

Consumer perceptions: pork and pig production. Insights from France, England, Sweden and Denmark

T.M. Ngapo^{a,*}, E. Dransfield^a, J.-F. Martin^a, M. Magnusson^b, L. Bredahl^c, G.R. Nute^d

^aStation de Recherches sur la Viande, INRA, Theix, 63122 St-Genès-Champanelle, France

^bDepartment of Public Health and Caring Sciences, Uppsala University, Uppsala Science Park, Dag Hammarskjölds Väg 10B, S-75183, Uppsala, Sweden

^cThe MAPP Centre, The Aarhus School of Business, Haslegaardsvej 10, Dk-8210, Århus V, Denmark

^dDivision of Food Animal Science, School of Veterinary Science, University of Bristol, Bristol BS40 5DU, UK

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Abstract

Consumer focus groups in France, England, Sweden and Denmark were used to obtain insights into the decision-making involved in the choice of fresh pork and attitudes towards today's pig production systems. Many positive perceptions of pork meat were evoked. Negative images of the production systems in use today were expressed, but rationalised in terms of consumer demands, market competition and by comparisons to previous systems of production. Knowledge of production systems appeared of little consequence in terms of any meat market potential as several groups freely remarked that there was no link between the negative images of production methods and their purchase behaviour. The groups were clearly confused and mistrusted the limited information available at the point of purchase. Careful consideration should be given to meat labelling, in particular taking account of the evident consumer ethnocentrism, to assure that such information is targeted to enhance consumer confidence.

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1. Introduction

Both the world's meat consumption and production increased by almost 30% between 1991 and 1999, equivalent to average increases of more than 2.5% per annum (FAO, 2000). Furthermore, the world's meat production has been projected to increase at a rate of 2.2% per annum over the decade to 2007 (FAPRI, 1998). Pork accounts for 56.2% of this total growth in meat production. In the EU14, pork meat production and consumption increased by approximately 15 and 13%, respectively, from 1991 to 1999 and both showed relatively steady increases (MHR Viandes, 1999). To better illustrate this market from a Western European perspective, in 1996, for example, Western Europe contributed 21.7% of the world pork production, the equivalent of 15.5 million tonnes of pork meat, second

only to Asia. In addition to local market movements, both exportation and importation of pork meat from Western Europe increased from 1995 to 1999 by about 35% (MHR Viandes, 2001). Worldwide in 2000, France and Denmark were in the top 10 biggest producers of pig meat, at 2.3 and 1.6 million tonnes produced, respectively, and Denmark was the biggest exporter of pig meat exporting 1.3 million tonnes; French pig meat exports were about half that of Danish (FAO, 2000). The UK was the fourth biggest importer of pig meat, importing 0.8 million tonnes. Sweden was neither a large producer nor importer of pig meat (approximately one tenth that of French production and importation, respectively). With overall worldwide rates of pork consumption increasing in parallel with production, it is important for producers to be at the forefront of the competition for potential markets.

Consumer and market orientation have been identified as the key factors for successful future development of today's meat industries (Grunert, Hartvig Larsen, Madsen, & Baadsgaard, 1996; Verbeke, 2000). An

* Corresponding author. Tel.: +33-473-624736; fax: +33-473-624089.

E-mail address: ngapo@clermont.inra.fr (T.M. Ngapo).

understanding of the factors that determine consumer perceptions of a product's value or cost is of crucial importance to product innovation, choice of marketing strategy and maintenance of competitive advantage. Implications from studies investigating the influences of the consumer decision-making process towards fresh meat in Belgium led Verbeke (2000) to recommend a series of topics requiring interdisciplinary research. One of the topics was linking changes in consumer beliefs and attitudes to consumer behaviour to explore future developments and up-date recommendations for the different levels within meat organisations. The impact of growing consumer concern about animal welfare and environmental issues led Verbeke and Viaene (1999) to conclude that future success in the pork sector will be determined by the ability to deliver safe meat which is both lean and produced through acceptable production methods. These conclusions were derived from responses from Belgian consumers, but what about other European consumers?

A useful technique employed as a qualitative means of obtaining insight into the consumer decision-making process is the "focus group". Focus groups are used to encourage participants to engage with one another, formulate their ideas and draw out cognitive structures which are not articulated using other research methods (Kitzinger, 1995). The focus group technique involves carefully planned discussions to explore individuals' perceptions, feelings and thoughts and gives the researcher an opportunity for exploratory discussion to understand consumers' knowledge and perceptions. A distinct advantage that focus groups have over other research methods is that group dynamics often encourage participants to voice opinions and attitudes that would otherwise be unheard. In addition, focus groups do not discriminate against people who cannot read or write, encourage participation from people reluctant to be interviewed on their own or who feel they have nothing to say and, by tapping into interpersonal communication, are particularly sensitive to cultural variables (Kitzinger, 1995).

The aim of this study is to use focus groups to obtain insights into decision-making towards fresh pork purchase and attitudes towards today's pig production systems using consumers from France, England, Sweden and Denmark.

2. Methodology

Four focus groups were conducted in each of France, England and Sweden during March and April 2001. The groups were composed of women or men who live in rural or urban areas. Two groups were also conducted in Denmark, in May and June, of mixed sex differing in the type of area in which the participants live (rural or

urban). The ages and number of participants in each focus group are given in Table 1.

The participants were recruited by post using a standardised invitation in France, England and Sweden. In France and England, those who responded positively by telephone were chosen if they consumed pork and were between 20 and 70 years old. In Sweden, the process was the same except that pork consumption was not a criteria for participant selection. The selected respondents received a second letter detailing the venue and time. The participants in Denmark were recruited by telephone and were chosen if they were between 30 and 60 years old, were at least partially responsible for food shopping in their household and consumed pork at least once a week in their main meal of the day. Pork consumption information was obtained by asking about consumption of a range of meats. No information was given to the respondents to indicate that the subjects of the focus groups were pork meat quality or pig production methods.

Procedures described by Morgan (1998a, 1998b), Krueger (1998a, 1998b, 1998c) and Simon (1999) were used to conduct the focus groups. A questioning route was developed by the research groups in the four countries, translated to the respective languages of the countries and strictly adhered to in France, Sweden and England. The questioning route was comprised of a series of mostly open-ended questions to obtain information on consumer perceptions of pork meat quality and pig production systems. The questioning route is presented in Table 2. The adjusted questioning route used in Denmark is given in Table 3. A visualisation exercise and the production of collages were also added to the Danish questioning route. The visualization exercise was used as an introduction to the discussion about the quality of pork and the participants were asked to visualize going to the supermarket to purchase pork for their evening meal and then to write down their thoughts. Collages were used as a fore-runner to the discussion about today's pig production systems. The participants, in pairs, produced collages using pictures and words that they extracted from a selection of agricultural, environmental, health and women's magazines provided by the moderator. The participants were asked to produce collages representing their perceptions of the

Table 1
Composition of the focus groups

	France <i>n</i> (age)	England <i>n</i> (age)	Sweden <i>n</i> (age)	Denmark <i>n</i> (age)
Total	24	34	21	19
Rural women	5 (37–63)	10 (20–60)	6 (20–58)	9 (32–47)
Rural men	8 (32–45)	8 (20–60)	6 (22–70)	
Urban women	7 (22–70)	8 (20–60)	5 (34–58)	10 (32–54)
Urban men	4 (26–70)	8 (20–60)	4 (22–56)	

Table 2
The questioning route

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1. Opening question (5 min):
 - a. Tell us your first name and what kinds of meat you eat?
 2. Introductory question (7 min):
 - a. In terms of pork meat, what does “good quality” mean to you?
 3. Key questions (10 min each):
 - a. To obtain good quality pork meat, what do you look for?
 - is the pork that you buy always of good eating quality?
 - is the pork you want to buy always available?
 - what information do you find the most useful on the label?
 - b. What is your opinion of the “value for money” of pork?
 - c. What do you think of the healthiness of pork meat?
 4. Transition question (7 min):
 - a. Moving away from the pork meat and onto the way that pigs are raised now, tell me what you think about the way that pigs are raised today?
 5. Key questions (10 min each):
 - a. Has the situation become better or worse in recent years? In what ways?
 - is it different in this country than in other countries?
 - b. How would you describe the state of health and the wellbeing of pigs today?
 - c. Do you think that pigs are treated humanely?
 - d. Do you think about the environment when you think about the way pigs are raised today?
 - what do you think are some of the effects on the environment?
 - e. How does the way that pigs are raised influence the quality of meat?
 6. Ending question (10 min):
 - a. We are going to write a questionnaire to distribute to a large number of people in this country and some other European countries to try to obtain information about peoples perceptions and ideas of both pig production systems and pork meat,
 - do you have any other thoughts about the raising of pigs or pork meat that have not been illustrated by the questions we have asked today?
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Table 3
The adjusted questioning route used in Denmark

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1. Opening question (5–10 min):
 - a. What kinds of meat do you eat?
 - b. On what occasions do you use the different kinds of meat?
 - c. Are some meat types more suitable for guests than others?
 2. Introductory question (5–10 min):
 - a. What do you think about pork compared to other kinds of meat?
 - b. What do you think of the healthiness of pork?
 3. Key question (30 min):
 Visualisation exercise about imagined supermarket shopping situation where pork is bought. Presentation by each participant.
 - a. In terms of pork, what does ‘good quality’ mean to you?
 - b. What do you look for to get pork of good quality?
 - c. Is pork of good quality always available?
 - d. Do you look at labels on the packages when you buy pork from the self-service cooling counter?
 - e. What information do you look for?
 - f. What does this information tell you about the quality of the meat?
 - g. How does the quality of pork compare to price?
 4. Transition questions (10 min):
 - a. Moving away now from pork and onto the way that pigs are raised, now, tell me how the breeding of the pigs influences the quality of the meat?
 5. Key question (60 min):
 Production of collages depicting how the participants perceive pig breeding in Denmark today. Presentation of collages.
 - a. What do you think about the way pigs are bred in Denmark today?
 - b. What is it like to be a pig on a typical Danish pig farm today?
 - c. Have pig breeding methods become better or worse in recent years? How?
 - d. How does Danish pig breeding compare to that in neighbouring countries?
 - e. Has the welfare of the pigs become better or worse in recent years? In what ways?
 - f. Do you think about the environment when you think about how pigs are raised today? What do you think are some of the effects on the environment?
 - g. How does the way the pigs are raised influence the quality of the meat?
 6. Ending question (5–10 min):
 - a. We have talked quite a lot about pork and how it is produced, is there anything that you would like to add before we finish?
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ideal raising system in comparison with how pigs are bred on Danish farms today.

All group discussions were conducted by a moderator and lasted from 1.5 to 2 h. An assistant was also present to take notes and observe group dynamics. Audio recordings of all French, all Swedish and the rural English women groups were made. The Danish groups and three of the English groups were undertaken by external market research companies. Detailed accounts of the individual groups were written immediately after the groups were performed. The person responsible for the project in each of the four countries provided an English summary of the focus groups in that country from which this paper was drafted and agreed upon.

The focus group participants by no means constitute random samples of the populations of the countries. In addition, inferences have been drawn based on claimed or self-reported behaviour. It is recognised that these responses may be subject to social desirability, post-rationalisation or cognitive dissonance or consonance. Hence, the reported answers may deviate from actual or overt behaviour.

3. Results and discussion

3.1. Eating habits—meat

A majority of the participants said that they ate all types of meat. However, in all countries there were some who said that they had restricted their diets in terms of the types of meats eaten. In France, nine participants said that they had reduced or stopped their beef consumption and this was generally associated with perceived health risks associated with mad cow disease (Bovine Spongiform Encephalopathy, BSE). In Sweden and Denmark four and five participants, respectively, said that they did not eat lamb. Two of the Swedish participants were also self-reported vegetarians. There was no mention of reduction of pork consumption by any of the participants. This is surprising, particularly for the English participants, when one considers that the ‘foot-and-mouth crisis’ of 2001 was reported after the first of the English groups (rural women) and peaked, especially in terms of media attention, during the time the following three groups were being undertaken.

3.2. Good quality pork

Four factors considered indicators of good quality were mentioned in all four countries, these being fat cover, price, country of origin and place of purchase (Table 4). With the exception of country of origin, these characteristics were usually evident at the time of purchase.

The importance of having some fat cover for cooking, moisture retention and taste, but not too much because of health-related concerns was emphasised and repeated throughout the discussions. The perceived importance of pork fat cover has been shown by consumer preference studies (including, Diamant, Watts, & Cliplef, 1976; O’Mahony, Cowan, & Keane, 1995; Romans & Norton, 1989; Sikora & Weber, 1995).

The effect of price differed within each country for all four countries; some consumers perceived that higher price was a sign of better quality, others thought that it was better to pay a little more than the lowest price, but that there was not a sufficiently large difference in quality to warrant the existing high prices and still others thought that even the cheapest pork was of good quality. Some consumers were suspicious of the cheapest

Table 4
Similarities and differences between countries for the factors considered to be associated with good meat quality

	French	English	Swedish	Danish
Some fat cover	X	X	X	X
Price (varies)	X	X	X	X
Country of origin (own country)	X	X	X	X
Place of purchase	X	X	X	X
Colour of meat (light red)	X	X		X
Quality label	X	X		X
Overall appearance	X	X		X
Taste		X	X	X
Tenderness		X	X	X
Freshness		X	X	X
Juicy or not dry		X	X	X
Odour of raw meat	X		X	
Type of production	X		X	
Portion size	X			X
Organic		X		X
Even trimming/size		X		X
Firm raw texture		X		X
No hormones/antibiotics used		X		X
Non-stressed pigs			X	X
No drip	X			
Older pig age	X			
Some bone present	X			
Moist appearance		X		
Cleanliness of place of purchase		X		
Disease-free		X		
Unbroken packaging		X		
Some crackling/skin		X		
Texture			X	
Slaughtered on farm			X	
Farmed nearby			X	
From small abattoirs			X	
Some intramuscular fat				X
Healthiness/wholesomeness				X
Colour of fat				X
Not pre-spiced/marinated				X
Texture when cooked				X
No shrinkage when cooked				X
Smell during cooking				X
Availability				X
Temperature of display				X

meat or 'sale' meat questioning why it was so cheap, others searched for this meat. A large number of participants said that they paid more than usual and shopped at the butcher's if the meat was for a special occasion, such as for visitors. However, pork was generally considered a lower class of meat compared to beef, for example, and not used for "special" occasions.

The importance of the country of origin was reiterated in other parts of the discussion. All groups preferred meat that was from their respective countries and perceived such meat to be of better quality. However, information of origin appeared to be only rarely available for pork and little trusted when available.

The place of purchase was especially important in terms of trust. With the exception of the Swedish participants who rarely buy from butcher shops, many participants felt that they were unable to correctly identify the quality of the meat on display and entrusted their butcher to make the selection for them. Complete confidence in the ability of the butcher was expressed, not only to select good quality meat from that on display, but, in addition, to have on sale meat that was only of good quality and from good sources with regards to animal welfare. In a survey of German consumers' perceptions of fresh meat quality, Becker, Benner, and Glitsch (2000) found that the butcher was considered the most trusted source of meat safety information for German consumers and using surveys and focus groups, Verbeke (2000) found that Belgian consumers who paid a lot of attention to the information from butchers had a better image of pork meat. Becker et al. (2000) also observed that the country of origin (preferring locally produced foods) and place of purchase played dominant roles in the selection of fresh meat in the shop. In addition and similarly to the observations in the present study, Becker et al. (2000) found that 50% of the survey respondents did not consider price a helpful attribute in quality assessment.

In three of the four countries, the taste and the tenderness of cooked meat, meat colour, overall or general appearance and apparent freshness were mentioned as indicators of good quality (Table 4). These factors are physical product characteristics evident at the moment of purchase (except taste and texture) and were re-stated when asked what characteristics are searched for to find good quality. Similarly, from 16 pork meat attributes, Belgian consumers selected taste and freshness as the second and third most important after retail quality (Verbeke, Van Deckel, Warnants, Viaene, & Boucqué, 1999).

A complete list of all the factors mentioned (not necessarily by all participants or all groups within a country) is given in Table 4. The participants generally did not discriminate between the quality factors associated with selection at retail and those of eating quality. The French and Danish groups listed a greater

number of meat characteristics than the other groups. In the Danish groups, the use of the visualisation technique prior to the definition of pork meat quality may have prompted this emphasis on meat characteristics. The Swedish participants emphasised a number of factors relating to the slaughter and raising of the pigs which were not mentioned by the other groups. Likewise, the English participants showed some interest in factors related to meat safety (diseases and residues). Information about safety, slaughter and raising is rarely evident at the moment of purchase.

When questioned about the consistency of the quality of the meat purchased, there were two 'schools of thought' in France, England and Sweden. One group, predominantly men, said that they were never disappointed and could not remember a bad experience. The other group said that the meat bought was not always of good quality being dry, tough, with a lot of drip and/or having little or a bad taste. This split is consistent with the findings of O'Mahony et al. (1995) who observed that 40% of Irish consumers surveyed thought that the quality of pork varies a lot, whilst 55% did not. In the present study, many of the participants thought that characteristics consumers perceived as poor meat quality were often a result of inappropriate cooking methods or lack of time to prepare the meat correctly.

The desired pork was always available and a good choice existed. Only the French participants said that sometimes they had difficulty to find good quality pork, but with some effort they could always find what they wanted. On the occasions when something was not available, the participants said that they would choose another cut or perhaps go to another store. Some of the Swedish participants said that their purchase decision was made at the place of purchase and not before. The English participants had observed that even at the height of the "foot and mouth" crisis, pork was always available. Some groups discussed the advantages of shopping through a butcher (advance ordering, advice given, personal service, perception of receiving better meat), the disadvantages being that the butcher was considered more expensive and had a smaller assortment than the supermarket. Some participants shopped directly via the internet and some directly with the farm, trusting these businesses to do the meat selection.

3.3. Labels

The price, weight, date of packing or "best before" date and country of origin were the information on the label considered the most useful by participants in France, England and Sweden. All groups in the four countries were adamant that they wanted meat from their respective countries and had images of other countries as being "dirty", making "less effort to be

good farmers”, and “breaking the rules”. However, interestingly, the country of origin, which was considered one of the most important quality selection factors and useful pieces of information on the label, was also one of the most distrusted. In general, the information provided on the labels was considered confusing and questions were raised, such as “what does country of origin actually mean”, “is it the country where the animals are raised or slaughtered, or where the meat is processed?” and “what is organic meat?” Similar consumer confusion has been observed in other studies. Burger, Wagner, and Müller (1994) found that two thirds of the respondents in a German consumer survey felt they were insufficiently informed about food quality and were confused by the flood of unclear information. Verbeke (2000) observed that Belgian consumers’ knowledge and perception or interpretation of labels largely contrasted with the product features actually labelled. This was explained by a lack of clarity experienced by consumers, resulting from a plethora of labels on the Belgian meat market which led to consumer confusion and misunderstanding.

3.4. Value for money

The groups had some difficulty discussing this question and tended to discuss quality factors comparing pork to other meats. However, in France, England and Sweden pork was generally considered good value for money compared to other meats, being considered one of the cheapest meats available and almost always of good and uniform quality. In the Danish groups there was some disagreement and some participants thought that the competition was so tough that farmers were forced to sell low quality meat at low prices. The participants did say that because the meat is cheap, they buy it, knowing the quality to be poor. In France and England it was also noted that organic meat is a lot more expensive than “normal” (as stated by the consumer) meat.

3.5. Nutritional quality

This was a difficult area for most participants to discuss. All groups discussed the importance of a balanced diet and eating meat in moderation. The discussions focussed largely on the fat content of the meat and health-related concerns. Pork meat, especially the muscle tissue, was considered less fatty than beef or lamb and classed as a “white meat” by some participants. Some French groups also thought it more fatty than veal or poultry, but less fatty than in the past. While fat was considered unhealthy, all groups stressed the necessity of having some fat for taste. It is interesting to compare the consumer perceptions in this study with those of the Belgian consumers in the study of Verbeke

et al. (1999) where pork received the worst leanness rating perception compared to both beef and poultry.

The importance of care during preparation and of cooking because of diseases and worms that pigs have was mentioned in all countries. The English groups felt pork meat “safer” to eat than other meats. This feeling of security was said to be due to the lesser number of food scares compared to other meats, however, fear in the knowledge that pigs eat “everything” was expressed. Some French respondents thought that the diet of pigs could result in a future “crisis”. The French groups did think that the safety of pork meat was good because of the antibiotics given to the animals during production; some of the Swedish respondents were concerned about the transmission of residues of antibiotics to humans.

The French groups, who were passionate when discussing food, introduced cultural factors in this topic saying that it is an important part of French culture to eat meat at least once a day, especially for the health of children.

3.6. Pig production today

Groups in all countries agreed that the majority of pig production systems today are intensive, resulting from economic demands. This type of production was viewed negatively and comparisons were made with battery hens, factory-type production and with an image of “prisons”. The pigs were perceived to be treated badly, being stressed, in very confined spaces, too concentrated with long transport to slaughter. The French groups noted that the farms stink, the Danish that the floors are concrete and the pigs cannot root about, and the English that the pigs cannot have a special “toilet area” as was considered usual for pigs. In all countries it was expressed that meeting consumer demands for cheap meat within the limitations imposed by authorities meant that farmers were financially unable to respond to consumers’ concerns about the rearing conditions.

While there was a lot of discussion that these modern production methods are inhumane, most groups questioned the use of anthropomorphism as a means for the consumer to assess the production systems and some thought that “perhaps the pigs are happy in intensive production”. Participants in all countries admitted that their views were dominated by images generated by the media and the reality of the reports was questioned, few had actual first-hand experience or knowledge of the systems. Some French and the Danish groups were emotional when talking about intensive rearing conditions, yet all of these groups willingly admitted that their purchasing habits were not influenced by these images. This self-reported purchasing behaviour is consistent with that of a Belgian study where claimed attention to mass media reporting of animal welfare issues had little impact on consumer behaviour towards

fresh meat (Verbeke & Viaene, 2000). In another study Verbeke (2000; Verbeke & Ward, 2001) found that attention to mass media reports about meat safety had a highly negative influence on consumer behaviour to fresh meat, showing the difference in consumer perception (and its impact on claimed behaviour) between food safety and animal welfare issues. It has been hypothesised that, while the first issue impacts on behaviour, the latter impacts largely on attitude without furthering into behavioural changes. In the present study it was also observed that the English urban women adopted an 'ignorance is bliss'-type attitude and did not want to know where meat comes from in terms of types of production systems (this group had great difficulty responding to this question), taste being of greater importance. This is particularly startling considering the impact of the BSE and "foot and mouth" crises on English society in the last decade.

The feed given to the animals was discussed, largely by the men, especially in comparison to animal-based feeds and mad cow disease. The Danish participants thought that intensively reared animals are fed both concentrates, which are perhaps from genetically modified materials, and growth enhancers. The French groups did not trust the labels concerning animal feeds.

Animals raised outdoors or "free range", climatic conditions permitting, were perceived as happier, but their meat more expensive. Organic production was similarly considered by some English and Danish participants. However, all groups acknowledged that there are problems with extensive systems. Some Danish participants felt that pigs reared intensively know no other mode of life and therefore the methods are acceptable and others thought these pigs were "better-off", for example, "free range pigs might squash their piglets". The French participants were sceptical about "outdoor rearing" considering it a marketing tool whereby the animals are "finished" outdoors only (the animals are raised indoors and spend several days outdoors immediately prior to slaughter in order to achieve the right to label the meat 'reared outdoors'). The English questioned whether organic pigs are reared "happily" or merely fed differently, whether there is enough space to raise pigs outdoors and whether it is better to raise animals outdoors, for example, alongside motorways breathing vehicle exhaust fumes.

3.7. *Better or worse in recent years?*

All three possibilities were obtained here, often within the same focus group and in all four countries. Those who perceived the systems to be better nowadays, but not ideal, used examples of better sanitary conditions, less diseases, toys for the animals to play with, better feedstuffs and animals seen outdoors. It was thought that this is a result of greater public awareness of animal

welfare (not the Swedish groups) and more inspections, rules and restrictions imposed by authorities. Increased demands for better quality meat and international competition for market sectors were mentioned as contributing factors to better production systems by some Swedish participants. It was discussed that the systems had become more and more intensive, this had peaked and now more extensive farms are appearing. This suggests that rather than an amelioration of the intensive systems, the presence of extensive farming systems is interpreted as an improvement.

Some participants felt that there had been no change, and more particularly, no degradation, in production systems in the last 30 years. These participants also discussed that some good intensive farms exist, and conversely some bad extensive farms, dependent on the individual farmer.

Those who perceived the systems to be worse nowadays discussed the development of large scale units, mass production and industrialisation since the 1950s. In particular the urban men in England and France used descriptions, such as catastrophic, not natural, enormous degradation, and compared the production to that of battery hens. The French participants reflected on the faults of the old style of raising pigs in small pens with little light and Swedish participants felt the systems—old and modern—were similar but nowadays the farms are larger and the transport to slaughter longer.

The English rural women stated that "it all ends up as meat anyway" and therefore it doesn't really matter if the systems are good or bad. And the French urban women having said earlier that the systems were "shocking", in response to this question said that they were not against intensive production.

3.8. *Our country!*

Questions about differences in pig production systems in different countries evoked strong patriotism and much commentary. Groups in each of the four countries were adamant that their country was better than any other, even if not ideal or in some instances bad, as was previously observed with the country of origin as a quality factor. This is interesting in view of the fact that all groups admitted knowing very little about pig production in their own countries and even less, if anything, about this topic in other countries.

It was generally believed that in their own country, the rules are stricter and adhered to, animal welfare is more important and standards are higher than in other countries. A lot of the images of cruelty to animals and poor conditions were media-generated or characteristics of perceived stereotypes of the countries to which the groups compared themselves. The comparisons were worldwide, with countries within this study, countries within the EU, other European countries, developing or

third world countries and geographical regions. Notably, EU regulations were considered to be of a lower standard than the strict regulations in many of its constituent countries.

3.9. *Pig health and well-being?*

Some participants believed pigs to be healthy because of good veterinary control, inspections, general care for animals, more animal rights groups and good feedstuffs. This apparent good health was questioned by others who considered that pigs suffer psychologically in their stressful environment caused by small pens, long transport and farmers' attitudes. Some Swedish participants thought that outdoor pigs were happier, but that they get diseases that indoor pigs do not and some of the Danish participants felt veterinary intervention was lacking in outdoor systems. The French participants discussed the preventative usage of antibiotics both positively (comparing it to vaccination for humans) and negatively (destroying the ability of pigs to cope with diseases). The method of administration was also a problem, syringes being considered both acceptable and unacceptable, but was unacceptable when added to feedstuffs.

It was generally thought that pigs are not treated humanely due to previously mentioned factors, such as stress, space and transport, but again this was considered to be farmer-dependant. English participants maintained the idea that the animals are raised to be killed and therefore this question is not relevant, except the rural men who believed pigs to be intelligent animals which should be treated better. The English urban women continued to ignore the possibility that the situation is perhaps not ideal, stating that they prefer to believe the "romantic" image they have. The French participants believed that industrialisation has created a lack of time for caring for the animals because the farms are too big. This was also thought to have resulted in indifference among farmers towards their animals. Swedish urban men added that it is more profitable to replace, rather than care for, sick animals. The Swedish rural men were the only group who expressed their belief that pigs are treated humanely, the rural women did not want to answer the question. French country women reiterated the questionable use of anthropomorphism to critique the treatment of animals and were more concerned about slaughtering techniques.

3.10. *Environmental concerns*

The problems listed were smells, noise, effluent (leakage into the water table and drinking water, in particular resulting in hormones and antibiotics in drinking water), imbalance of acidity and/or ammonia in soils, destruction of pastures by outdoor raising and methane

emissions. Some factors related to meat were expressed, such as "what happens to the enormous amount of carcass waste from processing" and "the amount of plastic packaging should be reduced". The English participants also questioned where the swill goes now which was previously fed to pigs (this practice has been banned recently in England). The Swedish groups were concerned about environmental pollution created when transporting both pigs and feed. French groups said that rules are in place to reduce or prevent pollution, but the urban men believed that these rules are not followed.

All French and English groups and the Swedish rural men appeared more concerned about environmental pollution from pig production than the other Swedish groups and the issues listed above were generated from their comments. The Danish participants were not at all concerned about these issues.

3.11. *Effects of production method on meat quality*

All groups were convinced that there is a direct effect of production on meat quality. This was evident before arriving at this question in the questioning route through unprovoked comments expressed throughout the discussions. The common factors believed to effect meat quality were feed, stress (on-farm handling, transport, slaughter and lack of space), and breed. The English and French groups also believed that extensive rearing gives better quality meat. Some noted that meat today tastes blander than in the past and the Swedish women and Danish groups remarked that organic meat does not differ in flavour to meat produced "normally".

Other comments included off or bad flavours resulting from intensive (English) or free range rearing (English rural women), stronger and better flavours from organic production systems (English), better quality meat with more attention to animals and greater cleanliness (French rural participants), effects on quality resulting from medicines, level of veterinary control, growth enhancers and cooling regime after slaughter (Danish), and bad flavours resulting from bad smells (Swedish urban men). Swedish urban women also felt that "a happy pig tastes better".

A number of questions were raised by the participants in this part of the discussion:

"Are differences in meat quality of the different production systems able to be detected?"

"Is the meat from outdoor rearing tougher as the animals are more active?"

"Is organic meat healthier?"

"Do the antibiotics used on the pigs harm us?"

3.12. Extra comments?

While no new ideas were generated, some themes were reiterated. The lack of labelling of pork and its reliability was discussed again and the confusion or lack of understanding of information and concepts was emphasised. Three common themes were “organic, outdoor, free range—what do they actually mean”, using France as an example, “what does ‘produced in France’ guarantee the French consumer”, and “are there methods of traceability in place?” Methods of slaughter and cleanliness of abattoirs were of concern to some, in particular Swedish rural women were interested in mobile slaughter houses. A final question raised was “can research be trusted?”

4. Conclusions

This study included small samples of adults residing in either rural or urban areas of France, England, Sweden and Denmark. Keeping in mind the limitations of this qualitative method, many consumer attitudes in the four countries were the same. Furthermore, small differences in approaches in conducting the focus groups among the four countries do not change the main conclusions concerning the views about production and meat quality aspects.

Many positive perceptions of pork meat were evoked, such as being good value for money and always available. Negative images of the systems of production used today were expressed, but often rationalised in terms of consumer demands, market competition and by comparisons to previous systems of production. Knowledge of production systems appeared of little consequence in terms of meat market potential as several groups freely remarked that there was no link between the negative images of production methods and their purchase behaviour.

The groups were clearly confused and had a strong mistrust in the limited information at the point of meat purchase. Careful consideration should be given to the labelling, in particular, taking account of the evident consumer ethnocentrism, and assuring that this information enhances consumer confidence.

Focus group discussions are a qualitative means of obtaining insight into the consumer decision-making process allowing limited generalising and quantifying. The issues identified will be extended further and quantified using a questionnaire approach.

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