# Communication of farm-based qualities from farmer to consumer: case studies of Danish beef chains

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## Abstract

Danes are some of the highest consumers of meat in Europe, yet the market is characterized by highly homogenous and standardized meat sold pre-packed in supermarkets. Differentiated meat products and channels have been emerging (and disappearing) in the last decade. They are driven by different groups of actors relating to various value sets: citizens (animal welfare, landscape and biodiversity conservation), farmers (farm economy and animal welfare), artisan butchers (good handicraft), public authorities (biodiversity conservation). In this paper we consider 6 "quality" beef meat food networks and analyze the way short and long chains reconnect consumers to farming. We observe that the content of the message to the consumers is not really different between short and long chains and is mostly very simple. Chains attempt to connect to consumers' ethic but rarely convey more factual information. In chains where agricultural practices affect organoleptic qualities (flavor, tenderness, color) and make the meat slightly different from conventional meat, more communication might be needed.

## Introduction

Consumers in developed economies are increasingly disconnected or distanced from producers and this has allowed producers and retailers to sell food which is increasingly damaging for human health and the environment (Eden et al., 2008). A solution commonly proposed is to reverse this distancing, to reconnect consumers with producers through education and information provision about systems of food production, so that consumers will avoid food coming from such damaging systems and instead favor food from more beneficial systems. Information is then supposed to raise consumer awareness about the consequences of the products that they buy (Eden et al., 2008). In the past decades new forms of consumer-producer cooperation in food networks have emerged that are increasingly documented under headings such as 'Short Food Supply Chains' and 'Alternative Food Networks'. Many of these initiatives represent attempts to (re-) build connections between rural producers and urban consumers. They are seen as potentially more sustainable than the "mainstream" ones because of their focus on "quality", "place" and "nature" (Goodman, 2003). They can therefore be drivers for sustainable food and farming systems of the future.

The literature often offers a dualistic characterization of "alternative" foods as being somehow uniquely "ethical" while conventional foods are "non ethical", as discussed by Holloway et al. (Holloway et al., 2007). It is not always clear what "alternative" in the literature stands for in comparison to "conventional". Authors have drawn attention to different economic, geographical and sociological structures (Watts et al., 2005). In the case of beef meat in Denmark, we identified chains which claim they have a special "quality" product, where the qualities relate to farm based practices; some chains with a close contact farmer-consumer and others based on a

long chain with supermarket outlet. We concentrate this study on chains which propose to the consumers a product arguing of differentiated qualities, based at farm level and we don't take position on whether these chains are alternative or not.

In this study we explore different beef food chains which claim to have a product with a high quality based on on-farm practices. We investigate the way these chains inform consumers and how the quality claims are build. We compare "long" and "short" chains in their ability to convey the message on farm quality to consumers. "Short" chains are characterized by a close contact farmer-consumer with maximum one intermediate between them and "long" chains are more extended in space and number of actors, typically with supermarket sells. Our hypothesis has been that "short" chains, with a "face to face" contact farmer-consumer allow the communication of more accurate and nuanced information about farming than "long" chains. The questions were then: Do "long" and "short" quality food chains reconnect the consumers and the farmers in the same way? Do they carry the same level of information to consumers? What is the potential for these different organizations to improve the communication between farmers and consumers?

## Methodology

Case selection, data collection and methodology

We have chosen to study a diversity of beef food chains in Denmark. The criteria of selection were that we should, at the end, have a broad coverage of types of organizations: both in length of the chain and number of actors involved, but also chain-owner (farmer-driven, butcher-driven...). We also chose them in order to have a broad coverage of the quality cues they are branding their products under.

We have interviewed 11 beef farmers about their farming practices and their experience in marketing their products and conducted 12 semi-structured interviews with other food chain actors: people from slaughterhouse, butchers, cooks, a person in a certification body, a buyer in a supermarket. These interviews cover 7 different food chains. There is some overlapping because some actors are involved in several chains. The interview guideline included: background of the person and of the activity, practical organization of the daily work, relations with supplier and clients, information and reaction on consumer demand, handling of meat quality. We took part to a supermarket event were a butcher had organized a talk and a degustation with his customers. We also conducted content analysis of the publicity material and website of the different chains.

The analysis of all this information has been done focusing on meaning creation around quality, negotiation of quality between the actors and the links between organization and the mediation of quality.

## Quality definition

We share with Noe and Alrøe (noe and Alrøe, 2011) the understanding of qualities as aspects of the empirical relation between actor and object. Thus, as claimed by convention theory, there is no universal understanding of quality and quality is cognitively evaluated in different ways depending on which normative broad is invoked. (Ponte and Gibbon, 2005)

Quality of meat includes both (1) the objective dimensions i.e. traits that can be measured on the samples and is dependent on the biological basis, but independent on the user this includes microbiological measurements, as well as colour and tenderness of the meat, and (2) the subjective dimension, based on the perceptions of the users i.e. their preferences, in terms of the value they attribute to various type of information (Edwards and Casabianca, 1997).

We have established a typology of the different quality dimensions that can be embedded in a beef meat product in a consumer perspective based on literature (Brunori et al., 2008; Conner et al., 2008; Morris and Young, 2000). They are:

- Safety (sanitary quality, freshness)
- Health (presence of healthy micro-nutrients, fat)
- Convenience (packaging, easiness to handle and to prepare)
- Organoleptic (flavour, juiciness, tenderness, colour)
- Ethics (animal welfare, contamination, landscape, biodiversity)
- Rootedness (connection to traditions, culture, the food is produced by someone, somewhere)

These dimensions have been used for analysing quality creation and mediation in the case studies. The 2 last dimensions are so called "credence" attributes (Ponte and Gibbon, 2005) and cannot directly be verified by the consumers when buying or consuming the product. They thus need to be communicated to the consumer.

# **Background**

## Danish beef production

The actual beef meat production in Denmark is coming from different types of farms, producing different animals. Most of the animals slaughtered are an outcome of milk farming (82% of the slaughtered cattle (live weight) estimated from(Danish cattle federation, 2010) ) and suckler systems represent a minor part. Beef coming from milk production is composed of culled milking cows and heifers and calves (mostly 8-10 months and maximum 200 kg slaughter weight, feed based on concentrates). They represent the majority of domestic beef production; they are commercialized without quality claims, and represent the "mainstream" Danish meat. Organic steers and heifers from milk herds are an exception and are sold together with the organic steers and heifers from suckler systems). From the suckler systems can be found on the market: young animals (10 to 20 months) finish fed with concentrates; organic produced (and thus mainly grassfed) heifers and steers at about 2 years age and steers and heifers from rustic breeds between 2 and 5 years old produced mainly on grass. These animals come from very different farms and have been fed quite differently to obtain a particular size to a particular age. They are considered by the meat processing actors as different qualities of meat.

## Traditional logic of quality

Traditionally definition of meat quality and therefore quality of animals for meat production has been determined by consumers, cooks and butchers. The palatability (pleasantness of taste of food) for the consumer is a central aspect. It depends among other things, on the juiciness, tenderness, fat content and meat taste. These factors are influenced by the animals characteristics (age, bred, feeding), the transformation process (cut, maturation techniques and time) and the cooking processes. See also (Lebert et al., 2003) for more details. Economy for slaughterhouses and butchers has been an important driver of the selection of animals: big

muscles in the hind quarter at a young age give less cost for the maturation and muscles which can be sell to a high price. Mechanization of the processes in meat industry, organization of the chains around supermarkets have also pushed the production into a search for uniformity of the products: if the animals are more alike it means less manual work in the process and no "bad surprise" for the consumers and cooks.

In conventional chains, these butchers' interests and consumers' preferences have conducted to a focus on these qualities for beef meat: tenderness, size of specific muscles, fat marbling and/or fat amount and uniformity of the product all year long. These meat quality aspects are translated into rules for the farmers, who will get their animals paid according to certain criteria, which influence the quality of the meat: age of the animals, slaughter weight, conformation of the carcass in muscle size and in fat amount. This means that young animal (below 18 months) finish with concentrates is traditionally considered as the one delivering "high quality" meat in a Danish context.

These qualities are rooted in the "conventional" and historical food chains. They are present to a certain extend in all chains we analyzed. For all the butchers we interviewed, the first association to quality for meat is tenderness. When they mentioned problem with meat quality, it was because the meat was "tough".

## New dimensions of quality in meat

In the last decades, consumers have added new dimensions in their perceptions of meat quality to the traditional quality cues mentioned above. They have often developed in reaction against scandals covered by the media: animal mistreat and contamination or against more diffuse impacts of the industrialization of agriculture and of the food chains: worry for human health and uniformity of the landscapes for example.

These preoccupations have allowed new quality cues to emerge on the market: "animal welfare friendly", "organic" and "from natural pasture, framing biodiversity and traditional landscapes" are some of the examples found in the Danish context. Danish consumers place animal welfare as an important ethical quality, regarding to food production, as it had already been noticed by Delavigne in 1999 (Delavigne, 1999).

These new claims are carried by various chain organizations at the initiative of farmers, butcher, public administration or consumers themselves.

## Results and discussion

#### Presentation of the cases

Table 1 gives an overview of the cases in terms of claims to the consumers and ownership of the concepts.

We also studied a conventional chain, with no quality claim based at farm level that we use as a reference in the analysis.

Chain name	Main claims for quality to the consumers	"owner" of the concept	Actors implicated and main outlets
"Long" chains			
Friland Beef	Animal welfare (certified by the Danish Animal Protection Association) For some of the products, name of the farmer, localization of the farm and brief description of the animal's life For some of the products: conservation grazing Tender and tasty meat Danish	Danish cooperate slaughterhouse	Slaughterhouse, cutting plant and packaging is common with "conventional" chains Supermarket outlet
Friland Organic Young Beef	Certified Organic: animal welfare, less risk of residue of medicine in the meat, natural, no GMO in the feed. Tender and tasty Danish	Danish cooperate slaughterhouse	Slaughterhouse, cutting plant and packaging is common with "conventional" chains Supermarket outlet and catering
Nature Meat (Nordjysk Naturkød)	The animals have been grazing natural pasture in a specific region and thereby contributed to landscape and biodiversity preservation Locality – wild nature Animal welfare Fair for the farmers Tender and tasty	In start local public administration, then private medium-sized slaughterhouse	Medium sized slaughterhouse also implicated in "conventional" chains Private butchers outlet and supermarkets Notice: The concept was stopped in 2011
"Short" chains			
Slagter Sørensen	Traditional handicraft and know-how Organic meat: animal welfare Tasty and tender From an identified region and 5 identified farmers The animals have been grazing natural pasture in a specific region and thereby contributed to landscape and biodiversity preservation	Butcher	The butcher get the carcass from the slaughterhouse after agreement with the 5 farmers; he matures and cuts the meat and sell directly to the consumers via his webshop + some sell to restaurants
Grazing association	Local Taking care of the local landscape and biodiversity You can see yourself that the animals have a good life	Consumers – citizens	Members of the association take decision about grazing the area, help in the practical work and commit to buy a quarter of animal each year. They use the service of a local butcher for preparing the meat.
Farmers direct farm sale	Diverse from farm to farm (5 cases) Proximity and animal welfare are common to all For two of them: Organic For one of them: grazed in wild nature Fat content of the meat Tasty and tender	Each farmer	The farmer gets a small private slaughterhouse to slaughter the cattle and cut it down. The consumers come and buy the meat at the farm.

Table 1: Overview of some characteristics of the chains studied – the chains are presented by decreasing volume of animal treated per year from top to bottom.

# Reconnecting consumers with farming with emotions and knowledge

In our case studies we identified 3 levels of communication of farm based qualities with consumers:

Telling a simple story, use images. This is used for catching people in their emotions and meeting them in their global ethical dispositions

- Inform about practical aspects of farming and positive actions for environment and animals welfare. Consumers can understand part of food production and this knowledge can fit with their ethical dispositions
- Explain more complex link between conditions of production and food quality in order to educate consumers so that they will accept differences with products they are used to in conventional market, for example seasonality, difference in flavor, texture of the meat.

We will here analyze the communication with the consumers in the different food chains: the ways of carrying the message to the consumers and then the content of the message and which level of communication with consumers are intended. We will finally conclude with the impact of these different organizations on farming systems.

# Supports of communication of farm-based values

We observe in the chains of our study different ways for "bridging the gap" and getting the consumers informed about farming.

# Certification and private band

Long chains selling in the supermarket use certification and labeling. The certification is materialized by a logo on the etiquette of the product and a slogan. The 2 institutions standing for certification are trusted by consumers, the Organic certification is certified by the Danish state; the certification for animal welfare is certified by the Danish Animal Protection Association. Certification is only used in long chain with retail or butcher outlet. Farms which are certified and who sell part of their production directly to consumers rarely use their certification as a marketing argument for their direct customers.

## Direct contact farmer-consumer

Farmers selling directly their meat have a direct contact to consumers. Direct contact farmer consumer is mostly, of course, practiced in short chains but long chains also use it. In a longer chain (Friland Beef), some farmers have been implicated in events where they go in a supermarket and speak there with consumers.

## Information to the butcher about farm conditions

Besides certification, those chains try to give more information to the consumers by capacitating the butchers who have direct contact with consumers. In Friland Beef and in Friland Organic, butchers of 2 supermarkets chains get courses about animal welfare and some of them went out to visit farms.

## Internet conveying the voice of the farmer to the consumer

Internet is used by small as well as long chains. It allows the actors of the chains to tell more complete story of the product than the etiquette on the meat package for example.

Friland Beef had a website (sporditkod.dk) were consumers can go in and by entering the number of the meat package get information about the animal, classification of the carcass, information about the farm were the animal is coming from with a picture of the farmer with his animals and a little text where the farmer is describing his farm. Slagter Sørensen has a website where consumers can see a video presenting his work and see the animals grazing on pasture. He has

also a page where he quotes the farmers speaking about their farms, conservation grazing and the good welfare of their animals. The Nature Meat chain had also a web-site where the farmers presented themselves and their farms. 3 of the farmers selling directly their meat to consumers (farmers F,G and J) have a website presenting their farms.

Consumers direct implication in the decision of production

In the case of the grazing association, consumers are part of taking farming decisions for the meat produced. They get then informed and involved in farming.

Face-to-face interaction is characteristic from short chains either in real-life meeting or in internet-based relationship. Communication in "long" chains uses mainly certification and pictures at the buying place but they have also develop strategies with face-to-face interaction between farmers and consumers and informed-butchers and consumers. Internet offers "long" chains as well as "short" chains possibility to communicate with consumers.

We observed the use of these 5 different support of communication about qualities originating from farm-level. What are their consequences on the content of the messages?

## Claims for quality and content of the message

The overall message is similar in the different chains

The analysis of the claims conveyed by the different chains shows that the arguments used for marketing are very similar in short and long chains.

Concerning qualities rooted at farm level, the same positive values are praised:

- Animal welfare, a good life for the animals
- A certain harmony to nature, animals grazing in green grass, eventually nature conservation grazing
- Identification of the region and eventually of the farm of origin of the animal

All these qualities are carried by long as well as short food chains; we did not identify difference in the overall message. However the complexity of the message they convey is more or less detailed and informative.

Example of a message to consumers: information on cattle grazing

Grazing cattle in green grass is the image commonly used in all the cases for marketing the meat to the consumers. This representation of grazing has also been coming very often in the interviews with chain actors. It is an image which accepted and acknowledged by all partners. What does it mean for the communication between farm and consumer?

Most products use pictures of the animals outside in a green field, grazing. The words "nature", "natural", "quiet", "freely" are often present on the packaging, leaflets and websites. This "easy" message is the one conveyed on the packaging of the meat for the meat sold in supermarkets and by the pictures used in the shops and on the websites.

Some farmers and organizations remain in this idyllic image for the consumers and "hide" – don't mention other aspects of farming, like finish feeding indoors with feed based on concentrates.

On one site we can read: "the herd is grazing the whole summer in the very nice valley". In the farm reality, it is only partly true because the mother cows with calves graze in summer, but animals for slaughtering are in the stable during 4-5 months. Another farmer describe his communication with the consumers at a supermarket where he simplifies and "idealize" again the feeding of the animals: ". as I also say to the customers,(...) And the cows are going on grass, you don't put pesticide on grass. It is nature pure that the cows eat. So they can just be the best and most lean food you can buy!" It is also the representation of a cook buying Friland Beef meat for almost 20 years. When he describes the farm and animal life, he says: "it has been going outside, chewing grass; it has been going with it offspring. It has had a good life out on a green pasture".

Idyllic image of grazing cattle is maybe catching the interest of consumers, but getting those information, most consumers will think that the animals have been living from grass most of their life, although they have been getting silage and concentrates in the last 4-5 months of their life.

This idealization of animal life is present in different chain organizations: Friland Beef as well as farmers selling their meat directly to consumers. Danish farmers and meat industry seem reluctant to tell to the consumers that they finish-fed their animals with concentrates. In contrast, we did a similar study in France (Bedoin et al., 2009), where in the case of the Label Rouge, farmers were praised for their capability of finish-feeding, choosing the feed which will give the perfect muscle development and marbling at the right time on the animals' life. Beef production of suckler breeds is relatively new in the Danish agricultural history and many farmers (at least the ones we met) have been starting with this activity of beef production after having been milk or pig farmer...Finish feeding with concentrates is necessary to get the characteristics in muscle size at a defined age which the meat industry require in the long chains and the meat consumers are used to consider as quality meat (clear color, not much fat and tender); though the knowledge about this aspect is not present at butcher and consumer levels.

If we consider all the chains studied, except the grazing association, we can see that the message used for selling quality meat is an idyllic representation of animal life. One explanation for this "easy communication" could be that the consumers are not interested in it. Farmer A "It is very difficult to get the consumers interested in the story we would like to tell to them" and "when we make open doors events at the farm, there are not many coming". Certification means that expert and specialist have taken choices about what is "best" for example for animal welfare and animal feeding and consumers rely on this certification and don't necessarily need to make an effort in understanding what is behind the certification. It is surprising that even when there is space for a communication farmer consumer (either by direct contact or through internet) this space is not used to give to the consumers a nuanced view of the farms.

In the cases studied, storytelling is the most important axes for communication. It remains often quite superficial and can lead to misinterpretation by consumers, as we showed here in the case of cattle grazing and we could also illustrate it in relation to animal welfare.

# Information of consumers and impact on farming systems

Information and education of the consumers and other meat users as cooks are present in some chains but not given importance in the chains where organoleptic qualities of the product are very similar to those of "conventional" meat.

In this study we encountered several chains with a communication only/mainly based on "story telling" (Friland Organic Young Beef, Friland Beef and Nordjysk Naturkød). They adopt the traditional qualities (high tenderness, low fat, color) which are used as quality marker in the "mainstream" meat market. The idea is then: within these ethical rules, how to make a meat which is as close as possible to traditional standards of quality in "mainstream" market. Farmers in those chains have then to respect rules about age of the cattle and its size. This decision has an economical rationality because the same procedures and facilities can be used in the slaughterhouse, cutting plant and by the butcher as in the "mainstream" other animals.

However it excludes farming systems, which also have a "good story" but do not meet the standards. For example organic produced Galloway cattle, which have been living only from grass in the heath slaughtered at 2 to 5 years are sold as minced meat by Friland because they do not fit in with the age and weight definition of Friland Organic Young Beef. The farmer said: "Our cattle are not big enough to be classified in the good classification. So it is a problem. I think our meat is much too good to be delivered to the supermarket and sold between old milking cows"

Actors in the Friland beef concept are conscious about this standardization and opened the concept to different breeds and therefore more diversity; they have a website with an educative purpose to explain the specificity of the different breeds. However the differentiation remains on breeds and does not include divers ages and thus feeding strategy.

"Alternative" production systems, which don't fit in the traditional requirements, can be valorized and also become a "quality" product but this requires different processes in the transformation for maturation and cut, which can be of a higher cost. It also requires a part of education of the consumers and butchers about the link between farming systems, feeding and meat quality in order to accept a meat which is different from the one they are used to (in color, size, texture, flavor, marbling). In the cases we studied this process is being tried in the grazing association and by the butcher selling on the Internet (Slagter Sørensen) and by 2 farmers selling their meat directly to consumers. In the grazing association, consumers themselves have been trying different strategies and chosing the age of slaughter and the feeding of the animals which give the best quality for them, and they have chosen a product which would be considered as "bad" quality in a "conventional" chain. Slagter Sørensen praises his traditional craftsmanship in maturing and cutting the meat. From his website: "A happy cow (...) which has lived a free life, tastes just better. They move naturally and grow slowly, which contributes to ensure a good marbling and taste in the meat. (...) Good craftsmanship makes also a difference. I am hanging the meat for maturation as in old Danish traditions; and I am handling the meat with care when I am processing it – it contributes to ensure that we deliver the best quality – each time"

A cook who buys from both types of meat from Friland Beef and from Slagter Sørensen said: "They are very good, both. They have a different character; (...) one is light and the other is darker and stronger (...) I will not prepare the same dish with them. It also depends of the season." Consumers are mainly not prepared to deal with this diversity and it is then a necessity for the food chains to inform them of the reasons for this variety and "educate" them in dealing with it, for example with appropriate recipes and different meat cuts.

# **Perspectives**

For communicating ethical values from farm to consumer, it seems that there is not much difference between short and long chains: the use of internet and of certification help telling a

story to the consumers in the long chain, which is similar to the story, which is told in short chains. Traceability also allows to identify the farm, the meat is coming from in the supermarket and tell its story to consumers. However in both long and short chains, these "stories" can be so idealized that it deforms "reality". From these cases it seems that the chains aim more at "telling a nice story" than at informing consumers about practical farming. The complexity of information transmitted to consumers in the food chains studied was very limited, farmers selling directly to consumers stated that consumers were not interesting in more knowledge The importance of information in consumers' choices is discussed in the literature: Eden et al. (Eden et al., 2008) argue that consumers don't change their behavior simply in response to information from assurance schemes. While scholars have shown that product information is important for heavy organic buyer in Danmark (Elbrønd and Bjerg, 2012) and Greece (Krystallis et al., 2006) There are very different types of consumers with different requirements in term of involvement in food production. For some consumers, trust in the label or in an identified farmer might be more important than the actual information about farming conditions.

Within many of the chains studied, short as well as long, farmers and processors produce a meat which has similar organoleptic characteristics to "traditional" meat, within some ethical rules. More "alternative" farming systems with for example rustic breeds, no concentrate feeding need dedicated actors for processing the meat in a different way in order to reach a high – but different quality. In our cases we only found it in short chains. But this inclusion of more alternative production system is not embedded in more information about the links between conditions of production and food quality which could educate consumers so that they would accept differences with products they are used to in conventional market, for example seasonality, difference in flavor, texture of the meat. This information-education of consumers might be needed but is made difficult because of the "idealistic" story told in the other "quality" chains.

## References

- Bedoin, F., Kristensen, T., noe, E., 2009. Bridging the gap between farmers and consumers: value creation and mediation in "pasture-raised beef" food networks. In: pp. 347-355.
- Brunori, G., Cerruti, R., Medeot, S., Rossi, A., 2008. Looking for alternatives: The construction of the organic beef chain in Mugello, Tuscany. International Journal of Agricultural Resources, Governance and Ecology 7, 126-143.
- Conner, D., Campbell-Arvai, V., Hamm, M., 2008. Value in the values: pasture-raised livestock products offer opportunities for reconnecting producers and consumers. Renewable Agriculture and Food Systems 23, 62-69.
- Danish cattle federation, 2010. Figures on danish cattle. In.
- Delavigne, A.-E., 1999. "Nous, on mange de la chair" Approche anthropologique du rapport a la viande au Danemark. In.
- Eden, S., Bear, C., Walker, G., 2008. Understanding and (dis)trusting food assurance schemes: Consumer confidence and the "knowledge fix". Journal of Rural Studies 24, 1-14.
- Edwards, S., Casabianca, F., 1997. Perception and reality of product quality from outdoor pig systems in Northern and Southern Europe. In: Sørensen, J. (Ed.), EAAP European

- Association for Animal Production and DIAS Danish Institute of Agricultural Sciences, pp. 145-156.
- Elbrønd, M., Bjerg, M., 2012. The purchasing motives and values for heavy organic buyers in Denmark when buying meat An exploratory study using Means-End Chain analysis. In: Department of Marketing & Organisation; Business and Social Sciences, Aarhus University.
- Goodman, D., 2003. The quality 'turn' and alternative food practices: reflections and agenda. Journal of Rural Studies 19, 1-7.
- Holloway, L., Kneafsey, M., Venn, L., Cox, C., Dowler, E., Tuomainen, H., 2007. Possible Food Economies: a Methodological Framework for Exploring Food Production-Consumption Relationships. Sociologia Ruralis 47.
- Krystallis, A., Arvanitoyannis, I., Chryssohoidis, G., 2006. Is There a Real Difference Between Conventional and Organic Meat? Investigating Consumers' Attitudes Towards Both Meat Types as an Indicator of Organic Meat's Market Potential. Journal of Food Products Marketing 12, 47-78.
- Lebert, I., Rousset, S., Lebert, A., Talon, R., 2003. MEAT | Eating Quality. In: Benjamin, C. (Ed.), Encyclopedia of Food Sciences and Nutrition, Academic Press, Oxford, pp. 3777-3785.
- Morris, C., Young, C., 2000. `Seed to shelf', `teat to table', `barley to beer' and `womb to tomb': discourses of food quality and quality assurance schemes in the UK. Journal of Rural Studies 16, 103-115.
- noe, E., Alrøe, H., 2011. Quality, Coherence and co-operation: a framework for studying the mediation of qualities in food networks and collective marketing strategies. International Journal of Sociology of Agriculture and Food 18, 12-27.
- Ponte, S., Gibbon, P., 2005. Quality standards, conventions and the governance of global value chains. Economy and Society 34, 1-31.
- Watts, D.C.H., Ilbery, B., Maye, D., 2005. Making reconnections in agro-food geography: alternative systems of food provision. Progress in Human Geography 29, 22-40.