Consumer attitudes to food quality products

EAAP publication No. 133

edited by:
Marija Klopčič
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EAAP – European Federation of Animal Science

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Emphasis on Southern Europe

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Preface

This publication focuses on food quality issues. Attention is given to producers' and processors' aspects and also to consumer behavioural aspects. This topic is not regularly on the agenda in animal science conferences. However, at the EAAP (European Association for Animal Production) conference in Crete, Greece in 2010, a workshop was devoted to this topic. The choice of this topic illustrates the growing interest for added value products, such as special local, organic and health claimed products. The emphasis in this publication is on countries in Southern Europe. The workshop was organised in cooperation with the Mediterranean Working Group of EAAP and with input from the EU-FP7 project Focus Balkans, studying food product and consumer sciences in the Western Balkan countries.

Two well known strategies in animal production are specialisation and diversification of production. Quality food products are usually linked to the diversification strategy of production, combining agricultural production with processing and/or selling of the products. Agro-tourism is also a form of diversification. What is typical of all these activities is a link to the consumer of the products. This requires special business qualities. For instance, personal characteristics come into the picture. We enter in fact the field of food consumer sciences. This is a relatively new and complex field of study. Food consumer science could easily be considered as a synonym for, or a hybrid of, two distinct sciences. On one hand, there is the part that might be regarded as 'hardware', i.e. the science of food, while on the other there is the part that might be designated as 'software', namely the science relating to consumers. Food consumer science is intended to overcome such differences as it pursues a holistic approach towards hardware (referring in particular to natural sciences such as chemistry, biochemistry, microbiology, process techniques), and software (i.e. social and humanistic sciences, mostly sociology and psychology). The latter should tell us why, when and how the consumer will purchase and consume food, while the first should examine how food is produced and processed. In animal sciences nearly all attention is given to the hardware component, while the software component is often neglected. However, for successful business in quality food products the software component is essential. This publication devotes attention to the consumer aspect as well as to the production and processing aspects.

The publication is split into overview articles, a series of country reports and articles devoted to interesting studies related to the topic in a number of European countries. I wish to thank the co-editors Marija Klopčič and Jean-Francois Hocquette, and all of the authors very much for their input. All contributed papers have been reviewed carefully by at least two reviewers. Especially the editors examined all articles several times and corresponded extensively with the authors. Also, an English language check was undertaken by Gerry Keane from Ireland, who also added remarks.

The publication gives insight in an area of knowledge still very much in development and not really well-known in the animal production environment. We expect it will enhance understanding of the complex relations in the route from product to consumer.

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Part 1.
Overview papers

Food quality policies and consumer interests in the EU

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Abstract

The EU agricultural product quality policy concentrates on product qualities such as geographical origin, a product's traditional character or organic production method. Alongside numerous voluntary certification schemes, these schemes allow for European consumers to obtain quality-guaranteed foodstuffs, and for European producers to differentiate their products in an increasingly competitive and globalized food market. This chapter discusses the challenge of informing consumers about food quality and it reviews consumer interest in relation to origin-labelled, traditional and organic foods. While these qualities generally appeal to European food consumers, several real or perceived barriers to increased purchase persist, such as price, availability or uncertainty with respect to the true production method or product character.

Keywords: consumer; food; organic; origin; traditional

Food quality policies in the EU

'A constantly increasing number of consumers attach greater importance to the quality of foodstuffs in their diet than to quantity.' This statement as mentioned in the European Council Regulation EC 510/2006 (European Commission, 2006: L93/12) was one of the main justifications for introducing the European Union (EU) agricultural product quality guarantee schemes related to geographical indications and traditional specialities. The three schemes are commonly known as PDO (Protected Designation of Origin), PGI (Protected Geographical Indication) and TSG (Traditional Speciality Guaranteed), from which the PDO and PGI schemes are the most widely used with more than 500 registered products each by the end of 2011 (European Commission, 2012). Besides these quality schemes that focus on geographical origin and special product characteristics that provide products with a traditional character, and alongside numerous voluntary private certification schemes, the EU agriculture and food quality policy also concentrates to a large extent on organic agriculture to guarantee reliable quality food to European consumers.

The application and market presence of agriculture and food quality schemes is quite diverse across Europe. Whereas in some European regions the use of geographical indications to signal distinct product quality are dominant, other regions focus more on the development of collective quality marks which are also referred to as possible candidates for future formal PDO or PGI registration. Yet other regions focus more on private quality assurance schemes or organic food production. Becker (2009) indicated that EU Member States have gone different ways with their food quality policies, which reflects differences in historical evolution, in the development and organisation of food chains and industries, as well as differential consumer interests, attitudes and behaviours.

Several regional European clusters were identified based on the focus in their food quality-enhancing policies (Becker, 2009). A first cluster, including countries such as France, Italy, Spain and Portugal was classified as countries that are strongly PDO/PGI oriented. Several Eastern European and Western Balkan countries, such as Czech Republic, Slovakia, Hungary and Slovenia were classified as 'catching-up with respect to PDO/PGI'. Another cluster consisted of Germany, the United Kingdom, Ireland and Belgium, with a clear orientation towards food quality assurance schemes. Such schemes were often initially informed by food safety concerns during the last decade of the 20th century, but gradually developed into overall quality-oriented schemes. Other countries like the Netherlands and

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Luxemburg were classified as quality oriented but diversified in their food quality policies, while Austria and the Scandinavian countries were more organic-farming oriented.

Applications of agriculture and food quality schemes and related consumer interests have been empirically investigated and described for example in Barham and Sylvander (2011) with a main focus on West-European countries and some global perspectives, while the different chapters of the present book complement the picture with a focus on Southern Europe and Western Balkan countries in particular. The present chapter will discuss the challenge of informing consumers about food quality, and it will briefly introduce consumer interest in relation to each of the three cornerstones of the EU agriculture and food quality schemes, notably origin-labelled, traditional and organic foods.

Informing consumers about food quality

On-pack product labelling is the typical way of informing consumers about food quality at the place of purchase. Product labelling has gained considerable attention recently, both as a means to provide product-specific information to stakeholders involved in the food chain (e.g. retailers and resellers), and to reduce quality uncertainty faced by consumers in their food choice or decision-making process. Also from the regulatory point of view, issues relating to the labelling of food products have gained momentum recently. This has become very apparent with the cases of quality, country of origin (or provenance), geographic origin and traceability labelling, which have come to the fore in international law and trade debates (as well as disputes in some cases), specifically regarding registration and protection issues (Maher, 2001). Fresh food products have been particularly prone to origin and quality labelling as an alternative product differentiation strategy to branding (Carter *et al.,* 2006). Furthermore, governments have put labelling legislation high on the agenda in the past decade. In the EU, rules are put in place on the labelling, presentation and advertising of foodstuffs (most notably Council Directive 2000/13/EC and its amendments) to enable European consumers to get comprehensive and accurate information on the contents and the composition of food products, and therefore helping them to make an informed food choice. Within the EU General Food Law, traceability has occupied a very prominent position recently, most specifically with the establishment of Commission Regulation EC/178/2002 that defines the concept of traceability and contains its general provisions.

Indications on food labels, such as origin labels, geographical indications or other quality marks on food products may represent some value for consumers because they may be perceived as signalling a particular product specification (e.g. relating to authenticity and genuineness). Labels also signal a certain quality level, which does not necessarily need to be premium quality. For example, region and origin labels have been reported to be rather convenient marketing tools designed and used to signal and stress particular food product attributes, rather than objective signals of premium quality (Cannon, 2005). Also the intrinsic added value of traceability for consumers is debatable. Traceability labelling, for example, assures consumers regarding the feasibility of tracing back to the origin in case of a food safety crisis. Especially in case of a food safety event this type of information becomes relevant, though mainly for legal purposes and efficient product recall and recovery (Verbeke and Ward, 2006). Otherwise it may be of little value and legibility to the end user. The General Food Law Regulation EC 178/2002 requires the traceability of all foodstuff, thus traceability has become mandatory and is no longer a criterion on which products can be differentiated. As a result, specific labelling of compliance with legal rules may be of little value to consumers. Simple compliance with mandatory standards is either not signalled to end users, or if signalled, it has little value since it does not allow consumers to draw meaningful quality expectations based on the information provision.

From a consumer perspective, labelling debates are about information, and its processing and use by the target audiences (Verbeke, 2005). Because many food products are low-involvement goods, i.e. products whose perceived importance is rather low in the purchasing decision at least relative to

more durable consumer goods, it is likely that consumers use label cues (if ever) as heuristics or easy decision rules that help them in making quick quality judgments (Verbeke and Ward, 2006). As such, consumers may use indications of origin, traditional attributes or a reference to organic standards as an easy decision criterion in their daily food purchasing. Nevertheless, in cases where uncertainty about quality or safety is elevated and where one would expect consumer involvement to increase, labelling information can become a more dominant means for inferring product quality. This has been reported for example, for meat labels shortly after the bovine spongiform encephalopathy (BSE) crisis in Europe (Becker, 2000; Verbeke and Viaene, 1999). Thus labels, including country of origin labels, geographical indications of origin, quality marks or organic labels are extrinsic information cues that can assist consumers in inferring product quality and forming quality expectations. Labels often signal a particular credence quality. Through their signal value and visibility on product packages – similar to brands – such labels may reach the status of a search cue, i.e. an information cue that consumers may more actively search for during their shopping and purchasing decision process.

Quality expectations impact on attitudes and behaviours related to food purchasing, satisfaction and future purchasing decisions (Grunert, 2005). Consumers typically weigh the perceived value of labels or specific information cues on labels against other product attributes during their decision-making. Since products are bundles of attributes and since they are marketed carrying a bundle of cues for consumers attempting to signify a certain quality, it is not easy to discern the true premium tied to a single indicator on a particular food label (Kerr, 2006).

Importantly, for labels to have value for consumers, they must be communicated, attended to and understood in the first instance. Studies indicate that this condition is often not fulfilled. Grunert (2005) reported that information cues relating to quality, origin or traceability may be relatively difficult for consumers to interpret, compared to more easily understood indications such as expiry or best before date. As a result, this type of labelling information is unlikely to have a strong effect on consumers' quality evaluation when consumers lack concrete knowledge about the region of origin or when they do not consider the signalled quality as desirable.

Consumer interest in origin-labelled foods

Informing consumers about the geographical origin of foods by means of a PDO or PGI logo is a first specific component of the EU agricultural quality policy (Figure 1). Several empirical studies have concentrated on mapping the value consumers place on origin-labelling information. For example, Van Ittersum *et al.* (2007) concluded that consumers of regional products value regional certification labels. Consumers' image of regional certification, more specifically PDO labels, consisted of two dimensions, namely a quality warranty dimension and an economic support dimension. Furthermore, they reported that both dimensions were positively related to consumers' willingness to buy and

Figure 1. European Community (EC) logos for geographical indications (PDO and PGI).

pay for the protected regional product. The quality warranty dimension enhanced consumers' perceived product quality, while the economic support dimension associated with stronger beliefs regarding the support of the regional economy. Also Caporale and Monteleone (2001) indicated that providing information on the origin of food products, which was virgin olive oil in this case, had a significant positive impact on product acceptability. Loureiro and Umberger (2003) calculated that US consumers were willing to pay a price premium of up to 38% for 'US certified steak', and even up to 58% for 'US certified hamburger'. The results of the study by Roosen *et al.* (2003) indicated that consumers place more importance on labels of origin than on private brands in the case of beef. More specifically, in Germany and France the attribute origin received the highest ranking of all steak attributes. Finally, Enneking (2004) reported that third-party certified quality and safety labelling significantly influenced German consumers' choice behaviour and their willingness to pay a premium for liver sausages, even on top of premium branding strategies.

In contrast, Bonnet and Simioni (2001) concluded that it cannot be taken for granted that consumers in general value the quality signal provided by a PDO label. The latter study dealt mainly with branded products, more specifically branded Camembert cheese, and it concluded that brands appeared to be more relevant than origin labels in consumers' valuation of food products. In a similar vein, Loureiro and Umberger (2007) concluded that geographical indications in the form of country of origin labelling for beef was not valued as the most important quality attribute. Instead, consumers valued food safety inspection certification more. This led these authors to conclude that geographical indications may only become a signal of quality if the source of origin itself is associated with higher food safety or quality. Van Ittersum *et al.* (2007) stressed the importance of perceived quality as a determinant of willingness to buy and pay extra for protected regional products. However, the influence of geographical indications on product preference only held for specific consumer segments, most specifically for residents in the product's region of origin.

Studies with meat consumers in Belgium indicated that consumer interest was generally low for direct indications of traceability, moderate for country of origin, and high for direct indications of quality (Verbeke and Ward, 2006; Verbeke *et al.,* 2002). Best before date, meat type and the beef label in general attracted the highest levels of attention among consumers. Consumers' attention levels to quality labels or quality marks were higher than attention to country of origin indicators. The studies concluded that it was rather surprising that the country of origin indications received relatively little importance and attention. A bigger impact could have been expected given the large amount of negative press associated with the safety of beef (more specifically BSE) in the study's time period (1998-2001), especially with beef originating from some specific countries. This finding suggests that a designation of beef origin was not automatically associated with higher safety or better quality, which is in line with findings by Bernués *et al.* (2003) and more recently also Loureiro and Umberger (2007). Nevertheless, an assessment of the impact of a mass media information campaign that aimed at informing consumers about beef quality demonstrated that the values consumers place on country of origin and quality labels can be changed positively through communications (Verbeke *et al.,* 2002). The findings herewith underscore a certain potential of indications of origin and quality in marketing strategies, when appropriately advertised through marketing communication campaigns.

In addition to studies on general consumer interest on geographical indications as a sign of food quality, it is also relevant to gain insight into possible drivers for purchase of products with origin labels. Verbeke and Roosen (2009) reported that both for fresh meat in general, as well as for different species meat separately (beef, pork, poultry), the shares of quality and region of origin-labelled meat purchase correlated positively with consumers' health orientation, thus indicating that quality and region of origin labels appeal relatively more to consumers with a stronger interest in personal health and eating healthily. The share of region of origin-labelled meat also correlated negatively with convenience orientation. This suggests that region of origin-labelled meat appeals rather to consumers with a lower interest in convenience, or alternatively, appeals more to people

who are willing to devote more time and effort to the purchase of this type of product. In qualitative exploratory studies (Verbeke *et al.,* 2005), consumers indicated they perceived the purchase of meat with an indication of origin as less convenient because they believed products with this kind of indication are less readily available.

In conclusion, findings from reviewed consumer studies are not unanimous with respect to whether labelling cues such as country of origin labels, geographical indications or quality labels have a favourable impact on consumers' product valuation. The diversity of empirical findings suggests though that there are opportunities; that the perceived value of geographical indications of origin depends on product-related, environment-related (institutional and regulatory) and person-related factors, and in addition, can be favourably influenced by effective communications.

Consumer-based definition and perception of traditional foods

The EU TSG label highlights the traditional character of foods, either in their composition or means and methods of production (Figure 2). Traditional food products (TFP) constitute a product category that gained considerable interest recently in line with an overall trend related to authenticity.

The EU-funded project TRUEFOOD (www.truefood.eu) sought a consumer-based definition of traditional foods through implementing qualitative and quantitative consumer research. In a first phase of the consumer study, four main dimensions were distinguished in the way European consumers define the concept of TFP based on focus group discussions and word association tests (Guerrero *et al.,* 2009; 2010). The first dimension of the definition of TFP was habits and naturalness. The TFP were perceived by European consumers as food products that can be eaten every day or quite frequently, that are part of daily life, and are commonly used. Most consumers also associated TFP with habits and habitual or frequently occurring consumption. Some traditional food products were also defined as seasonal, or consumed at special occasions such as Christmas and Easter. The concept of a traditional food was associated with being anchored in the past, transmitted from one generation to the next, something that has been consumed from the past, has existed for a long time, that has always been part of the consumers' life, usually in a specific region. The TFP concept also included aspects related to health, to naturalness, to being homemade, an artisan character, made and processed on the farm, without industrial handling, and without the use of additives.

A second dimension was called origin and locality. Tradition in relation to food was linked to food origin and in this sense European consumers agreed that traditions cannot be readily exported. Local products outside their area of influence, outside their locality, region or country are likely to be perceived as regular products, thus losing all or an important part of the additional emotional values and feelings that may be conferred on consumers in their original place of manufacturing

Figure 2. European Community (EC) logo for traditional specialities (TSG).

and/or distribution. However, some consumers participating in the focus groups stated that in certain cases traditions may be created or taken over from other regions or countries, because information, fashions or globalization may spread some traditions all over the world and may convert even a non-traditional product into a traditional one over time.

A third dimension pertained to processing and elaboration. There was general agreement across countries regarding the importance of the elaboration of the food. It seemed more appropriate to talk about traditional cuisine than to talk about TFP. In many cases, it is the elaboration that makes the difference between a traditional and a non-traditional food product. For example, whereas beef or pork may be common products, specific preparations such as stews or goulash may be positioned and perceived as traditional foods. In this context, the gastronomic heritage and artisan character of the elaboration method acquire great importance. When dealing with food, the transfer of the know-how or culinary arts among generations constitutes the gastronomic heritage. To be traditional a food product not only has to contain traditional ingredients, but also has to be processed in a traditional way, according to traditional recipes. The TFP were perceived in general as simple products, with rather low complexity. They also tend to be basic, natural and pure, often in the sense that little or no processing or manipulation has occurred after the primary production of the food and its ingredients.

Sensory properties constituted the fourth dimension in the definition of the concept of TFP. Taste was an important dimension, with distinct taste emerging as one of the strongest characteristics of TFP. The importance of sensory characteristics as a quality dimension in determining consumers' acceptance or rejection has been pointed out in a large number of previous studies and is widely accepted. Sensory parameters were mentioned as one of the simplest and easiest ways to recognize and identify the authenticity and traditional character of a food product.

The second phase of the TRUEFOOD consumer study was quantitative and included web-based surveys of about 4,800 European citizens on their definition of traditional foods. Based on the quantitative evaluation scores given by the study participants, the following consumer-driven definition for the concept of TFP was set forth: 'a traditional food product is a product frequently consumed or associated to specific celebrations and/or seasons, transmitted from one generation to another, made in a specific way according to gastronomic heritage, naturally processed, and distinguished and known because of its sensory properties and associated to a certain local area, region or country' (Vanhonacker *et al.,* 2010). Several elements of this definition were widely supported by European consumers from each of the countries involved in the study. These elements included the association with a long existence or history, a high degree of consumer familiarity, the presence of specific sensory properties, seasonal availability and authenticity. The latter aspect relating to authenticity has a clear link with the concept of integrity in traditional food chains (Verbeke, 2011), since it was related in particular to an authentic origin, the use of authentic recipes, the combination of authentic raw materials and authentic ways of processing. Other elements, like associations with special occasions, locality, and natural processing were generally weaker and not equally shared across European food cultures. Hence, depending on the target audience, such elements may require more or less emphasis in communications about traditional foods.

The TRUEFOOD consumer study also revealed that traditional foods have a very favourable image among European consumers, which mainly stems from the products' specific taste, high and consistent quality, healthiness, safety and nutritional value (Vanhonacker *et al.,* 2010; Almli *et al.,* 2011). Interestingly also, perceptions on the low availability of traditional foods – sometimes even a flavour of exclusivity – and their time-consuming preparation, contributed positively to the image of these foods. Hence, from a consumer perspective, traditional foods are a broad and multifaceted concept that is difficult to cover with a concise and short definition. The insights from this study suggested that the integrity of traditional foods and traditional food supply chains may be judged by consumers against a wide and flexible range of criteria as specified in the proposed definition.

Consumer issues in relation to organic foods

The EU organic farming policy is a specific component of the overall EU agricultural product quality policy. Products that meet the EU organic farming regulation (Council Regulation EC 824/2007) are signalled by the recently established EU organic lobo which is obligatory for all pre-packed organic food products within the EU since July 2010 (Figure 3). The way in which consumers perceive organic products has been investigated in numerous studies, as reviewed for example by Bonti-Ankomah and Yiridoe (2006) and Aertsens *et al.* (2009). Based on existing consumer science literature, organic foods are mainly perceived as healthier and safer than conventional foods. Many consumers are also convinced that organic products are more environmentally friendly and tastier than conventionally grown foods. A lower perceived level of contamination and a higher nutrient content of organic vegetables were shown to be the two major drivers for why consumers believed in the health advantage of organic over conventional vegetables (Hoefkens *et al.,* 2009). Despite the fact that a majority of consumers hold positive attitudes towards organic foods, the market share of organic products remains low, varying from less than 1% in some Southern, Central and Eastern European countries to slightly more than 5% in Austria and Denmark (Aertsens *et al.,* 2009). The strongest barriers to increased organic consumption are the price premium and the perceived lack of availability of organic products. Other possible barriers pertain to uncertainty about the distinct character of organic products and lack of trust in the certification process.

Socio-demographic characteristics have been reported to be associated with the purchase of organic food, though their role in explaining variability in organic food purchases is rather limited. Several studies have concluded that women hold more positive attitudes towards organic foods than men, and that families with children are more likely to purchase organic foods than families without children. Findings with respect to age and education effects on organic food purchase are not consistent in one particular direction. In addition to the moderate impact of socio-demographics, values are important motives for organic food purchase. Health motives, which are related to the value security, are among the strongest arguments for purchasing organic foods. In addition, taste expectations, which are related to the value hedonism, play an important role in the choice for organic products. Finally, interest in the value universalism, which relates to the protection of the environment and animal welfare, is an important driver for food choice among regular organic food consumers (Aertsens *et al.,* 2009).

Apart from attitudes, values and demographics, cognitive factors also shape organic food choice. The study by Aertsens *et al.* (2011) reported that higher objective (factual) and higher subjective (perceived) knowledge of organic food production relate to a more positive attitude towards organic food, as well as to a greater experience with organic food, and a more frequent use of information about organic foods. Possible explanations are that people who hold a more positive attitude towards organic foods may be more interested and search for more information, thereby increasing their objective knowledge. On the other hand, greater knowledge concerning organic food production may

Figure 3. European Union (EU) organic farming logo.

have a positive influence on attitude because the principles of organic food production are linked by consumers in a positive way with aforementioned values such as security, hedonism and universalism.

Perceptions about organic foods do not necessarily match scientific realities. The study by Hoefkens *et al.* (2009) reported that heavy users of organic food – defined as people whose vegetable consumption consists of 80% or more of organic vegetables – held the strongest favourable beliefs about organic compared to conventional vegetables. Compared to other user groups, heavy users perceived organic vegetables to be significantly healthier and better controlled, and to contain more nutrients, less contaminants, no synthetic pesticide residues, less harmful micro-organisms and less mycotoxins. The study also observed gaps between consumer perception and current scientific evidence concerning the nutritional value and safety of organic vegetables compared to conventional vegetables. Consumers in general seemed to overestimate the nutritional and safety benefits of organic vegetables, with the exception of synthetic pesticide residues. Consumers' beliefs on the absence of residues of synthetic pesticides in organic vegetables and lower nitrate levels are to a large extent supported by scientific evidence. The gap between facts and consumers' perceptions appeared to be greatest for the healthiness characteristics, nutritional value and microbiological safety of vegetables, especially among older consumers with children. The mismatch between perceptions and facts was stronger when the consumption frequency was higher, but was independent of gender, place of residence, education and income level. The study overall indicated that organic vegetables benefit from very favourable consumer perceptions, some of which cannot be scientifically substantiated. As a result, the study recommended caution with respect to exploiting propositions that are not fully scientifically supported and recommended the organic sector to capitalise rather on emotional value than providing rational argumentations for the choice of organic vegetables.

Conclusions

The EU agricultural product quality policy concentrates on product qualities such as origin, a product's traditional character or organic production methods that allow European producers to differentiate their products in an increasingly competitive and globalized food market. These qualities generally appeal to European food consumers. The market differentiation potential of quality products relates to a large extent to credence qualities. These are qualities that cannot be readily verified or experienced by consumers and for which reliable and trustworthy information and communication is crucial. Certification and labelling schemes are most commonly used for this purpose. Consumer motives for the choice of quality products pertain to higher health, safety, sensory and increasingly also sustainability beliefs and expectations, some of which may not necessarily match with scientific realities. Despite strong motives, several real or perceived barriers persist, such as price, availability or uncertainty with respect to the true production method or product character. Such barriers may prevent consistent alignment of favourable attitudes with choice and eating behaviour.

Local market realities are reflected in consumers' reactions toward label cues signalling quality and origin. Additional studies investigating consumer interest in geographical and/or quality indications, including the aspect of cross-cultural variability and differences are needed. Many of the studies referred to in this chapter considered aggregated consumer data without focusing on potential differences between consumer segments, or without concentrating on particular niche markets. Origin- and other quality-labelled products may appeal more to particular market segments, e.g. consumers with a stronger interest in high-quality high-priced foods, specific socio-demographic groups, or residents of the region of provenance of the considered foods. Appropriate market segmentation and targeting have been stressed as a key success factor for food quality labelling and information provision programs (Verbeke, 2005). Therefore, investigating particularities of specific markets and market segments, both cross-culturally and within a country are recommended. The wide array of studies and their specific geographical scope reported in this book volume contribute to bridging part of this gap.

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Trends in food choice and nutrition

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Abstract

'Trends' in the way we eat are discussed in this chapter. Three potential trends are taken as points of departure, namely health concerns, convenience, and process characteristics. Some of the evidence provided may not necessarily be evidence of a trend itself, but can be regarded as indicators or important issues that may change the way we eat. However, the food industry plays a major part in shaping these trends, and both direction and speed will depend on how the food industry handles these developments.

Keywords: health concerns, convenience, process characteristics

Changes in the way we eat

The way we eat is changing. Everybody is talking about it. There is a steady stream of conferences and lectures on the consumer of the future, on trends in food consumption, about the rapid changes in consumer demand, about the need for innovation by food producers as a way to survive. Major topics mentioned in this context are usually health concerns, the role of convenience, and the importance of ethical and environmental issues.

As for most other 'trends' the evidence is equivocal and sometimes anecdotal. While we do have a growth of convenience products, we also have a slow food movement and a growth in the sales of kitchens and cookbooks. While there is considerable evidence of peoples' health concerns, their eating habits do not seem to become healthier. In spite of considerable discussion on organic production and animal welfare, the market shares of products positioned accordingly remain small (e.g. Willer and Yussefi, 2006). A recent, comprehensive study on meal patterns in the Nordic countries showed that, in spite of all talk about the breakdown of traditional meal patterns, by far most meals follow the traditional patterns and do assemble the family (Kjærnes, 2001). In most cases we have no longitudinal data that would provide solid evidence that we really are dealing with a 'trend' here. In this paper, I will therefore choose a cautious approach to identifying 'trends' in the way we eat. Taking points of departure in the three potential trends mentioned above – health concerns, convenience, and process characteristics – I will provide some evidence that may not necessarily be evidence of a trend itself, but can be regarded as indicators or important issues that may change the way we eat.

Health concerns

Healthy eating has been high on the public agenda for some time, and there are no signs that this will change in the immediate future. The debate is partly fuelled by the increasing incidence of obesity in most parts of the world, and partly by a range of lifestyle-related diseases (like cardiovascular diseases and diabetes) that are attributed at least to some extent to unhealthy eating habits.

Most consumers are aware of the link between eating and health, and healthiness of food is, after taste, the second major criterion in the quality evaluation of food products across a range of studies (Grunert, 2005). Still, there is a widespread opinion that people do not eat healthily enough. Some consumers are just not very interested in healthy eating, or believe that their diet is healthy enough in the first place. Also, some consumers may find it hard to change their habitual eating behaviour. Other consumers may find that there is a trade-off between health, taste, and convenience, and are

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not willing to make compromises (Kazbare *et al.,* 2010). The fact that good taste leads to immediate gratification, whereas healthiness of a food is an abstract credence characteristic with potential rewards far away in the future, does not help. Finally, some consumers may simply find it difficult to find out which products are more and which are less healthy.

In the interface between consumer health concerns, public policy aiming to further healthy eating, and industry interest in finding new ways of positioning food products, a number of developments are currently occurring that will make healthiness a more prominent characteristic in food choice. These include nutrition labelling, functional foods, use of health and nutrition claims, and health branding.

Nutrition labelling is an attempt to further healthy eating by giving more product-related information. It thus presupposes that people are interested in healthy eating, but that they lack information for distinguishing the more from the less healthy products. New EU legislation on the topic is on its way, a number of national schemes have been advanced, and parts of industry and retailers have introduced voluntary schemes. All this has resulted in a heated debate on the best nutrition labelling scheme, especially between advocates of so-called traffic light labelling and advocates of the General Daily Allowance (GDA) scheme.

Consumer research (see Grunert and Wills, 2007; 2008, for a summary) has indicated that most consumers like to have nutrition information on food products, and that they especially like the idea of simplified nutrition information on the front of the package (so-called signposting). Whether it has any impact on consumer choice is much less clear. A recent pan-European study indicated that while the majority of consumers can understand the most common labelling formats and use them to identify the healthiest of a range of products, the percentage of consumers actually looking for such information when shopping is not higher than about 15%, with a good deal of national variation (see Grunert *et al.,* 2010), and research using eye-tracking methodology (a method that allows to follow how the eye fixates on different parts of the environment) suggests that attention spans during shopping may be too short for processing the information to such an extent that it could affect choices (Grunert *et al.,* 2012).

Functional foods, i.e. foods that have been modified (usually by some kind of enrichment) for additional health benefits, have been a growing market for some years, but the growth in Europe has been slower than some advocates of functional foods thought, and there have been many failures in attempts to introduce such products on the market. It seems that European consumers' emphasis on the naturalness of food products stands in the way of a more rapid proliferation of functional foods (which almost by definition are regarded as less natural) and confines them to niche products for consumers with special health concerns or problems (Bech-Larsen and Scholderer, 2007). This is supported by studies showing that, on average, consumers rate a product with an added functional benefit as less natural, less tasty, less attractive generally speaking, and even lower in overall healthiness (in spite of the added health benefit) compared to the same product without the enrichment, as shown in Figure 1 (from Lähteenmäki *et al.,* 2010).

Part of the problem in capitalizing on the health trend from the industry perspective is that healthiness is, as stated above, a credence characteristic and therefore has to be communicated. This communication, at least the part of it that occurs via advertising and on the product label, is heavily regulated. The recent new legislation on the use of nutrition and health claims does open up the possibility for more health claims in the marketing of food products, but at the same time makes substantial requirements with regard to the scientific documentation needed for approval of a health claim. In addition to the legal requirements, consumers must be able to understand the health claim and find it relevant – an issue still clouded by many unresolved questions on, for example, positive or negative framing (is the product good for something, or does it prevent something), use of qualifiers (the product 'may' instead of the product 'will'), and long or short claims (Bech-Larsen

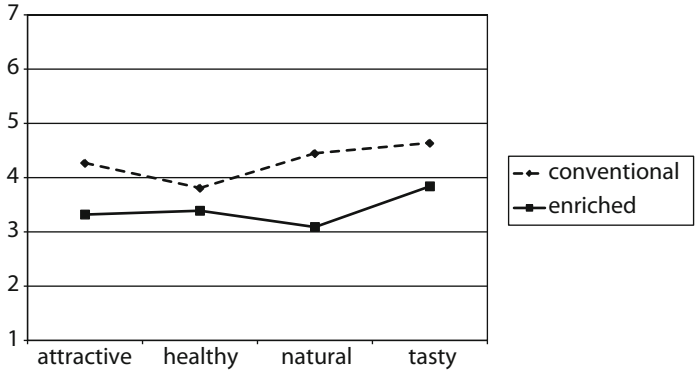

Figure 1. Evaluation of conventional and enriched bread product (adapted from Lähteenmäki et al.*, 2010, higher numbers indicate more positive evaluation, Nordic sample, n=4,612).*

and Grunert, 2003; Van Kleef *et al.,* 2005; Van Trijp and Van der Lans, 2007; Kapsak *et al.,* 2008; Grunert *et al.,* 2009).

Of course, healthiness can also be communicated in 'softer' ways, and industry has already some time ago started to intentionally build brands and sub-brands where healthiness is a major part of the brand image (Chrysochou, 2010). The brand is a major decision facilitator for consumers, and if problems of credibility and possible misuse can be solved, health branding can become an important supplement to the 'hard' forms of health information, to the benefit of both consumers and industry.

Convenience

Everybody agrees that the importance of convenience in the development and marketing of food products and services is increasing. In a US survey, 55% of respondents indicated that convenience is 'very important' in their food purchases (Senauer, 2001). In many countries of the Western world, the share of meals eaten outside the home is increasing. But what, actually, do we mean when we say convenience? Convenience is a multi-facetted phenomenon (Jack *et al.*, 1997; Costa *et al.*, 2001). Darian and Cohen (1995) suggested that convenience can cover any savings of time, physical energy, or mental energy that occurs during one or more of the phases of the home food production chain: deciding what to eat, purchasing, preparation, consumption and cleaning up. Convenience then covers a good deal more than ready-made meals or eating out.

Why is convenience a trend? Many relate it to changing demographics, especially the increase of female participation in the labour force, but attempts to relate such variables directly to the demand for convenience-related food products and services have led to mixed results (e.g. Strober and Weinberg, 1980; Darin and Klein, 1989; Kim, 1989). Others argue that the convenience trend is mainly a question of changing attitudes, with the pride in homemade food and the negative attitude towards convenience products slowly disappearing (e.g. Candel, 2001; Cowan *et al.,* 2001; Swoboda and Morschett, 2001). The truth may lie in a combination of both arguments, as Scholderer and Grunert (2005) have shown. They demonstrated that convenience orientation acts as a mediator between perceived resources (in terms of disposable time and money) and convenience-oriented behaviour (like buying convenience foods). In addition, they showed that convenience orientation is also affected by other factors, notably food-related motives, such as involvement with food (the conceptual model is shown in Figure 2).

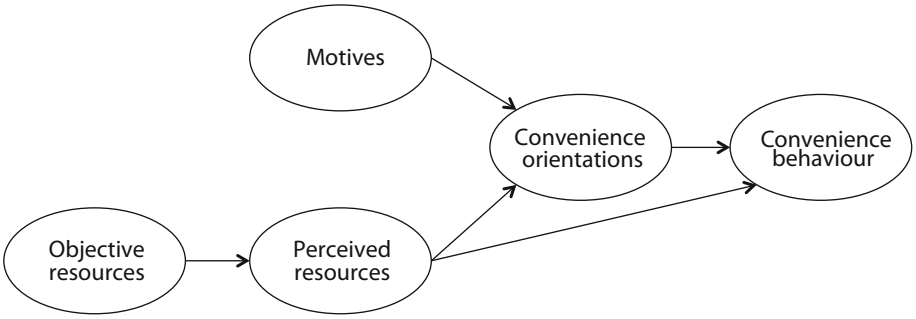

Figure 2. Conceptual model of convenience demand (from Scholderer and Grunert, 2005).

Therefore, we cannot expect a simple relationship between, for example, time scarcity and demand for convenience products. First of all, it is the perceived scarcity of time and the experience of stress in daily life that affects behaviour. Second, food-related motives and attitudes may either reinforce or counteract the ensuing tendency towards more convenience in the kitchen. More importantly, we would then also expect that different types of consumers, even when they experience the same type of stress and time scarcity, would demand different types of convenience, in order to retain consistency with their general food-related lifestyle. A major study of demand for convenience products and services in Ireland (Ryan *et al.*, 2002; De Boer *et al.*, 2004) demonstrated very nicely that demand for convenience can be high in segments as different as 'adventurous' and 'extremely uninvolved' food consumers.

The food industry has responded to the convenience trend mostly in the ready meal category. The range of products available still differs considerably between countries, even within Europe, but it is probably safe to say that the bulk of products in many countries (the UK being the major exception) are still mainly targeted more at the uninvolved than at the food-loving consumer segments. Food-loving consumer segments typically like to retain a degree of freedom in their meal preparation and therefore prefer meal component types of products, which generally have been forthcoming more slowly.

Process characteristics

One of the recurring themes in discussions about the future of the food industry is the extent to which consumers are concerned about food production issues such as organic production, local production, animal welfare, use of genetically modified organisms (GMOs) and sustainability. Numerous studies have shown that at least some consumers have concerns of that nature, and the range of food scandals that we have observed has sharpened public and especially media attention. But there is also a widespread opinion that the attitudes that consumers express may not be strongly related to their purchasing behaviour, as mirrored by the low market shares of, for example, organic products in many countries.

Contrary to what many non-social scientists believe, the issue of the relationship between attitude and behaviour – or the lack of it – is well-known in the social sciences, and has been studied for more than 50 years. There is a good body of knowledge on the factors that determine whether a given attitude will be related to behaviour or not (e.g. Fazio, 1990).

We all have lots of attitudes that affect our behaviour only occasionally. Usually, these will be attitudes that are not strongly held, and attitudes that are not very accessible to our thinking at the time of the behaviour. Simply speaking strongly held attitudes are those where the attitude object is embedded in a network of associations, and where these associations are based on own experience.

The less we know, and the more what we know is based on indirect sources, the less these attitudes will affect our behaviour. Many people may voice a critical attitude towards pig production when asked, but most of them will know little about the topic, and what they do know will mostly not be from direct personal experience. Such attitudes will affect our behaviour only occasionally.

Whether they affect our behaviour or not, will then depend on attitude accessibility at the time of the behaviour – in the shop, for example. Here, we should remember that most grocery shopping occurs in a time-pressed and information-overloaded situation. Many other things are on people's minds. But external factors can make people remember their attitudes – 'activate' them, in terms of cognitive psychology. Such activation can, for example, be caused by promotions at the point of sale. Most consumers probably bring a whole range of potentially relevant, but not ordinarily used attitudes to the shop. Which of these, if any, become relevant for their shopping actions will then depend on the stimuli to which they are exposed in the shopping environment.

The fact that people voice concerns about topics such as animal welfare and other aspects of food production, especially when they are prompted to express their degree of concern by an interviewer, is thus not inconsistent with the fact that these concerns affect their shopping behaviour only occasionally. Consumers are often quite aware of this. As an example, studies in several European countries (Holm and Møhl, 2000; Ngapo *et al.*, 2004) demonstrated once more that consumers have lots of concerns about animal production, but also showed that consumers themselves freely remarked that there was little or no link between the negative image of production methods and their purchasing behaviour.

The current situation is therefore that many people have attitudes towards food production, but that for most consumers these are weak and will, in most situations, not affect their purchasing behaviour. However, changes are possible. Even weak attitudes may be activated at the place of purchase and then become relevant for buying behaviour in that particular situation. Even this does not necessarily imply that the consumer will then buy a product positioned as, for example, an animal welfare product, but it implies that such product attributes, when linked to an activated attitude, will enter the trade-off among different buying criteria. Attitudes towards food production will then not generally affect buying behaviour, but they can be regarded as a potential that can be tapped by creative marketing and product development.

When there is no trade-off between the process characteristic and, for example, taste and consumers' positive attitude to the process characteristics has been activated, the effects can be quite dramatic. As examples, both country of origin and organic production have been shown to have halo effects with regard to quality perception, meaning that consumers tend to believe that, for example, an organically produced piece of meat is better not only in terms of its process characteristics, but also in terms of healthiness and sensory quality (e.g. Hoffmann, 2000, for origin effects, and Scholderer *et al.*, 2004, for effects of outdoor pig production). When differences between the physical properties of conventional and organic alternatives are small, these expectations may even persist in the light of potentially disconfirming experience. Scholderer *et al.* (2004) measured both expected and experienced quality of pork chops in a completely balanced design, where both actual type of production (conventional vs. organic) and information on the production method (none/conventional/free-range/organic) were varied. The results can be seen in Figure 3. While actual meat type had a small, but significant effect on 3 out of 4 dimensions of experienced quality (after tasting samples), with the organic meat receiving scores that were a little lower, the information on the production method had a considerably larger, opposite effect, so that consumers believing that they tasted organic or free-range pork actually perceived the quality of the meat as higher, irrespective of which type of meat they actually ate. Similarly, McIlveen and Buchanan (2001) demonstrated that information on the point of purchase – a butcher, a low and a high quality supermarket – affected the sensory evaluation of meat samples.

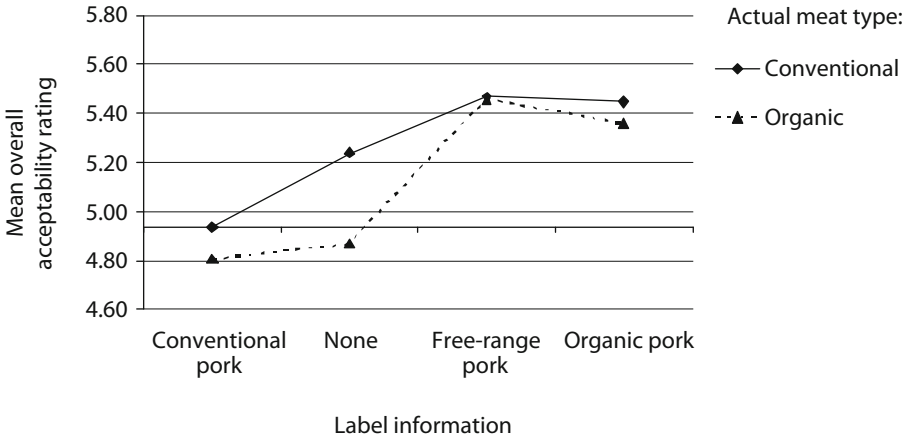

Figure 3. Experienced overall quality perception based on meat type and label information (adapted from Scholderer et al.*, 2004, Danish sample, n=185).*

Conclusions

There is reason to believe that health, convenience and process characteristics are three trends that are about to change the way we eat. However, the food industry plays a major part in shaping these trends, and both direction and speed will depend on how the food industry takes up these developments.

Health is high on the public agenda and at least a share of consumers is concerned about healthy eating and would, in principle like to change their behaviour. The industry can facilitate this development by developing healthier products, providing appropriate information on labels and in advertising, develop functional products that combine scientific substantiation with thorough consumer insights, and by making health part of their corporate image.

Convenience has been an ongoing trend for some time and will continue, but the speed will largely depend on the industry realizing that convenience means different things to different people, and that there is a need for more products that combine convenience with healthiness and good sensory and culinary properties.

As for process characteristics – organic production, animal welfare, free of GMOs, fair trade and others – there is a considerable potential due to many consumers positive attitude, which only occasionally is translated into actual demand. The food industry can contribute to breaking down the barriers for making these attitudes behaviourally relevant by developing products that have process characteristics as an added benefit, but otherwise can compete with conventional products on all other quality dimensions, while retaining a realistic price differential. The issue of process characteristics is not only for agriculture but also for food processing as consumers form opinions about which types of production they like and which they do not, and industry should take these seriously.

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