# The role of sensory attributes in marketing organic food: findings from a qualitative study on Italian consumers

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## ABSTRACT

This paper explores in-depth sensory experiences, expectations and perceptions of organic consumers when purchasing and eating organic food, using a qualitative marketing research technique. Five focus group interviews supported by semi-structured questionnaire were performed in Italy during 2009.

Findings suggest that sensory attributes may be more relevant for elder participants than for younger ones. Moreover, consumers largely agree that organic food should be different from conventional ones, but variety is also expected and between organic food themselves. Appearance and odour appear to be the most important sensory attributes when consumers purchase food, while taste and odour are the most important attributes when eating. Sensory-related information seems to play a crucial role when consumers are choosing which product to buy for the first time. On this regard, sensory marketing could be an important tool to build awareness and training consumers on peculiar sensory properties of organic food, which is very important to enhance the conscious consumption of organic food. Finally, suggestions both to researchers and food marketers are provided.

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## 1. INTRODUCTION

According to Schmitt (1999), we are in the middle of a big revolution that will replace traditional feature and benefit marketing with experiential and emotional marketing. This challenge is related to modified consumers lifestyles that in turn are associated with changes of consumers needs and expectations. Therefore, companies should look for different possibilities of how to satisfy consumers expectations taking into account a new marketing approach or paradigm called ‘experiential marketing’, which is focused on letting customers be involved into unforgettable emotional experiences. Therefore, the objective of experiential marketing is also identifying and communicating to consumers sensory stimuli more suitable to product characteristics and consumer expectations, in order to delight them and let them fall in love with the product (Messaggio, Miani, Tonielli, & Virardi, 2009; Santini, Cavicchi, & Canavari, in press). In this framework, food does not only express a functional value, as for instance a source of nourishment, but it also can provide emotions. For instance, the odour of a fresh apple just picked from the tree, could recall memories linked with special emotions to people who had experience of the countryside.

Nowadays, organic food consumers seem to pay more attention to “hedonistic” motives for purchasing of organic food, such as health, taste and wellness, than to “altruistic” purchasing motives, such as environmental protection and animal welfare. Therefore, it appears that sensory attributes are gaining importance in orienting food choices (Shepherd, Magnusson, & Sjödén, 2005).

Organic practitioners are also starting to take into account sensory properties, such as taste, smell, appearance, touch, odour, etc. as important elements to be considered in the food product development and marketing communication strategies in order to quickly respond to the new consumers needs and to shifted expectations.

Consumer research on this topic is therefore useful when addressing to a specific target and fine-tuning the marketing strategies of food companies. Consumers surveys are commonly used to analyze these issues, but to the best knowledge of the authors, only few studies have been conducted in Italy about organic extra-virgin olive oil (Bracco, Caniglia, D'Amico, Di Vita, & Pappalardo, 2009; Midmore et al., 2005), Pecorino cheese (Napolitano et al., 2009) and organic vegetable baby food (Vairo & Zanoli, 2009), which focused specifically on consumers’ sensory experiences and preferences for organic food (Stolz, Jahrl, Baumgart, & Schneider, 2010). Since sensory properties are a relatively new issue in the organic food market, an exploratory approach is necessary in order to provide useful insights to design more extensive consumer surveys able to segment consumers and helping food distributors to improve their marketing strategies.

The objective of this paper is to explore in-depth sensory experiences, expectations and perceptions of organic consumers when purchasing and eating organic food, using an exploratory approach and a qualitative marketing research technique. The output of this research is the identification of some key elements, which may make researchers able to address further research and may provide useful recommendations to food industry and distribution practitioners interested in marketing organic food.

This paper is organised as follows. Section two provides a short literature review about the recent evolution of organic food markets, putting a particular emphasis to the role played by sensory attributes in consumer choice. Section three describes the qualitative method used to collect and analyze information about experiences and expectations of organic consumers linked to sensory attributes. Section four presents the findings of this research about relationships between consumers and sensory attributes of organic food. Finally, section five summarizes the main findings and indicates the need of more extensive and in-depth investigations.

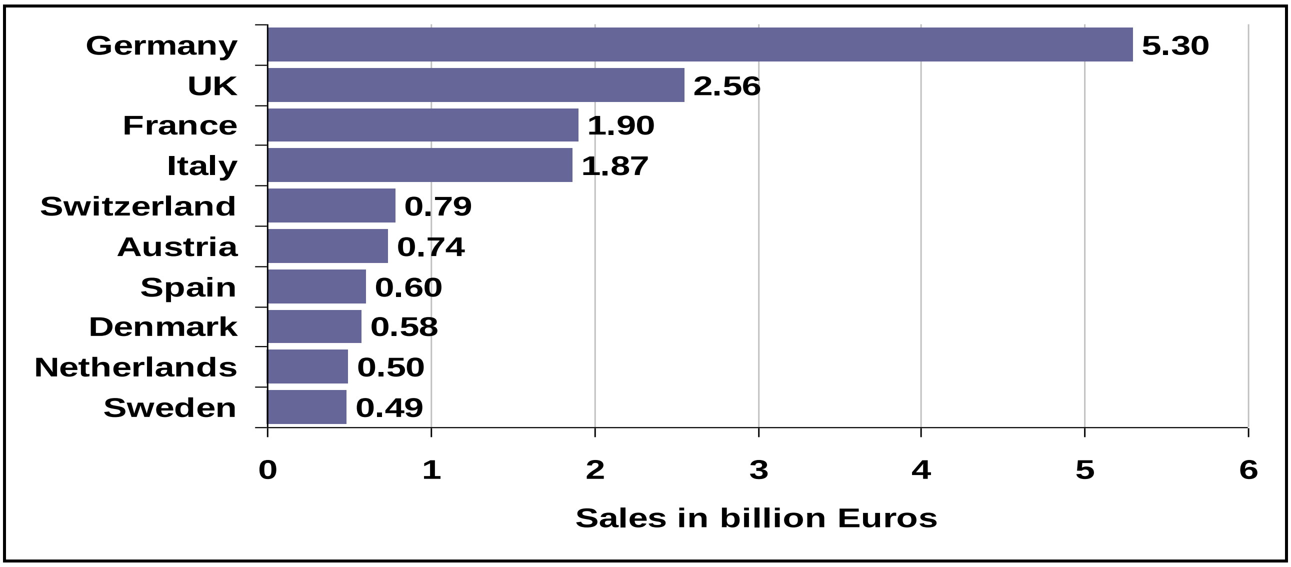
## 2. BACKGROUND

Drawing on a review made by Spiller & Obermowe (2009) we found that the organic food market was characterized by an uninterrupted growth during the past decade (Hamm & Gronefeld, 2004; Sahota, 2009), which has also changed its original supply chain structure and characteristics. Padel et al. (2009) gave a comprehensive overview about an extensive growth in the European organic market reporting that the total value of the organic market is estimated at approximately 16.2 billion Euros in 2007, an increase of nearly two billion Euros compared with 2006. Moreover, the organic food market in Europe has grown on average about 10% per year with an average per-capita spending of 27 Euros across all European countries.

Figure 1 show that the largest European countries, e.g. Germany, the United Kingdom and France have the highest total sales of organic products, whereas figure 2 shows that smaller countries, like Denmark, Austria and Switzerland have the highest market shares of organic food in 2007.

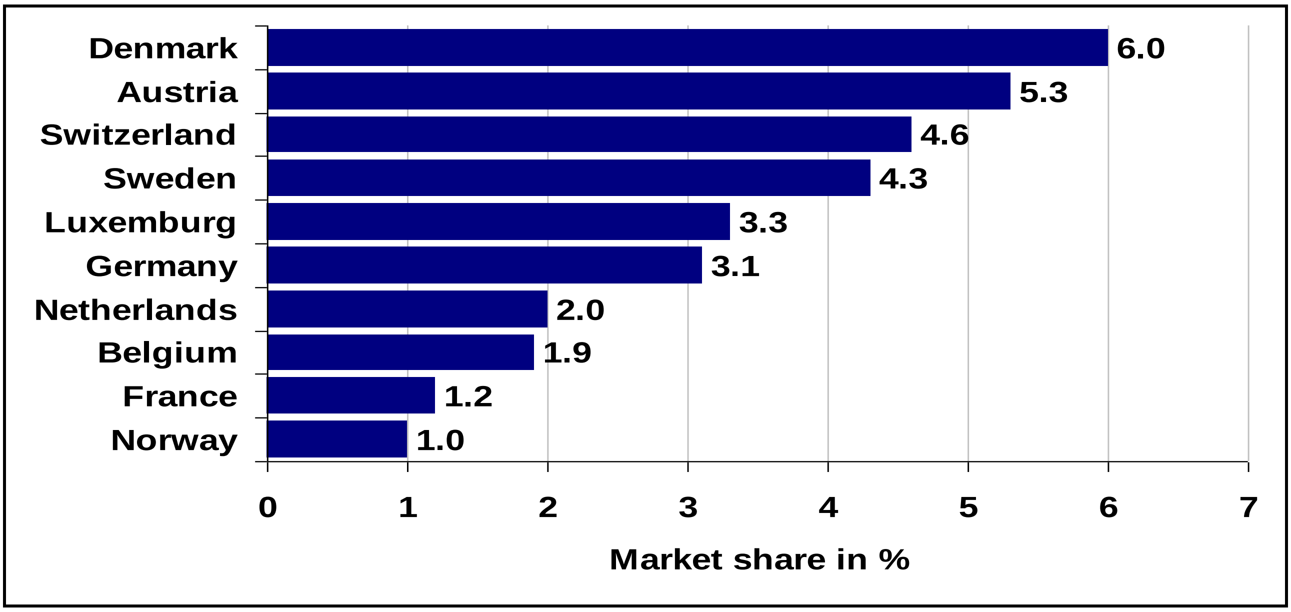
The Italian turnover of organic products amounted to 1,970 million Euros in 2008 (Stolz et al., 2010). Despite of the world economic crisis, Italian consumers are increasing their consumption of organic food. The growth rate of the Italian organic market slowed down to 5.4% in 2008 but it grew up to 6.9% in 2009 (Ismea, 2010).

**Figure 1 - European countries with the highest total value of organic sales in 2007**




Source: Padel et al. (2009).

**Figure 2 - The ten European countries with the highest market shares of organic products in 2007**




Source: Padel et al. (2009).

Organic food represents about 3% of the overall Italian food consumption. Although the European markets is moving from 'exclusive' to 'mass' market where large retailers are gaining market share (Hughner, McDonagh, Prothero, Shultz, & Stanton, 2007), in 2005 the share of organic food sales in large retail chains was only 39% that is much lower than in most European countries. Therefore, in Italy organic food is still mainly sold by traditional grocery stores and by specialized retailers (e.g. the organic retail chain NaturaSì). However, the share of organic products sales at large retailers has increased in the last few years (Schaak & Willer, 2010). The retail chain "Esselunga" is presently the Italian retailer with the highest share on the Italian organic food market (Santucci, 2009).

With regard to the main relevant buying motives of Italian consumers a study of Ismea (2005) revealed that the most important are: “naturalness” (34 %), “health” (31 %) and “authenticity” (25.5 %). It is striking that “better taste” was a buying motive of only few consumers (5 %) as well as “environmental friendly” and “animal welfare” (3 %).

Closely linked to challenges in the organic food sector above mentioned, consumers are evolving their buying motives from traditional motivations, such as environmental protection and animal welfare towards health, taste and wellness motives (Spiller & Obermowe, 2009). However, taste can be considered as an important driver underlying consumers values and attitudes, which act at determinants in organic food consumption (Aertsens, Verbeke, Mondelaers, & Van Huylenbroeck, 2009). In addition, some studies show that taste, and other sensory attributes, represents an important attribute for specific consumers segments, who approach pragmatically the purchase of organic food products (Pellegrini & Farinello, 2009) and tend to evaluate them according to the same parameters applied to conventional products (Berardini, Ciannavei, Marino, & Spagnuolo, 2006). Many studies revealed that taste and appearance are among the most important criteria in organic food purchase (Castellini, Berri, Le Bihan-Duval, & Martino, 2008; Kuhar & Juvančič, 2010; Magnusson, Arvola, Hursti, Aberg, & Sjödén, 2001; Roddy, Cowan, & Hutchinson 1994). These findings were confirmed by studies reporting an increasing share of consumers who were willing to pay higher prices for organic products solely if they feature aspects beyond the fact of being organically produced, such as a unique taste or smell (Lüth & Spiller, 2005). In addition, some scientists pointed out that sensory attributes were important elements that should be taken into account in the marketing strategies by organic food operators than even before (Brennan & Kuri, 2002; Padel & Foster, 2005).

## 3. METHODOLOGY

According to the objective of the research we applied the focus group interview as the most suitable qualitative research technique. Focus groups are frequently used in market research to explore in-depth topics, in order to allow the emersion of elements that could be used in further investigations (Molteni & Troilo, 2007).

During fall 2009 we performed five focus groups in five different cities across Italy, namely Trieste, Genoa, Rome, Bari and Matelica. The locations were chosen with the intent to include large and small towns, stretching across the Country, and addressing both areas where organic food are already a well-established market and others where it is not. Pre-selection of organic consumers using a short and simple recruitment questionnaire and aimed at complying with quota restrictions that take into account gender (67% women and 33% men), age (50% between 18-45 years and 50% between 46-75 years) and level of organic food consumers consumption (heavy users and light users)[2], was conducted by the researchers. Then, the selected consumers were invited to join group discussions in rooms endowed with all the facilities necessary to conduct focus groups (e.g. round table, chairs, board and pin up cards, audio and video-recording equipments, etc.).

The discussions were conducted following a semi-structured questionnaire previously designed and pre-tested with personnel of the University of Bologna. The questionnaire was divided into sections that reflected the themes under investigation: associations related to sensory characteristics of organic food; expectations of sensory properties in terms of standardization/variability; expectations to marketing sensory aspects of organic food.

Table 1 describes in detail the characteristics of the 41 organic consumers who were interviewed during the focus groups interviews and how they are stratified according to age brackets, and gender. Two focus group discussions involved heavy users while three discussions regarded light users of organic food. The choice to separate heavy users from light users was made to avoid the risk that heavy consumers could have influenced the opinions of light users during a joint discussion because of their supposed better knowledge of the issue.

**Table 1 – Characteristics of the focus groups interviews**

| **N° FG** | **1** | **2** | **3** | **4** | **5** | **TOTAL** |
|---|---|---|---|---|---|---|
| **Type of users** | Light users | Heavy users | Heavy users | Light users | Light users | |
| **Location** | Trieste | Genoa | Rome | Bari | Matelica | |
| **N° Consumers** | 8 | 8 | 9 | 6 | 10 | **41** |
| ***Thereof*** | | | | | | |
| **Female** | 5 | 6 | 5 | 3 | 6 | **25** |
| **Male** | 3 | 2 | 4 | 3 | 4 | **16** |
| ***Thereof*** | | | | | | |
| **18 to 45 years** | 4 | 4 | 5 | 3 | 5 | **21** |
| **46 to 75 years** | 4 | 4 | 4 | 3 | 5 | **20** |

Each interview lasted about 1 hour and was video and audio recorded. The interviews content was transcribed and then the transcripts were read and concepts and meanings extracted from the text

[2] Light users are occasional consumers, who ate organic food once or twice during the last six months, while heavy users are frequent consumers who ate organic food more than twice during the same period.

were categorized and classified considering the different themes investigated and then analyzed using a qualitative content analysis and meaning condensation approach.

## 4. RESULTS

In this section we summarize the main findings of our study. First of all, it appears that some consumers are still somewhat confused about the meaning of the term ‘organic food’. Organic food is often associated with a set of desired features of food such as naturalness, freshness, taste, safety, no chemical contaminations and “home made” foods, while compliance with a well-defined production standard and its certification is rarely mentioned. This result confirms that many consumers are interested in the final result rather than the process. In addition, although some of the mentioned attributes may be considered as a consequence of the adoption of the organic standard (e.g., reduction of the risk of contamination by agrochemicals), others such as freshness are just indirectly and sometimes weakly linked with the organic standard or they are rather the expression of other concepts. For example some consumers said:

> *“….for me organic food is a food produced in a small farm”*
>
> *“Organic food comes from the vegetable garden cultivated from my grandparents!!”*

Furthermore, some consumers link organic food to particular food products (e.g. milk, fruit, vegetables, natural, fair trade, etc.), animals (e.g. insects), people/occupations (e.g. farmer, baker), colours (e.g. green, yellow, etc.).

With regard to the importance of organic food sensory attributes when consumers purchase and eat food it appears to exist differences depending on age. Elder consumers seem to pay more attention to sensory and safety attributes than younger ones. The latter, instead, seem paying more attention to environmental protection, animal welfare, absence of chemical preservatives or additives when they purchase organic food. The higher attention paid to sensory attributes of organic food by elder consumers may be linked to childhood memories who apparently serve as a “personal sensory-quality term of reference” when taste experiences of the childhood or former times are compared with nowadays sensory characteristics of food. However, among attributes that consumers take into account when purchasing and eating organic food, basically sensory attributes still appear to be less important than others, such as environmental protection, animal welfare, absence of additives, etc.

Regarding consumers’ expectations in terms of standardization/variability of sensory properties, participants largely agree that organic food should be different from conventional ones in terms of shape, odour, colour, taste, texture, etc, but variety is also expected between organic food themselves. For example, an organic light user of organic fruit said:

> *"....the shape of organic food does not have to be standard. It has to be natural and each fruit must have a different shape, because has to depend on the nature".*

However, the latter findings are in contrast with a few consumers who expected that organic food may mimic some successful branded products.

Sensory attributes may play different roles at the purchasing and eating levels. In particular, important sensory attributes when consumers purchase organic food appear to be appearance and colour, as mentioned by a consumer:

> *"....food has to be attractive and must have a particular colour that outlines natural characteristic and that exalts smell".*

On the other hand, from these focus groups emerged taste and odour represent for many consumers the most relevant sensory attributes when eating organic food:

> *"... taste of food has to be consistent and accompanied to a strong personality".*

The difficulties showed by consumers to describe sensory experiences and expectations and the existence of many different patterns in perceiving sensory differences between organic and conventional food products, confirm that sensory perception is a complex issue to be analyzed.

Consumers often mention that information about ingredients, additives and origin of the products have the highest relevance for their buying decision. However, sensory-related information is deemed to play a crucial role when consumers are choosing which product to buy for the first time.

In addition, consumers underlined the importance of symbols and images concerning nature or people reported on the packaging labels, which may increase the chances to purchase organic food. For example, an image of rainbow or sun could be associated with organic food or

> *"....a picture of grass lawn with people walking with kids among trees, or parents with kids who walk among nature remember me organic food".*

Finally, keywords associated to organic food have been discussed in the focus group, and some of participants highlighted that odour or taste mentioned on the labels may be very attractive to consumers, as indicated for example by a couple of consumers:

> *".....coming back to nature!".*
>
> *"…also information about taste and odours reported on the label of jar of honey could increase the chance of its purchasing. "*

## 5. CONCLUSIONS AND RECOMMENDATIONS

Although it is risky to make conclusive statements on the basis of a qualitative study based on a small sample, we may draw some conclusions that could represent a good starting point for further investigations based on a quantitative approach.

First, consumers may still appear to be confused about the correct meaning of 'organic food', which they sometimes associate to closely related but also different meanings, depending on personal knowledge, experiences, etc. This issue was widely investigated in the late 1980s and early 1990s, but recently it has lost the attention of practitioners and researchers, while probably it may still represent an issue.

Second, older consumers' comments seem to assign more relevance than younger consumers to the role played by sensory attributes when they purchase and eat organic food. This may be because older consumers would expect that organic food will mimic food that they were used to eat when they were children. This may have important implications about marketing strategies for food operators that suggests that experience, education and training on food taste may play a role in shifting preferences.

Third, consumers largely agree that organic food should diversify in terms of sensory characteristics such as shape, taste, odour, etc. in comparison with conventional products.

Fourth, even though sensory attributes appear not to be the most relevant buying motives of organic food as also confirmed by other studies (Magnusson et al., 2001; Schifferstein & Oude Ophuis, 1998), however, they may play an important role both at the purchasing and eating levels. In particular, at the purchasing level appearance and colour are expected to be relevant attributes, while taste and odour are important when consumers eat organic food and they may play a role in both expectations building, satisfaction and loyalty mechanisms.

Fifth, in terms of sensory marketing, consumers appear to be attracted by particular colours, images, symbols or keywords linked to organic food, that if suitably emphasized (e.g., using sensory labels) could increase the chances of consumers purchase. Thus, sensory marketing could be an important tool to build awareness and training consumers on peculiar sensory properties of organic food could be very important to enhance the conscious consumption of organic food. On the other hand, food marketers could inform consumers about production methods of organic agriculture and processing, nutritional component, modification of taste during shelf-life when they are directly linked with sensory attributes.

The use of an experiential marketing approach, through, for instance, reproduction of sounds and noises associated to organic production method as well as tastings, contests, games and oral advice at the point of sales on how to prepare and consume organic food, may contribute to further stimulate the interest for this kind of products.

Finally, we may suggest that further marketing research may address the need of segmenting organic consumers on preferences for sensory characteristics, in order to design better sensory marketing actions. In addition, willingness to pay (WTP) of consumers for organic food claiming particular sensory attributes needs to be explored.

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