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The duality of innovation and food development versus purely traditional foods

Suggested Short Title: Innovation and food development in traditional foods

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Abstract

Background: Intangible cultural heritage includes knowledge and skills transmitted throughout times, and this also applies to the food sector. Traditional knowledge assumes important social and economic value, which is relevant both for sectorial clusters as well as for majority social groups.

Scope and approach: The objective of this review was to analyse the constraints and motivations for development in the sector of traditional foods, from the point of view of marketing and consumer trends. This review was based on published works searched for in scientific databases, such as ScienceDirect, PubMed, Scopus and web of Science.

Key findings and conclusions: This review showed that the value of tradition, recognized in many sectors of society, is also important in the food sector, which is particularly rich in ethnical elements, local ingredients, traditional formulations and social aspects, linked not only to the food itself but also to the act of eating and sharing. However, the food industry seeks development of new products that follow modern trends and are able to conquer today's consumers, while at the same time maintaining the identity of specific products, valued as traditional.

Keywords: Consumer acceptance, ethnic food, marketing innovation, price, traditional food.

1. Introduction

Having in mind the present competitive and fast shifting markets, companies rely much on the successful development and introduction of new products and/or services into the market. Innovation is a vast and multi-dimensional concept, which can be defined as the capacity to develop new products, new processes, new forms of organisation or even new markets (Horvat et al., 2019; Kalluri & Kodali, 2014; Kühne et al., 2010).

There is an increased interest in traditional food products, which represent a growing segment in the European food market. So as to maintain or even increase market share and profitability and take advantage of marketing opportunities, the traditional food sector companies are also impelled to innovate, even though innovations are controversial in this particular context (Kühne et al., 2010; Vanhonacker et al., 2013).

Presently, the food sector is regarded as one of the most important in the current global economy. Yet, food industry or food service companies still face many challenges in managing their products and competing in the market, being an area with high degrees of new product failure (Horvat et al., 2019; Pinna et al., 2017, 2018; Ryynänen & Hakatie, 2014). Innovation is generically accepted as one of the keys to success, although it is not enough to guarantee success for its own. In fact, companies can innovate and still fail if the innovation was not market driver, i.e., if the markets fail to accept it. Frequently, the acceptance of an innovation will depend not only on the innovation itself but also on the product to which it was applied. In the case of traditional foods, more than for other food categories, the level of novelty and its conceptualization are critical determinants of consumer acceptance (Guerrero et al., 2016; Vanhonacker et al., 2013).

Consumers usually associate Traditional food products with quality and associate them with tradition. However, and at the same time, they also demand for healthier, more nutritious, and more convenient products. Hence, innovation becomes essential to meet consumers' demands, and if traditional food products want to keep the pace, they need innovation as much as other food products. Consumers feel divided about innovation in traditional products, due to the contradictory concepts laying underneath: innovation *versus*

tradition. On the other hand, this is a particular window of opportunity because it brings innovation into a product that has a special position precisely because it is meant to be traditional (Bigliardi, 2019; Gere et al., 2019).

This review explores some aspects related to the constraints and motivations for development and innovation in the sector of traditional foods, from the point of view of modern marketing and consumer trends.

2. The importance of tradition in the food market

The protection of a society's identity is to some extent also associated with traditional foods, besides other aspects of culture and heritage. Probably the most known example is the Mediterranean diet, recognized by UNESCO and inscribed in 2013 on the Representative List of the Intangible Cultural Heritage of Humanity. The Mediterranean diet was recognized as a healthy diet in the middle of the 20th century, after the end of World War II, and is constituted by certain types of foods which are characteristic in peoples' diets in the countries that surround the Mediterranean sea (Guiné, 2016; Nissensohn et al., 2016; Noale et al., 2014). The foundations of the Mediterranean diet are variety, moderation and the predominance of vegetables over foods of animal origin. However, not only the foods are on the focus of this dietary pattern, because they are complemented by a philosophy of life that values personal relationships, the pursuit of happiness and physical activity. A gastronomy rich in colours, shapes and flavours was developed in these Mediterranean countries, that is also rich from the social point of view, since it brings life and nature together in harmony. The cultural roots of the Mediterranean diet include sharing, enjoying conversation around the table and relaxing after the main meal of the day with a nap (siesta). This antique cultural heritage, which has developed through times, is considered as one of the healthier, more prudent and balanced dietary models currently practiced. In true, much of the history of food is the core of the history of society itself, and combines culture and nature, as well as the spirit and the body (López, 2019).

Other examples of cultural heritage recognized by UNESCO in the area of food and diet include the Nsima - culinary tradition of Malawi (recognized in 2017), the Washoku - traditional dietary cultures of the Japanese especially for the celebration of New Year (recognized in 2013), the Gastronomic meal of the French (in 2010) and the Traditional Mexican cuisine – ancestral, ongoing community culture, the Michoacán paradigm (also recognized in 2010). All these certify certain foods or dietary patterns as valuable elements of a society's cultural patrimony (UNESCO, 2019).

The importance of intangible cultural heritage relies on the wealth of knowledge and skills that are transmitted from generation to generation throughout times. The social and economic value of traditional knowledge is relevant both for the minority groups as well as for mainstream social groups. Intangible cultural heritage is expressed through processes, phrases, know-how and abilities (including associated objects and cultural spaces), which people recognize as essential pieces of their cultural heritage. To spread through generations and constantly recreate this heritage, ensures humanity with a sense of identity and continuity. Also, considering a more economic side, this heritage and the activities linked with it definitely contributes to the economic and social development of a country or community (Petronela, 2016).

Certain food products, because they bear distinguishable characteristics, started to be named after their place of origin or production, being this an integral part of their names, and making them unique (Guiné, 2016). Recognizing the importance of such products, the European union (EU) developed some mechanisms, which were important milestones in the European Quality Policy. These assume the protection of designations relating to traditional agricultural products and foodstuffs. It's been more than 20 years ago that the EU introduced measures to regulate certification schemes, particularly, through Regulations (EC) 2081/92 and 2082/92, and to promote them as a way to develop opportunities and preserve the traditional characteristics of certain foods and/or processes used for food production. In this ambit, it was created the European System of Protection and Quality of Agricultural Products and Foodstuffs, which accounts for two levels of protection: Protected Designation of Origin (PDO) and Protected Geographical Indication

(PGI), and was also established the European System of Appreciation of the Specificity of Certain Agricultural Products and Foodstuffs, taking into account the traditional way of production or the composition, this relates to the Traditional Specialty Guaranteed (TSG) (Conneely & Mahon, 2015; EC, 2004; Guiné, 2016; Vales, 2014). Although these refer to all types of traditional products or methodologies, like for example traditional art, singing, dancing, it is a fact that many foods are also embraced by these regulations, such as cheese, wine, olive oil, honey, pastry products, among others (Reis & Malcata, 2011; Ríos-Reina et al., 2019; Rodríguez et al., 2019; Savin, 2018; Torreblanca-Zanca et al., 2019).

Although with the principal focus on the protection of European patrimony, the measures for protection developed by the EU are now expanded to other cultures. Since 2006, Asian countries can benefit from protection of their food products under the European scheme for PDOs and PGIs, and four Asian grain-based products have been registered (Melini & Melini, 2019).

3. Innovation in traditional products

Traditional food products constitute a significant category within the European food market, representing a key role in the daily food intake, reflecting cultural inheritance and bringing a past imprint to the contemporary dietary patterns in Europe. It is known that dietary patterns, however, may change with time and with specific societal influences. In today's food market, it is much appreciated the nutritional value of food and how the food product can bear health enhancing properties. This has led to changes in consumer behaviour, increasing the demand for products with specific characteristics, such as for example, higher fibre content, less fat and especially saturated or trans-fat, less salt, less sugar and particularly refined sugars, and reduced calories. If there are some cases in which the traditional foods are associated with increased health benefits, like in the case of the Mediterranean diet, it is also true that many of the traditional products are high in fat, salt or sugars. The health benefits of the Mediterranean diet are fully documented and it is known that the incidence or risk of major chronic diseases, such as coronary heart disease, thrombotic stroke, metabolic syndrome and diabetes, cognitive impairment, and cancer,

158 can be reduced and even prevented with healthy lifelong dietary habits, in accordance with
159 the Mediterranean diet principles (Boccardi et al., 2018; Mente et al., 2009; Misirli et al.,
160 2012; Petersson & Philippou, 2016; Salas-Salvadó et al., 2011; Schwingshackl &
161 Hoffmann, 2016). However, other traditional foods do not impart so desirable health
162 effects, like for example, traditional hams are very rich in salt, cheeses are very rich in fat
163 including saturated fat, or pastry that is very much based on high amounts of sugars and
164 particularly sucrose (Macedo et al., 1993; Martuscelli et al., 2017; Oliveira et al., 2019).

165 A stronger interest in health is associated typically with a lower consumption of
166 traditional foods. This is an indicator that maybe in a near future the consumption of
167 traditional food products might come to a point in which the peoples' perceptions of
168 traditional foods as less healthy may dictate a steep decrease in their consumption. A major
169 threat for the future of traditional foods is possibly an insufficient adaptation to new
170 requirements demanded by the consumers. Nevertheless, this may come as an antagonist
171 idea to the concept of tradition or traditional food, since innovation is not by principle
172 associated with tradition. Because of this duality, it is particularly difficult to develop
173 innovations with a good consumer acceptance within the category of innovation in
174 traditional products (Hersleth et al., 2011; Jordana, 2000; Trichopoulou et al., 2007).

175 The concept of traditional food product has been associated with four typical
176 dimensions as follows: "habit-natural", "processing-elaboration", "sensory properties" and
177 "origin-locality". Hence, it was found that most consumers associate traditional food with
178 habits; products that are consumed on a daily basis or at least frequently, and that became
179 part of their lives. Because these products are highly and frequently consumed, people tend
180 to attribute them very characteristic features that they became accustomed to and that they
181 know far too well. Consequently, even small changes in the sensory quality are probably
182 easily detected by regular consumers, making it particularly important that the food
183 industry carefully devotes resources to investigate consumers' reaction to changes in the
184 sensorial properties of products of traditional basis before trying to launch them on the
185 market (Luis Guerrero et al., 2009, 2010; Vanhonacker et al., 2013)

Other difficulties are associated with the dimension "processing-elaboration", because many processing methodologies are what typically contribute for the traditional nature of the foods in question. To be traditional, a food product not only has to contain traditional ingredients, but it also has to be processed in a traditional way and/or according to traditional recipes. Hence, testing a product in relation to their sensory characteristics is probably not enough to guarantee acceptance of a "novel" traditional food. Moreover, it is essential to evaluate the consumers' reaction when faced with information about the origin of the raw materials used as well as the processing methods utilized (Caporale & Monteleone, 2004; Luis Guerrero et al., 2009, 2010; Hersleth et al., 2011; Vanhonacker et al., 2013).

Providing information about "origin-locality" in the case of traditional foods is essential for consumers' valuation and appreciation of food products. For the foods to be perceived by consumers as typical, they must be recognizable among other similar products, i.e. they must match the "typical" image that usually that type of product evokes. The consumer behaviour and decision-making when choosing to buy or consume the product are linked to the product's image in the mind of the consumer, i.e., to its expectations. The information that is given to consumers has, therefore, possibly a symbolic as well as emotional meaning, which can determine higher or lower degree of product acceptability. In most of the cases, providing such information to consumers, indicating that, for example the foods were produced in their own local area or country, is beneficial and leads to increased acceptability (Hersleth et al., 2011; Iaccarino et al., 2006; Roininen et al., 2006; Stefani et al., 2006).

In today's society many people travel across borders, either due to working needs or for leisure purposes, and therefore consumers become in contact with gastronomic and dietary realties characteristics of other countries. Hence, they also get acquainted with many different types of traditional foods, and this familiarization may be a motor for better acceptance of innovations in the sector of traditional foods. Also, globalisation, migration and the increase in trade between countries extend the variety of products traded across borders. The effects of product origin can also be evaluated when they are faced with

comparisons between a product from their homeland with the same type of product from a different country (Hersleth et al., 2011; Iaccarino et al., 2006; Roininen et al., 2006; Stefani et al., 2006).

To provide consumers with information like brand, origin, price and nutritional value will have a positive influence on their expectations, being these aspects of particular importance in the case of traditional food products. Local and traditionally-made products usually lead to higher expectations than products coming from industrial production. Disconfirmation corresponds to a discrepancy between the expected and the experienced characteristics of a product, and it influences product perception, attitude formation and purchasing intentions. Disconfirmation is positive when the product is perceived as better than expected, while if the product is worse than expected, then disconfirmation is negative. One other important aspect that influences consumers' perception of food is the suitability for use in a certain context (Hersleth et al., 2011; Monteleone & Bertuccioli, 2006; Sabbe et al., 2009).

In the research by Vanhonacker et al. (2013) that investigated the consumer acceptance of innovations in traditional foods in six European countries, it was found that consumer acceptance was linked to the perceived impact of the innovation on the traditional nature of the food. Consumers are generally open towards innovations in traditional food products. Nevertheless, the highest levels of acceptance refer to innovations that reinforce the traditional character of the product (like, for example, a label that guarantees authenticity) or innovations that bear benefits by improving initial negative attributes of the traditional food (like, for example, the reduction of sugar, fat or salt content). Furthermore, the results demonstrated that these types of innovations would not likely attract new consumers to the traditional foods' market, but consumers already accustomed to traditional foods showed a clear positive acceptance for innovations in traditional foods (Vanhonacker et al., 2013).

Kühne et al., (2010) studied in what extent consumers from three European countries, accept innovations in the traditional food sector. The results obtained indicated that, in general, the consumers as well as the elements of the food chains were open to innovations in traditional food products. However, the preservation of the traditional character of the

food was indicated as a requirement for innovations in traditional foods (Kühne et al., 2010).

In the study by Hersleth et al. (2011) was evaluated the consumers' acceptance of innovative dry-cured hams, namely regarding the impact of reduced salt content, prolonged aging time and new origin. The results allowed identifying two consumer clusters. While some were more open to trying new kinds of food and this resulted in a higher acceptance of dry-cured ham with reduced salt level, long aging and different origin, other consumers were more sceptical to accept the new variation of the product.

In a work by Stolzenbach et al. (2013) that investigated new product development in the case of honeys, it was found that the novel honeys, even though also local, could be too innovative for the consumers, and that the traditional honeys were much more familiar to them, and therefore better accepted.

The case of innovation in a traditional pastry was presented by Oliveira et al. (2019), by which a differentiated version of the Portuguese custard tart "Pastel de Nata" was produced and its acceptance was tested through sensory analysis. The acceptability of the innovative product was satisfactory, and its flavour was associated to the traditional Pastel de Nata. Nevertheless, this study did not assess buying intentions or market studies.

Fibri and Frøst (2019) conducted a study to evaluate consumer perception of some selected Indonesian traditional foods in their original as well as modernised versions. Seventeen products were tested and the products that were perceived as traditional were those preferred, as opposed to those more modernized.

4. Consumer acceptance of ethnic foods

Today's globalisation, allied to fierce competition, has allowed food companies to expand their markets, either by developing new products to commercialize in domestic markets or by introducing "old" products into different markets, expanding to other countries and even into different continents. Having in mind that the commercial diffusion chains across countries are gaining importance, recently there has been a growing interest

of marketers to understand, model and shape these cross-national commercialization patterns (Barrena et al., 2015; Yalcinkaya, 2008).

Although consumers nowadays are exposed to a multiplicity of food products with different natures, it is a fact that people's attitudes, perceptions, preferences and values are deeply linked to culture and society, and this can become a disincentive to purchasing products from other cultures or countries, i.e., products with a strong associated ethnicity (Barrena et al., 2015; Yalcinkaya, 2008).

Although there are many successful stories in international new product adoption and diffusion, it is also true that, in what concerns food products, the resistance can be greater when compared to other areas, such as technology, for example. It is still very important to deeply understand the key factors that determine success in international new product transactions, and to start paying true attention to the fact that consumers tend to shape their behaviour according to the society in which they are inserted. Particularly, in different countries and typically countries located in different parts of the globe, consumers have different purchasing behaviours, and that is why the same strategies for marketing and commercialization may not work effectively in distinct countries. Hence, some adjustments may be necessary to make the marketing systems to work in differentiated societies. Although consumers across countries differ, there are adequate means to determine those dissimilarities, and this type of knowledge shall be used to adapt the marketing strategies to those differences. If companies naively think that globalization means that consumers around the world will automatically accept the same or similar products, and maintain the business strategies operating in the same way, they may incur in a very serious risk of failure to conquer the global markets. While it is a fact that individuals share common features of humanity, there are crucial cultural differences that must be taken into account when operating internationally. Culture has a deep influence on multiple aspects of behaviour, shaping values, beliefs, preferences and attitudes. Culture shapes the way members of a society share experiences, principles and beliefs. However, cultural boundaries can effectively constitute barriers that hinder the flow of communication and products across cultures. In today's global economy, it is pivotal to evaluate the

receptiveness of members of a culture to products and concepts originating from other cultures (Craig et al., 2005; Yalcinkaya et al., 2007).

The impact of cultural factors is very much variable depending on the product, since some products are more easily embedded than others. Areas such as technology, power tools or construction equipment have a low if not even null degree of cultural connotations. However, food, clothes or artistic works or forms of expression can be strongly embedded in a particular culture, resulting in marked differences across cultures. How people accept or reject products from other cultures will very much depend on their compatibility with the values and beliefs of that culture. On the other hand, there are some situations in which people in a particular culture may want to imitate the lifestyle and behaviour patterns of another culture. Hence, they may look for products that symbolize and provide a clear expression of the culture that is being mimicked. This shows that each case is a particular case and no rules must be though to apply to all types of products and all markets. For example, consumers in other countries have embraced cultural icons and material artefacts of American culture, from which some cases can be cited with respect to Food: McDonald's or Coca-Cola. Also Italian icons like pizza or lasagne have easily been implanted into many cultures around the world (Craig et al., 2005).

Although it is not easy to actually define “ethnic food”, it is possible to associate some common characteristics of this group of food products, that include: a) Origin – these are foods linked to a particular product, ethnic group, or in a delimited area; b) Consumption – usually the consumption of ethnic products is associated with cultural aspects and/or occasions; c) Characteristics of the product itself – these are particular and are perceived differently by consumers (Barrena et al., 2015; Calantone et al., 2006; Camarena & Sanjuán, 2008; Sheth, 2006; Triandis, 2006).

Social identity is determinant for consumers' new product acceptance, which implies that product managers have to consider adapting the strategies to meet the criteria of different cultures, if they want to conquer a suitable share of the market with their new products (Barrena et al., 2015; Bartels & Reinders, 2010). Techniques based on the means–end chain (MEC) theory are useful to model these global market associations. The MEC

theory postulates that it is possible to establish the links between the product's attributes, the benefits they symbolise and the values consumers hope to obtain from them. This MEC approach has been used on the case of ethnic foods by Barrena et al. (2015), and the authors intended to determine if ethnic origin influenced the cognitive structure, i.e., the personal values that consumers look for when making a purchase decision. The hierarchical value maps obtained indicate that there was a strong emotional dimension attached to the purchase and consumption of the tested ethnic product, which was couscous. Furthermore, they observed some cultural variation: while Arab consumers attributed more importance to issues such as the geographic origin of the product, cultural identification and fulfilment of family duty, the Spanish consumers, tended to follow the latest trends as a means to be more cosmopolitan and more successful within their environments (Barrena et al., 2015).

5. Final considerations

Society's identity includes also aspects related with traditional foods, apart from other facets of culture and heritage. Presently, the food market is increasingly shaped on the nutritional value of foods and how food products can bear health enhancing properties. Hence, consumer behaviour is changing towards attributing an added value to healthy products. Although in some cases the traditional foods are associated with increased health benefits, like it happens for example with the Mediterranean diet, the truth is that many of the traditional products have high concentrations of less healthy components, such as fat, salt or sugars. Hence, a key threat for the future of traditional foods is the possible insufficient degree of adaptation to the new requirements demanded by the consumers. The food industry seeks to meet these challenges, but this encounters the difficult borderline between tradition and innovation. The concept of tradition or traditional food is, by principle, antagonist of innovation. Because of this duality, it is particularly difficult to develop innovations with a good consumer acceptance within the category of innovation in traditional products.

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7. Declaration of Interest

The authors declare that there is no conflict of interest.

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