use in*

diesel, so in that way, if you look at the environmental dimension too, it is not necessarily a large positive trade-off.”

The participants had positive expectations from the living conditions of the animals: *“It sounds like that will give a good quality.”*; *“I believe that it is essential that they can come out and rode into the ground.”*; *“They seem to enjoy themselves.”*; *“I have experience from the time I had chickens, and such a chicken that is allowed to grow up in the garden tastes much better than the one you go out and buy.”*; *“I could just hug them [the pigs]. That is how it should look like.”*; *“This is actually kind of funny, because I think it sounds really delicious.”*; *“I would expect that you could get some really cool stuff out of someone like them.”* The living conditions were considered to have an influence on the quality of the meat: *“It tastes better, because it grows slower, and they get plenty of fresh air.”*; *“I think at least that if we compare it to cattle that have been standing inside for lifetimes, then I have no doubt that these taste significantly better. And the muscles are better.”*; *“An animal that is allowed to grow up in a natural pace, it will also have a firmness and flavour that is different and more intense than something that just grew up and weighed two pounds in a week.”* The participants based their expectations on their prior experience with organic meat products. They mentioned the importance of the information they had access to when differentiating between different products, especially when looking at final meat products in a store. In connection to this, one participant pointed out that there did not seem to be a big difference between what regular meat products looked like and the products they were presented with, therefore *“one really depends on the different labels in one way or another.”*; *“If the premise is that they [the chickens] are the ones we saw on the previous pictures [in their living environment], my expectations remain that they taste good. But that is only because you have the connection and know that they have gotten plenty of exercise, and know that they have had a wonderful life, and know that they have gotten all sorts of exciting things to eat and such things.”*; *“I do not think there is much difference*

between them and then everything else. It is also, therefore, that you really depend on the different labels in one way or another.”; “It also depends on the faith you have to the manufacturer and what is printed on [the package], you really are.” Some possible negative influences on the quality of meat were also mentioned: *“It might be a little too concentrated in its taste.”; “Fat percentage may be so low that it actually hurts the taste.”* Ultimately speaking, animal welfare is important, but it should not have a negative impact on product quality: *“If it is [an animal] that is out all the time and gets really, really, really a lot of exercise, it happens after all that the level of fat is so low that it can hurt [negatively affect] the taste too. Then I must say, yes to animal welfare, but it must not begin to taste of cardboard.”*

The participants pointed out that the price of such products would prevent people to buy them: *“People will not normally give the prices that it would take if you want it to be something you could also make money off, right. It is a balance. And it is sometimes the challenge, you cannot make these super delicious and super good products for many [people], they do say that they would like to buy animal welfare, they want to buy high quality and the like. There are not as many who buy welfare-oriented, as they say when they responded to the questionnaires.”* Even the participants themselves mentioned the price of such potential products: *“If it is chops and something like that, then I would very much prefer it if I could just spend the money. If I got the money for it, then I would just do it.”*

Focus group 2: Regular organic food buyers/ occasional organic meat buyers

The participants in group 2 saw the new production system as “idyllic” and they remarked on “happy pigs with curls on the tail”. When talking about the intention to buy such products, price and finances came into discussion. Opinions pointed towards the idea that finances would get in the way of actual purchase: *“I would prefer to purchase meat produced this way, but there’s the issue of finances.”; “I’m only looking at price, and they are just more expensive the ones that are free-*

range and those that are organic. And I don't think that that is what I will spend my money on."; *"Of course it has something to do with how your finances are."* When disregarding price and finances, participants would generally prefer to buy meat coming from this this type of production system over other types. However, animal welfare did not seem to play a key role in the daily purchase decisions of these participants. However, they acknowledged the intense industrialization of production processes: *"Agriculture, it becomes so industrialized today, so it's sort of like some large factories, just with animals in. It is kind of ugly, I think."*; *"I think that there are two trends in it. On the one hand it becomes more industrialized, but on the other hand then you have these animal welfare requirements."*

The participants would expect the meat from these animals to be darker, firmer, more compact and maybe more tender. Not much was mentioned regarding expected taste, due to the limited experience that participants had had with organic meat products. Some mentioned that *"[one would be] probably unable to taste the difference between animals grown in the same conditions, but with different feeds that are either organic or conventional"*, others had a different view *"I also have an expectation about, that if you give them organic feed, I have such an expectation that they'll come also to taste better. But I don't really know why."* Good quality could also be obtained for conventional meat, *"by hanging the meat long enough, even conventional meat becomes tender"*; therefore, it was not seen as an exclusive trait of organic products. Health was also mentioned as a product quality: *"I think that the chicken is healthier, but I don't think that there is taste difference. I don't expect a taste difference at least; I expect that there may be a nutritional difference."* The longer life and the freedom to move freely were considered as underlying factors that have an influence on the meat quality.

Focus group 3: Occasional organic food buyers

The participants in group 3 described the new production system as "idyllic", "wonderful",

“fantastic”, making references such as “it’s like my childhood” or “grandfather’s backyard”. *“It’s such happy chickens you would like to eat”*, stated one of the participants, or *“I would also wish that it was some like that, I bought every single time”* said another participant. Negative references were made in connection with the cost of such a production system: *“It sounds expensive.”* Hearing about the production system generated bad consciousness among those who did not purchase products that were produced in similar way: *“It also gives us the right to give bad conscience to those of us who will probably buy those who don’t have such good conditions.”* Animal welfare was not something of little importance to the participants in this group, yet some placed more importance on animal welfare than others. One of the participants explained he *“thinks about it, but sometimes I also put my values on the shelf because of the price.”* However, it was mentioned that people could probably afford such products, yet it was matter of priorities and attitudes: *“My claim is that 80 per cent of the adult population can afford the right choice if they want to. It is a matter of priorities. It is a change of attitude.”* When asked about what their preferences were, participants mentioned that probably anybody would prefer animals to have a good life: *“I don’t think that there is somebody who will think, no, such a chicken that has lived outside and is happy and healthy, that one I don’t want. I’d rather have one who couldn’t walk and couldn’t lift his own body.”*

The participants discussed about the possibility of having something in-between the organic and conventional production systems when it comes to animal welfare standards (as in chicken production, where there is a distinction between conventional, free-range and organic): *“In short, I think that it means more to me to know that the animal has had it good than that it is organic. Never mind the ecology and maybe meet somewhere between the organic and the non-organic.”* ; *“I am also a bit of a fan of your idea that we could meet in the middle. I don’t necessarily need everything to be organic. Many things I could certainly buy that were not organic, but it is that we know that*

the animals have had it good, it might just be enough for me that I think I would feel better buying it than those chicken fillets that are there, and probably never have been able to walk [the chickens].”

Moreover, the participants engaged in a debate about raising minimum standards for conventional production systems. One of the participants brought up this option in the discussion *“What about raising the lower bottom a bit, by law or something. That’s what I think should happened. Because there will always be those who buys the cheapest [products], so you should ensure that even the cheapest [animals] have had it like just a little better”*. Yet this proposition was not supported by the rest in the group, who pointed out negative consequences, such as increasing imports from other countries where there were no such standards.

The participants expressed various quality expectations as outcomes of the production system: pork would be really good and perhaps less greasy, the taste would be “marginally better” and a placebo in taste might occur: *“But if I do know it [how they were produced], it may well be placebo in taste, that is, if one knows that it has [had a good life] then it can raise it even more [increase taste] than if I can get to blind test it.”* Another participant pointed out that the taste of such meat *“will not be anything to say hurray for”*. When discussing intention to buy such products, there were two main parallels drawn by that participants: one was regarding the reference point or what this production system was compared to: *“If the alternative was a cow that had never seen grass, then this is surely better, much better”*; Another one was regarding the price of the final meat products: *“But everything we would like to buy. It’s the issue of price apparently, that we’ll have to establish all around. Because who doesn’t wish for the best for both humans and animals?”* Participants seemed price-conscious and they admitted that they would consider buying such products only if they were on offer in the supermarkets, due to expectations that the full price would be quite high.

Discussion

The aim of this study was to explore consumers' perceptions to production systems where animals have living conditions which exceed the required organic standards. More specifically, the study gained insight into how consumers perceived the production system, how the perception of the production system influenced the perceived quality of the final products and what expectations people had from the final products. It was also interesting to see whether responses differ among different types of organic food buyers.

The participants had a generally positive reaction to the production stories, regardless of their organic food purchase rates. Regular consumers relate to the stories from their own experience and knowledge about organic production system and an increased interest in animal welfare, whereas occasional consumers ponder on the proposed production process from a more detached position. Animal welfare is more important for regular organic consumers and less important for occasional consumers. The new production system is generally seen as idyllic, yet some participants are also sceptical. We can assume that this might be due certain trust issues with regards to bigger scale organic production processes. Many participants voice their concerns regarding the trends in production processes and the mass industrialization. Consumers certainly have mixed opinions about how this should be changed. Some regular organic consumers might see extensive animal welfare standards in organic production as unnecessary, while occasional consumers debate more about whether or not the minimum standards of conventional production should be dealt with instead. These findings imply that the idea is received in a positive way, yet it is uncertain how consumers will act on it. It is likely that regular consumers of organic meat products would be the best ones to target and to some extent also occasional organic meat buyers.

Another thing to consider is that for some consumers animal welfare is more important than the organic claim, hence production processes that are high in animal welfare, but that are not

organic are also sought after by consumers. Promoting the animal welfare aspect of the new production system over other specificities might help in attracting people's attention and work in favour of such products being considered for purchasing.

The participants were presented with rather long descriptions of the production process. In a commercial context it would be difficult to convey as much information through the label. Communicating the advantages and the qualities of the production system in a proper way is very important. Consumers state that the information they get with regards to how products are produced is the only information they get about the meat products they buy, therefore they are often relying on the label and the trust that what is presented is actually true.

The proposed production system is generally perceived as having a positive impact on the quality of the final products. Quality is an important aspect for consumers; therefore the production process would be less appreciated if the quality would not be satisfactory. This means that in case the sensorial quality of the final products (taste, tenderness, firmness etc.) does not live up to consumers' expectations, the chance of purchase/re-purchase of such new products would be jeopardized. Two steps should be taken in this direction. Firstly, the optimal treatment should be determined, meaning the treatment that gives the best results in quality (processing costs need to also be taken into consideration, of course, as extensive processing can increase the price significantly). Secondly, when the right "recipe" is found and good quality is assured, it should be communicated to consumers, as this can increase the attractiveness of the product.

Despite the generally good reaction to the production process and the products that the participants were presented with, it is evident that not all would eventually purchase such products. More research is needed in order to get a better idea of people's intentions to buy, however some conclusions can be drawn from this qualitative study. The price is brought up in all focus groups as a possible barrier to actual purchase. Regular consumers mention price in perspective, as something

that would generally be an issue, while occasional consumers have a more personal perspective, as they already consider high price to be discouraging for organic food purchase. It is not only occasional consumers whose actions are influenced by the price. Regular consumers are also aware of the higher prices of organic food - organic meat in particular - yet their strategy is to buy smaller quantities of organic meat or to buy other cheaper organic meat products. Such findings have great implications for the pricing strategy of new organic meat products. Occasional and non-consumers of organic meat products would generally not purchase high-priced organic meat products, while regular organic meat consumers would find a way to spend less money when purchasing organic meat products. Both scenarios lead to small sales for such new products if the price premiums are too high.

The concept tests provide an interesting insight into consumers' impressions of and expectations from the new production system. We notice areas where the production and processing processes could be improved in order to fit with consumers' expectations of the final products. Further studies should be carried out for a more limited investigation of specific aspects, such as information dissemination about the production system, labeling and characteristics of final products.

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Appendices

Appendix A: Production stories

Chicken	<p>The chickens are fed 100% organic feed of Danish origin and are locally produced. Each chicken is given access to approximately 10 m² 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 grown 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.</p>
Pigs	<p>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 areas 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.</p>
Cattle	<p>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.</p>

Appendix B: Pictures

Example of illustrations of animals in their living environment



Illustrations of meat



Appendix C: 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 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 grown 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 shops 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 grown 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 no.
 - 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?