Research report

Consumer-driven definition of traditional food products and innovation in traditional foods. A qualitative cross-cultural study

Luis Guerrero a,*, Maria Dolors Guàrdia a, Joan Nicola a, Wim Verbeke b, Filiep Vanhonacker b, Sylwia Zakowska-Biemans c, Marta Sajdakowska c, Claire Sulmont-Rossé d, Sylvie Issanchou d, Michele Contel e, M. Luisa Scalvedi e, M. Luisa Scalvedi e, Britt Signe Granli f, Margrethe Hersleth f

a IRTA – Monells, Finca Camps i Armet, E-17121 Monells, Spain
b Ghent University, Department of Agricultural Economics, Coupure links 653, B-9000 Gent, Belgium
c Warsaw University of Life Sciences -SGGW (WULS-SGGW), Department of Organization and Consumption Economics, Nowoursynowska Street 166, 02-787 Warsaw, Poland
d INRA, UMR 1129 FLAVIC, F-21000 Dijon, France
e PEGroup, Viale Gorizia 25/C, 00198 Rome, Italy
f Nofima Mat AS, Osloveien 1, 1430 Ås, Norway

Introduction

Traditional food products (TFP) constitute an important element of European culture, identity, and heritage (Committee of the Regions, 1996; Ilbery & Kneafsey, 1999) contributing to the development and sustainability of rural areas, protecting them from depopulation, entailing substantial product differentiation potential for producers and processors (Avermaete et al., 2004) and providing ample variety in food choice for consumers. TFP are often recognised by consumers with characteristics linked to regional identity and sensory quality. An important part of TFP is sold under different collective trademarks such as quality labels and, in general, consumers show a favourable attitude towards such products (Guerrero, 2001). However, producers of TFP still face the challenge to further improve the safety, healthiness, and convenience of their products by means of different innovations, which will enable them to maintain and expand their market share in a highly competitive and increasingly global food market. It is, however, important to get an insight into consumers’ perceptions, expectations, and attitudes towards traditional food products and consumers’ attitudes to innovations related to TFP. A basis for exploring these dimensions is a need for definition of the concept of traditional products and innovation related to TFP.

There are a few definitions in the literature of the concept of traditional foods. According to Bertozzi (1998) a traditional food product is a “representation of a group, it belongs to a defined space, and it is part of a culture that implies the cooperation of the individuals operating in that territory”. Jordana (2000) derived from this sociological definition the following: “In order to be traditional, a product must be linked to a territory and it must also be part of a set of traditions, which will necessarily ensure its continuity over time”. In 2006, the European Commission gave the following definition of...
“traditional” related to foods: “Traditional means proven usage in the community market for a time period showing transmission between generations; this time period should be the one generally ascribed as one human generation, at least 25 years” (EU, 2006). Recently a definition of traditional food has been developed through the work of the EuroFIR FP6 Network of Excellence. This is an elaborative definition, which includes statements about traditional ingredients, traditional composition, and traditional type of production and/or processing (EuroFIR, 2007; Trichopoulou, Soukara, & Vasilopoulos, 2007). In Europe, the only formal definition found for traditional food products comes from the Italian Ministry of Agriculture, that defines TFP as “Agrifood products whose methods of processing, storage and ripening are consolidated with time according to uniform and constant local use” (Ministero Agricoltura, 1999). Although these definitions try to capture the different dimensions of the concept of traditional food products, there is still one perspective that is missing, namely a definition of this concept seen from the consumers’ point of view.

Fagerberg (2004) stated that the concept of innovation depends on the context, thus requiring a wide range of different definitions. However, a common meaning may be identified according to this author: innovation is typically understood as the successful introduction of something new and useful. Moskowitz, Reisner, Itt, Katz, and Krieger (2006) add the idea of “recombination of components into new blends” to the definition of innovation in food and drinks. For Carayannis, González, and Wetter (2003) innovations are “the new products and services that emerge from technology”. It is, however, important to note that once again, the consumer perspective is missing in the case of the concept of innovation.

Proper understanding of consumers’ feelings and needs is dependent upon clear communication through a common language (Sokolow, 1988). Therefore, definitions for TFP and innovation in TFP derived from the consumers’ perspective are needed in order to understand consumers’ attitudes to innovations in TFP. Normally, these feelings and needs are related to sociocultural aspects, which in turn may be influenced by the country or place of origin of consumers. In the food domain, culture may be one of the most powerful determinants of attitudes and behaviours (Rosin, 1990). In general, cross-cultural studies show important differences in food-related aspects even in relatively homogeneous countries such as those belonging to the EU (Boer, Helms, & Aiking, 2006; Olsen, Scholderer, Brunso, & Verbeke, 2007). These differences are expressed both in terms of food choice and consumption patterns, as well as in beliefs, attitudes or lifestyles. According to Askegaard and Madsen (1998) Europe cannot be regarded as a homogeneous food culture, because noticeable differences exist not only at a national level but also at a more regional/local level in terms of food preferences, habits, food-related behaviour, and attitudes. The existence of cultural variation in food choices throughout Europe has been demonstrated at different levels: the composition of protein diets (Boer, Helms, & Aiking, 2006), importance of food risk communication strategies (van Dijk et al., 2008), attitudes to food, nutrition and health (Lappalainen, Kearney, & Gibney, 1998) or food behaviour and attitudes (Askegaard & Madsen, 1998). This variability is even greater when dealing with traditional food products and traditional cuisine that are based mainly on the natural resources available in the area.

According to Jordana (2000) southern European countries have a more traditional food character due to a greater market share of small companies and a better climate, which supports a more widespread availability of traditional food products. Therefore, it seems reasonable to observe and compare the definition for both TFP and innovation across countries that differ in cultural background. Thus, the meanings of both TFP and TFP-related innovation may diverge depending on the place of residence of the consumers. Urban consumers might be more prone to reconnect with rural roots (Montanari, 1994), while according to Weatherell, Tregear, and Allinson (2003), rural-based consumers tend to give a higher priority to “civic” issues in food choice, exhibit higher levels of concern over food provisioning issues, and show greater interest in local foods.

One of the most efficient ways to get preliminary insights into the concept underlying traditional food products, as well as innovation from a consumer’s point of view is by means of qualitative research techniques, especially by using focus group discussions (Krueger, 1988). Focus group discussion is a method by which a small number of individuals are selected in order to obtain information about their reaction to products and/or concepts (Resurreccion, 1998). However, one of the main disadvantages of this qualitative technique is the subjective interpretation of the results obtained. This caveat requires a careful interpretation made by an expert analyst (Chambers & Smith, 1991; Krueger, 1988). It is not always easy to avoid the tendency of the analyst to only see or hear those comments that fit in with his/her personal expectations and ideas (Dransfield, Morrot, Martin, & Ngapo, 2004). Several alternatives to the analyst’s subjective interpretation have been proposed in order to make the analysis of qualitative information more objective. Guerrero, Colomer, Guàrdia, Nicola, and Clotet (2000) analysed the frequency of use of different key words by each participant by means of correspondence analysis. However, this approach only takes into account a reduced number of words previously selected by the analyst. Reiner (1986) developed a software called ALCESTE in order to overcome some of the aforementioned limits. ALCESTE permits the detection of relationships between lexical worlds, through the analysis of word associations that repeat within sentences, given that it relies upon co-occurrence analysis, which would be difficult to find using other methods of content analysis (Alba, 2004), such as contingency tables and correspondence analysis. More simply, it could be described as a combination of textual and statistical analysis. In ALCESTE the different word categories are generated automatically by the software, not by the researcher, thus increasing the objectivity of the process and avoiding human influence.

The main objective of present research is to obtain a consumer-driven definition for the concept of “traditional food products” (TFP) and “innovations in TFP” and to compare these across six different European countries: Belgium, France, Italy, Norway, Poland and Spain. In order to make this qualitative approach more objective, textual statistical analysis, using the software ALCESTE, was applied, allowing comparison of the results obtained with those derived from the usual semantic analysis of focus group discussions. The research was carried out within the European Sixth Framework Programme, Integrated Project TRUEFOOD.

Methods

Focus groups

Twelve focus groups (7 ± 2 consumers in each) were carried out, two in each of the six selected countries, namely Belgium, France, Italy, Norway, Poland and Spain. In each country, one group discussion was held with rural consumers and the other with urban consumers (living in places with a number of inhabitants lower or higher than 10,000, respectively, as defined by the British Countryside Agency (BCA, 2006)). All selected participants were involved in deciding what food to buy and its preparation at home. In each focus group, both women and men were recruited in order to avoid gender dominance (Báhe, 1979). All the participants were between 29 and 55 years old so as to avoid age extremes. Overall, 95 consumers were
focus groups were carried out between June and September 2006. A common and agreed topic guide for the focus group discussions was developed according to Krueger (1988), and Chambers and Smith (1991). This guide included the recruitment criteria, the moderator’s guide, and some instructions about how to transcribe, prepare and present the results for analysis. Each focus group was led by a moderator. The moderator directed the flow of the discussion and ensured that all of the important issues were discussed. The moderator’s guide included a background section containing the purpose of the study, the expected outcomes, and technical definitions of TFP and innovation, a methodological section where the recruitment of the participants was detailed, and a description of the steps to follow for carrying out the focus groups. Each focus group consisted of the following four main parts each of about 20–30 min duration:

(a) Generic part about traditional products in general (not limited to food).
(b) Specific part focussed on traditional food products.
(c) Specific part oriented towards innovations in foods.
(d) Relationships between tradition and innovation in the food context.

Before starting the discussion a short introduction about the subject of the meeting was given by the moderator and a self-introduction of the participants took place. In line with Krueger (1988) and Ibáñez (1979) consumers were always asked about their personal experiences in order to avoid stereotypes. In addition, the moderators tried to avoid this effect when directing the flow of the discussions. All the focus groups were audio- and, in some cases, video-recorded. The sessions lasted between 90 and 120 min.

Data analyses

A transcription, word by word, of the tape recordings of each focus group was made in the original language first and then translated into English. In addition, each country’s research team wrote a report following the recommendations made by Krueger (1988). The final cross-cultural report was developed by means of an open discussion between the researchers. From this final report a common agreed definition for TFP and for innovation was obtained.

Each transcription obtained from the 12 group discussions performed was split into three different text files: one for the concept of traditional (parts a and b), one for the concept of innovation (part c) and one for the application of innovations in TFP (part d). In all cases, the questions and comments of the moderators were removed. Then, the text files were coded for each participant and identified by the country of origin, the gender, the place of residence (rural or urban), and the education level as a sampling unit (“Initial Context Unit” or ICU), and appended producing a single text file for each concept or idea (traditional and traditional food products, innovation and innovation in TFP). In these files all the contributions made by the same individual (ICU) were put together as a simple paragraph. The resulting coded file was submitted to a statistical analysis by means of ALCESTE software (ALCESTE, V.4.8, Image, Toulouse, France) (Reiner, 1986). The analyses were performed in five stages as described by Dransfield et al. (2004), Alba (2004) and Bailey and Schonhardt-Bailey (2006):

(1) Text segmentation and word coding: segmentation of each ICU using the punctuation marks contained in the text as groups of sentences or Elementary Context Units (ECUs). The different words were then classified using an internal dictionary as adjectives, nouns, adverbs and others.
(2) Lemmatisation: reduction of words to their root forms and their classification as “analysable” (nouns, verbs, . . . ) and “supplementary” (prepositions, conjunctions, . . . ).
(3) Contingency table of “analysable” reduced forms by ECUs.
(4) Top-down hierarchical cluster analysis to obtain stable classes and their significant words (tested by Chi-square).
(5) Description of the classes applying correspondence analysis and hierarchical cluster analysis.

Results and discussion

Semantic analysis of the focus groups

Tradition in general

Most consumers found it difficult to define “traditional”. They found the concept ambiguous and confusing. According to Prabhu

Table 1
Characteristics of the participants in the twelve focus groups performed.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of consumers</th>
<th>Place of residence</th>
<th>Gender</th>
<th>Age range</th>
<th>Education level</th>
<th>Number of children range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>18</td>
<td>9 rural, 9 urban</td>
<td>7 males</td>
<td>30-53</td>
<td>11 medium</td>
<td>0–4</td>
</tr>
<tr>
<td>France</td>
<td>15</td>
<td>7 rural, 8 urban</td>
<td>6 males</td>
<td>32-50</td>
<td>1 elementary</td>
<td>0–2</td>
</tr>
<tr>
<td>Italy</td>
<td>16</td>
<td>8 rural, 8 urban</td>
<td>7 males</td>
<td>30-50</td>
<td>2 elementary</td>
<td>0–2</td>
</tr>
<tr>
<td>Norway</td>
<td>14</td>
<td>9 rural, 5 urban</td>
<td>5 males</td>
<td>30-49</td>
<td>7 medium</td>
<td>0–3</td>
</tr>
<tr>
<td>Poland</td>
<td>16</td>
<td>8 rural, 8 urban</td>
<td>6 males</td>
<td>30-49</td>
<td>11 medium</td>
<td>0–7</td>
</tr>
<tr>
<td>Spain</td>
<td>16</td>
<td>8 rural, 8 urban</td>
<td>6 males</td>
<td>29-55</td>
<td>3 elementary</td>
<td>0–3</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>49 rural, 46 urban</td>
<td>37 males</td>
<td>29-55</td>
<td>6 elementary</td>
<td>0–7</td>
</tr>
</tbody>
</table>

* Education level: elementary or primary school; medium or secondary school; superior or university.
Soukara, and Dilis (2006). In science and technology and even in easily when asking participants about the general and abstract processing and elaboration. There was general agreement across countries regarding the importance of the elaboration of food. It seems more appropriate to talk about traditional cuisine than to talk about traditional food products. Normally, it is the elaboration that makes the difference between a traditional and a non-traditional food product. In this context, the gastronomic heritage and artisan character of the elaboration method acquire great importance. The word traditional comes from the Latin verb “tradi” which means to hand down, to transfer doctrines, customs, etc., from generation to generation. When dealing with food, the transfer of this “know-how” or culinary arts across generations constitutes the gastronomic heritage. Some ingredients and systems of food preparation represent an intrinsic part of the identity of regional foods and by association with the people who consume them (Fajans, 2006). 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 the traditional recipes. Traditional food products were perceived, in general, as simple products, with low complexity. Traditional food products tend to be basic, natural, and pure, often in the sense that little or no processing or manipulation has occurred after the primary production.

Sensory properties. Taste was an important dimension of the traditional food products: “tradition is tasteful”. Distinct taste appeared as one of the strongest characteristics of traditional food products. The importance of sensory characteristics as a quality factor in determining consumers’ acceptance or rejection has been pointed out in a number of studies. Sensory parameters are one of the simplest and easiest ways to recognize and identify the authenticity of a food product.

To sum up a traditional food product from the consumers’ perspective may be defined as “a product frequently consumed or associated with specific celebrations and/or seasons, normally transmitted from one generation to another, made accurately in a specific way according to the gastronomic heritage, with little or no processing/manipulation, distinguished and known because of its sensory properties and associated with a certain local area, region or country”.

Innovation in foods
Contrary to the concept of tradition in food, differences in the perception of the word ‘innovation’ were found between countries. This may be explained by the existence of noticeable differences between European countries regarding their propensity to accept and adopt innovations (Singh, 2006). Generally speaking, consumer attitudes towards innovation diverge from one country to another. French and Belgian consumers seemed to be more open to innovation in foods than Polish consumers, where tradition (especially in rural areas) plays an important role in the life and personal relationships of people (Bukraba-Rylska, 2004). Norwegian consumers tended to be closer to the Polish point of view than to the French and Belgians, being quite critical of the idea of innovation. For Italian consumers innovations emerged as something they have to live with and accept because of the modern way all or an important part of the additional values and feelings that may be conferred on consumers in their original place of manufacturing and/or distribution. However, some consumers participating in focus groups stated that in certain cases traditions may be created or taken over from other regions or countries (couscous in France, Santa Claus in Spain, ...), because information (Internet, TV, newspapers, ...), fashions or globalisation may spread some traditions and traditional food products all over the world and may convert even a non traditional product into traditional.
of living. French consumers also admitted that innovations are unavoidable due to the modern way of life. Spanish consumers had a propensity to be more neutral, keeping in mind both the advantages and disadvantages that food innovations might introduce.

According to the results obtained from the twelve focus groups the concept of innovation in foods seems to come under five main headings:

**Novelty and change.** For all six countries innovation was related to something new and/or to modifications in the ingredients, in the preparation of food, and in its size or packaging. Food is innovative if it is prepared in a different way, when adding unknown or new ingredients or when adding foreign and unusual ingredients. This idea of “novelty” related to the concept of innovation in food is similar to that found in the scientific literature (Carayannis et al., 2003; Fagerberg, 2004 or Moskowitz et al., 2006). Some participants stated that originally everything was an innovation, even the most ancestral traditions, since innovations have a temporary validity: “nothing is new for ever”. Once innovations become widely adopted they lose their innovative character and in some cases, start “the long road” to becoming a tradition. From this consumers’ perspective it seems unlikely that we can combine tradition and innovation in the same food product.

**Variety.** Innovation implies an important and evident benefit for consumers because it increases the variety of available options: variations in taste, in combinations of food ingredients, in product shapes, and sizes. Generally speaking, this is perceived as a positive outcome and a potential benefit derived from food innovations, given that most consumers appreciate diversity and the possibility of choice (Filser, 1994). Variety-seeking is a normal part of choice behaviour influenced by extrinsic motives such as consumers’ need to have different choices for different purposes, occasions, and people (McAlister & Pessemier, 1982). Personality traits such as boredom, satiation and curiosity (Lähteenmäki & Arvola, 2001), also contribute to the satisfaction of individual variety-seeking behaviour.

**Processing and technology.** Innovation in food was related to technological aspects and industrial food processing. An innovative food may be created by applying new technologies or further processing it. In general, consumers pointed out a certain apparent incompatibility between tradition and innovation, and in some cases these two concepts were perceived as contradictory.

**Origin and ethnicity.** Innovation was related to ethnic food and to imported products as well. The foreign (non-national or non-regional) image of the product tends to play an important role in determining its innovative character. In any case, it is important to note that the degree of innovativeness perceived in imported products and their acceptance may differ depending on the product properties and on intrinsic consumer factors such as interest in foreign cultures (Juric & Worsley, 1998) and cultural openness or consumer ethnocentrism (Chambers, Lobb, Butler, Harvey, & Traill, 2007; Shankaramesh, 2006; Verbeke & Lopez, 2005).

**Convenience.** Corresponding with changing lifestyles, convenience was also an important parameter related to innovations. Almost all participants pointed out the practical advantages that convenience-oriented innovations could provide in making a consumer’s life easier. The following examples were given: pre-cooked or ready-to-eat foods, frozen foods, microwavable products, or new packages. Food convenience enables the consumer to save time and effort in different food activities, shopping, meal preparation and cooking, consumption and even in post-meal activities. In a study performed in the UK, Buckley, Cowan, and McCarthy (2007) identified and defined two convenience-oriented segments of consumers, the “kitchen evaders” (16%) and the “convenience-seeking grazers” (33%). These segments of consumers could be of great interest as a target for producers and manufacturers of innovative TFP. Marketing related parameters such as retailing formats and branding, as a source of food innovations, were also perceived as a noticeable increase in convenience. In fact, all the stages involved in the food provisioning process influence consumers’ perceived convenience (Jaeger & Meiselman, 2004).

To sum up, the word innovation associated with food could be defined as “the addition of new or unusual ingredient; new combinations of product; different processing systems or elaboration procedures including packaging; coming from different origin or cultures; being presented and/or supplied in new ways; and always having temporary validity”.

**Applying innovations in traditional food products**

A crucial aspect concerning consumers’ attitudes to innovation in traditional food products was the type of innovation applied. In general, innovations that increase safety or provide the product with important tangible benefits were welcomed when these innovations did not harm the fundamental characteristics of the product. According to Henson (1995), consumers’ acceptance or rejection of new technologies is the result of a complex decision-making process that involves an assessment of the perceived risks/benefits associated with the new technology and with the existing alternatives. However, complex or extensive decision-making is only one potential way of dealing with food choice decisions. In very complex situations, in situations of high uncertainty or low issue involvement, consumers’ motivation to process information might be rather low (Chen & Chaiken, 1999; Tversky & Kahneman, 1974). In these cases, heuristics or easy decision rules, such as labeling information (e.g. information about the traditional character of a food product in this specific case), may act as a convenient guide for consumers to make fast decisions in line with their preferences (Verbeke, 2005). Normally, if the changes introduced are small, the innovation is more likely to be accepted. However, acceptance of the technology is not sufficient, but more likely a necessary condition for acceptance of the product. Generally, highly complex technological processes make consumers more critical of the products. It is important to mention that uncertainty may play an important role in consumers’ propensity to adopt and accept food innovations. Thus, it is commonly recognized that cultures with weaker uncertainty avoidance are more likely to participate in innovative behaviour (Singh, 2006).

The results obtained from the cross-cultural comparisons show that for each food, each innovation and their combination, different acceptance levels are observed depending on the country or culture, on top of individual consumer’s personal interests. For instance, French and Polish consumers are not keen on nutritional innovations, while these kinds of food modifications, generally speaking, are apparently well accepted in Spain (Guàrdia, Guerrero, Gelabert, Gou, & Arnau, 2006). Importantly, consumers should be properly informed about the innovation applied. Honest, informative, and reassuring communication is essential when introducing innovations in traditional food products. It should be noted though that strategies for reducing information asymmetry through the simple provision of more information to consumers have a limited chance of success if this information fails to address a particular need of an interested market segment. The implications for information provision are that the recipient population needs to be well understood (Verbeke, 2005).
Statistical analysis of the transcriptions (ALCESTE software)

Table 2 shows the summary of the descriptive results obtained for each concept (transcription) after applying the ALCESTE software. The total number of words for each transcription ranged between 46,719 words for traditional to 14,886 words for innovation in TFP, thus indicating that consumers spent longer discussing the former than the latter. There are two possible explanations for these findings, the complexity of the topic under discussion or the progressive fatigue of the participants. In each transcription the two different top-down hierarchical cluster analyses performed with a different number of words per ECU led to the same number of clusters or stable classes. In all cases, an acceptable percentage of classified ECUs was obtained, ranging from 61.9% to 78.2%. These figures represent the percentages of ECUs that were similarly classified in the two analyses performed by transcription.

Table 2
Summary of the overall results obtained from the three different analyses performed with ALCESTE software (double classification).

<table>
<thead>
<tr>
<th>Concept</th>
<th>Total number of words</th>
<th>ICUa</th>
<th>Number of ECUsb</th>
<th>HCAc</th>
<th>Analysable items</th>
<th>Number of ECUs</th>
<th>Words/ECU</th>
<th>Cases of the contingency table</th>
<th>Occurrences in contingency table</th>
<th>ECUs classified</th>
<th>Number of clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>46719</td>
<td>95</td>
<td>1107</td>
<td>1</td>
<td>634</td>
<td>817</td>
<td>14</td>
<td>517980</td>
<td>13705 (2.6%)</td>
<td>866 (78.2%)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>633</td>
<td>738</td>
<td>16</td>
<td>467150</td>
<td></td>
<td></td>
<td>13508 (2.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>19773</td>
<td>94</td>
<td>527</td>
<td>1</td>
<td>336</td>
<td>428</td>
<td>11</td>
<td>143808</td>
<td>5642 (3.9%)</td>
<td>346 (65.7%)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>332</td>
<td>380</td>
<td>13</td>
<td>126160</td>
<td></td>
<td></td>
<td>5549 (4.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation in traditional food</td>
<td>14886</td>
<td>92</td>
<td>402</td>
<td>1</td>
<td>245</td>
<td>323</td>
<td>11</td>
<td>79135</td>
<td>3992 (5.0%)</td>
<td>249 (61.9%)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>245</td>
<td>290</td>
<td>13</td>
<td>71050</td>
<td></td>
<td></td>
<td>3922 (5.5%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a ICU, Initial Context Unit.
b ECU, Elementary Context Unit.
c HCA, Top-down Hierarchical Cluster Analysis.

Traditional and traditional food products (TFP)

The analysis performed with ALCESTE provided seven different clusters for the concept of traditional and TFP. The total number of significant words ($\chi^2 \geq 2.89$) in each cluster ranged from 110 in cluster 5 to 175 in cluster 4. The different nationalities were individually located in the different clusters obtained (Fig. 1) with the exception of Belgians and Polish, both classified in cluster 4. This indicates an apparent discrepancy in the development of the discussion in each country, contrary to what was interpreted and described for the semantic discussion of the focus groups’ results. However, although different groups or clusters were obtained, the main ideas within each of these groups were probably similar, but expressed using different words. For example, food origin was important for all the countries involved. However, this importance was expressed with different words in each country: “Belgian” in Belgium, “French” and “Burgundy” in France or “Catalonia” in Spain. ALCESTE software is sensitive to the different words used.

Fig. 1. Correspondence analysis for the concept of traditional. Values 1–7 indicate the cluster centroid.
For this reason, the same idea expressed with different food products, nationalities or other words may provide different clusters.

Fig. 1 shows the overall map obtained with ALCESTE for the concept of traditional. In this map both the significant classification variables and the most significant words obtained were included. The focus will be on the definition of TFP and its similarity to the semantic analysis reported previously. Four main dimensions were detected in the semantic analysis related to the concept of TPF: habit and natural, origin and locality, processing and elaboration and sensory properties. The same four dimensions can also be found in the analysis performed with ALCESTE (Fig. 1).

Words such as “usual” (closer to Spanish and Italian consumers), “habit” (close to French consumers) and “daily” (close to Belgians, Norwegians and Poles) illustrate the association between TFP and what people normally eat. In fact food products such as “bean” and “rice” close to Spanish, “pasta” close to Italians or “bread” close to Poles, Norwegians and Belgians confirm this idea.

Similar to the semantic analysis some words point to the importance of the transmission of traditions from one generation to another: “grandmother”, “typical”, “parents” or “generation”. “Health” was close to Belgians, Norwegians and Polish, but other words such as “home-made”, “natural” or “fresh”, which were located in different places, could also contribute to this habit/natural dimension of the TFP previously defined. The only nationality that seems to be apart from the health dimension is France. However, French consumers have a significant contribution to cluster 2 ($\chi^2 = 298$), which also contains the word “fresh” ($\chi^2 = 17$). It is important to mention here that correspondence analysis (Fig. 1) mainly accounts for those characteristics that describe each column or row (profiles) better, even when their frequency is relatively low (Greenacre, 1984).

With respect to food origin, words such as “French”, “Italian”, “local” or “foreign”, clearly point out the importance of this aspect in TFP. All these words were among those that exhibit the highest $\chi^2$ values within the different clusters, thus having an important effect on the differentiation between countries.

The “recipe”, the “ingredients”, the “cooking” procedure and the way of “preparation” of the different food products also seems to be an important dimension in the concept of a traditional food product. Again, this finding corresponds with that from the semantic analysis. Clearly, not only are the ingredients themselves crucial for obtaining a TFP, but also the preparation and the processing.

Words connected to sensory dimension in food were frequently mentioned by consumers in the focus groups. They appear in Fig. 1 as “taste” and “quality” (referred to taste). Other significant words that were not included in the graph are “delicious” ($\chi^2 = 6$) and “sour” ($\chi^2 = 4$). All these words emerged spontaneously during the discussion and although they may have a different meaning for the different consumers (Koster, 2003), they reveal the importance of sensory properties in traditional food products. Sensory characteristics represent the fourth dimension of the concept of TFP and again confirm the findings of the semantic approach.

Some differences were observed with respect to gender and place of residence. Female and urban consumers were more concerned about the preparation and recipes of TFP, while men and rural consumers focussed more on their family units and believed that some changes have occurred regarding TFP. Gender differences may be explained by the different activities and roles that men and women still have with respect to food choice and preparation (Sayer, 2007). Urban consumers were influenced by all the aspects that define TFP, probably because of their willingness to reconnect with their rural roots (Montanari, 1994). Rural consumers seem to be more concerned about the changes that they believe are taking place and the possible consequences.

Innovation in foods

Four different clusters were obtained for the concept of innovation. The total number of significant words ($\chi^2 \geq 2$) per cluster ranged from 83 in cluster 1 to 132 in cluster 3.

The same five dimensions were obtained in the analysis with ALCESTE with some differences between countries similar to the results in the semantic analysis.

Fig. 2 shows the overall map for the concept ‘innovation’. Words such as “new”, “create”, “added” “modified” or “mix” among others, confirm the importance of the idea of something new or modified. Innovation is mainly perceived as novelty, but also as modifications or mixtures of already existing food products or ingredients. In general, these words appear for all nationalities, thus indicating that this dimension was similarly perceived in all cases. The word “new” was significant ($\chi^2 \geq 2$) for the four different clusters obtained.

Diversity and possibility of choice were expressed by the words “choose”, “variety”, “range” or “offer”. All of these words were close to Belgians compared to the other nationalities. The word “variety” was also significant in cluster 3 ($\chi^2 = 9$) where Italians and Polish were located. This aspect seems to be less important for Spanish consumers, probably because they perceive their diet as diverse enough. Although dietary habits are evolving towards a progressive abandoning of the diverse traditional Mediterranean diet in Spain (Lairon, Vincent, & Defoort, 2006), it seems that Spanish consumers involved in this study did not perceive an increase in variety as an important outcome of food innovations.

Processing and technology elicited words such as “packaging”, “process” or “production”, highlight the importance of this third dimension in the concept of innovation. These words and similar words (not included in the graph) such as “technology” or “tin” were located all over the different clusters and countries indicating an overall agreement about the impact of technology in food innovations.

The origin and ethnicity of a food as a source of innovation was especially highlighted by Spanish consumers, shown by the proximity of the word “place” to Spanish (Fig. 2). For the remaining nationalities some words were related to origin, but in most cases, except for Italians, they were not significant or only had low $\chi^2$ values. The Spanish may be more susceptible to this aspect because of the relatively recent and rapid growth of immigration and ethnic restaurants.

Convenience is clearly represented in Fig. 2 and corroborates the results obtained in the semantic interpretation of the focus groups. Words such as “quick”, “easy”, “fast” or “ready” indicate the importance of the convenience dimension. Remarkably, most of these words are located in cluster 4, close to Belgians. In any case, in all the clusters obtained and for all the countries, it is possible to find statistically significant words that point out the effect of convenience in the concept of innovation (“lifestyle”, “time”, and “work”).

The importance of “new cuisine” as a source of innovation also emerges in Fig. 2. This aspect was especially important for French and Spanish consumers and was expressed by words such as “restaurant”, “cook”, “delicious” or “recipe”. France has a long tradition of well-known and innovative chefs. In Spain, although more recently, innovative cuisine is also present in the consumers mind because of some famous local chefs and restaurants such as “El Bulli”.

It is also interesting to point out that food innovation was related to nutritional improvements (“salt” reduction or addition of “omega-3”). These words were mainly located close to Spanish consumers, although “health” was also close to Belgians. Sensory properties (“taste”, “sensory quality”, “colour”, “fresh”) also appeared during the discussion as important factors to keep in mind when innovating food products.
In general, when compared with the semantic analysis of the focus groups, similar results were obtained with the ALCESTE software. As it was assessed semantically, Belgian consumers seem to be more open to accept food innovations, while Polish seems to be the most reluctant to accept innovation in food. In fact the word “negative” clearly differentiated Poles from all but Italians. Norwegians were closer to the point of view of Poles than Belgians or French, and Spanish had an intermediate position. Italians,
although close to Poles, were also close to the word “positive”, thus indicating a lack of consensus among Italian consumers.

Innovations in traditional food products

Fig. 3 shows results from correspondence analysis for the concept of innovation applied to TFP. Five different clusters were obtained with a number of significant words ($\chi^2 > 2$) ranging from 51 in cluster 4 to 98 in cluster 1.

In general most of the innovations that emerged in the discussion, and that had a significant weight, were those related to packaging (“vacuum package”, “bag”, “carton”, and “shape”). These innovations in TFP are innovations that do not modify the fundamental intrinsic characteristics of the product. Nutrition-related innovations were also mentioned (“light”, “fat”, “omega-3”, and “vitamin”). This suggests that health improvement innovations may be accepted, but probably only when providing pronounced tangible benefits for consumers. Convenience oriented innovations also emerged in the discussion and were expressed as “fast”, “precooked”, “ready” or “preparation”. It seems that convenience-oriented innovations also have some possibilities of success when remarkable changes in the product (“keep”, “remain”, “same” …) do not take place. It is worth mentioning that sensory innovations in TFP tend to be rejected. Consumers highlight the importance of having the same “flavour” (close to Spanish) and keeping the original “taste” (between French and Norwegians).

Men tended to hold a more conservative position towards innovations in food than women. They were mainly differentiated by words such as “keep”, “same” or “same flavour”. On the other hand, and not surprisingly, women seem to be more open to packaging, convenience and health oriented innovations, although in some cases these innovations could convert a TFP to a non-traditional product (“become non-traditional”). Rural consumers held similar ideas to men, they were more conservative, while urban consumers were more prone to accept innovations in TFP.

Conclusions

It is challenging to communicate with consumers about concepts like traditional and innovation because they are abstract concepts. Four main different dimensions were identified that seem to express what European consumers perceive when thinking of TFP: habit and natural, origin and locality, processing and elaboration, and sensory properties. Five main dimensions appear to explain the concept of innovation in the consumers’ mind: novelty/change, variety, processing and technology, origin and ethnicity, and convenience. When innovations are applied to TFP their degree of acceptance is strongly dependent on the product and on the type of innovation. In general, innovations that provide consumers with tangible and relevant benefits without producing substantial changes in the product are well accepted in TFP (packaging, nutritional, and convenience oriented innovations). However, and although they may be accepted, in some cases these innovations may damage the traditional character of the food.

This study, although qualitative in nature, provides a new and useful perspective on consumer’s definition of traditional food products and innovation and touches on some of the possibilities in applying different generic innovations in TFP. It should be noted that we did not concentrate on specific food categories. It remains to be determined to what extent the obtained insights apply to specific foods. Nevertheless, the information obtained from this study may support small-to-medium enterprises in certain decisions regarding communication about TFP and when to adopt food innovations in their TFP. Further validation of the qualitative exploratory insights as presented in this study, e.g. through quantitative research, involving larger and more representative consumer samples, is recommended. Such studies should take into account the diversity among consumers, both with respect to their cultural and regional background, as well as in terms of personal characteristics such as food-related perceptions, attitudes and lifestyles, and individual difference variables, such as ethnocentrism and openness to innovation.

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