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The Role of Sensory Attributes in Marketing Organic Food: Findings from a Qualitative Study of Italian Consumers

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This paper uses a qualitative marketing research technique to explore in-depth sensory experiences, expectations, and perceptions of organic consumers when purchasing and eating organic food. 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 older than for younger participants. Consumers largely agree that organic food should differ from conventional items, but variety is also expected among organic products themselves. Appearance and odor appear to be the most important sensory attributes when consumers purchase food, while taste and odor 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.

During last decade the European organic food market has been characterized by an uninterrupted growth (Hamm and Gronefeld 2004; Sahota 2009), leading to changes in its original supply chain structure and characteristics. According to Padel, Schaak, and Willer (2009), the total value of European organic market was estimated at approximately €16.2 billion in 2007 (about US$22 million at the 2007 exchange rate), an increase of nearly two billion euros compared with 2006. Moreover, the organic food market in Europe has grown on average about 10 percent per year with an average per-capita spending of €27 across all European countries. Despite the world economic crisis, Italian consumers are increasing their consumption of organic food. Italian consumption of organic products amounted to €1,970 million in 2008 (Stolz et al. 2010) with an increase of 6.9 percent in 2009 (Ismea 2010), representing about three percent of overall Italian food consumption.

Although the European organic market is moving from "exclusive" to "mass" market status, where large retailers are gaining market share (Hughner et al. 2007), in 2005 the share of organic food sales in large retail chains in Italy was only 39 percent, much lower than in most European countries. Therefore in Italy organic food still is 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 and Willer 2010).

Presently, organic food consumers seem to pay more attention to "hedonistic" motives for purchasing organic food, such as health, taste, and wellness, rather than to "altruistic" purchasing motives, such as environmental protection and animal welfare. Moreover, sensory attributes are gaining importance in food choices (Shepherd, Magnusson, and Sjödén 2005). In this context, organic practitioners are also starting to take into account sensory properties, such as taste, smell, appearance, touch, odor, etc. as important elements to be considered in food product development and marketing communication strategies in order to quickly respond to the new consumers' needs and to shifted expectations.

Research on organic consumers' sensory analy-

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sis has not been explored widely in the literature. Some studies showed that taste and other sensory attributes represent important product features for specific consumers segments who approach the purchase of organic food products pragmatically (Pellegrini and Farinello 2009) and tend to evaluate them according to the same parameters applied to conventional products (Berardini et al. 2006). Other studies revealed that taste and appearance are among the most important criteria in organic food purchase (Castellini et al. 2008; Kuhar and Juvančič 2010; Magnusson et al. 2001; Roddy, Cowan, and Hutchinson 1994). These findings were confirmed by Lüth and Spiller (2005), who reported that consumers are 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. Finally, some scientists pointed out that sensory attributes are important elements that should be taken into account in the marketing strategies by organic food operators (Brennan and Kuri 2002; Padel and Foster 2005).

To our knowledge, few studies focused specifically on consumers' sensory experiences and preferences for organic food have been conducted in Italy (Stolz et al. 2010). Some authors explored consumers' sensory experiences and preferences concerning organic extra-virgin olive oil (Bracco et al. 2009; Midmore et al. 2005), while other contributions focused on Pecorino cheese (Napolitano et al. 2009) and organic vegetable baby food (Vairo and Zanoli 2009).

Because sensory properties are a relatively new issue in the organic food market, an exploratory approach is of paramount importance for providing useful insights to design more extensive consumer surveys in order to segment consumers and help food distributors improve their marketing strategies. This paper in particular explores in-depth sensory experiences, expectations and perceptions of organic consumers when purchasing and eating organic food. An exploratory approach and a qualitative marketing research technique have been used. Findings elicit some key elements which may enable further research and provide useful recommendations to food industry and distribution practitioners interested in marketing organic food.

Section 2 of this paper describes the qualitative method used to collect and analyze information about experiences and expectations of organic consumers linked to sensory attributes. Section 3 presents the findings of this research about relationships between consumers and sensory attributes of organic food. Section 4 summarizes the main findings and indicates the need for more extensive and in-depth investigations.

Methodology

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 discovery of elements that could be used in further investigations (Molteni and Troilo 2007).

During Fall 2009 we conducted five focus groups in five different cities across Italy: Trieste, Genoa, Rome, Bari, and Matelica. The locations were chosen to include large and small cities spread across the country, addressing both areas where organic food are already a well-established market and areas where it is not. Recruitment of organic consumers, conducted by the researchers, was carried out using a short and simple questionnaire aimed at complying with quota restrictions that take into account gender (67 percent women and 33 percent men), age (50 percent between 18–45 years and 50 percent between 46–75 years), and level of organic food consumption (heavy users and light users)[1]. 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 interview schedule, previously designed and pre-tested with personnel of the University of Bologna. The interview outline was divided into sections that reflected the themes under investigation: associations related to sensory characteristics of organic food, expectations on sensory properties in terms of standardization/variability, and expectations to marketing sensory aspects of organic food.

Table 1 describes in detail the characteristics of the 41 organic consumers interviewed during the

[1] 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.

Table 1. Characteristics of the Focus Group Interviews.

FG	1	2	3	4	5	
Type of users	Light users	Heavy users	Heavy users	Light users	Light users	
Location	Trieste	Genoa	Rome	Bari	Matelica	Total
Number of consumers	8	8	9	6	10	41
Female	5	6	5	3	6	25
Male	3	2	4	3	4	16
18 to 45 years	4	4	5	3	5	21
46 to 75 years	4	4	4	3	5	20

focus groups and how they are stratified according to age ranges and gender.

Two focus-group discussions involved heavy users and 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 influence the opinions of light users during a joint discussion because of their supposed better knowledge of the issue. Each interview lasted about one hour and was video and audio recorded. The interview content was transcribed, and the transcripts were read and concepts and meanings extracted from the text were categorized and classified according to the different themes investigated. Data were then analyzed using a qualitative content analysis and meaning condensation approach.

Results

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 contamination, and "home-made" foods, while compliance with a well-defined production standard and its certification is rarely mentioned. This finding confirms that many consumers are interested in the final result rather than in 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 only indirectly and sometimes weakly linked with the organic standard or they are the expression of other underlying concepts. For example some consumers said, "For me organic food is a food produced in a small farm" and "Organic food comes from the vegetable garden cultivated by 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), and colors (e.g., green, yellow, etc.).

The importance of organic food sensory attributes when consumers purchase and eat food differs depending on age. Older consumers seem to pay more attention to sensory and safety attributes than do younger consumers, who instead pay more attention to environmental protection, animal welfare, and absence of chemical preservatives or additives when they purchase organic food. The greater attention paid by elder consumers to sensory attributes of organic food may be linked to childhood memories which apparently serve as a "personal sensory-quality term of reference," when taste experiences of the past are compared with current sensory characteristics of food. However, among attributes that consumers take into account when purchasing and eating organic food, sensory attributes still appear to be less important than attributes 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 differ from conventional food in terms of shape, odor, color, taste, texture, etc., but variety is also expected among organic food items themselves. For example, an organic light user of organic fruit said, "The shape of organic food should not be standardized. It has to be natural and each fruit must have a different shape, because it has to depend on Nature." However, a few consumers expected organic food to 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 color, as indicated by one consumer who said, "Food has to be attractive and must have a particular color that outlines natural characteristic and that exalts smell."

On the other hand, for many consumers taste and odor represent the most relevant sensory attributes when eating organic food, as noted by one participant who said, "Taste of food has to be consistent and accompanied by a strong personality."

The difficulties shown by consumers in describing 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 analyze.

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 with people walking with kids among trees, or parents with kids who walk among nature remind me of organic food."

Finally, keywords associated with organic food were discussed in the focus groups, and some participants highlighted that odor or taste mentioned on the labels may be very attractive to consumers, as indicated for example by consumers who said, "coming back to nature" and "information about taste and odors reported on the label of jar of honey could increase the chance of purchasing."

Conclusions and Recommendations

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

First, consumers still appear to be confused about the correct meaning of "organic food," which is sometimes associated with closely related but different meanings, depending on personal knowledge, experiences, etc. This problem was widely investigated in the late 1980s and early 1990s, but recently it has lost the attention of practitioners and researchers, even though it still is an issue of utmost importance.

Second, older consumers' comments seem to assign more relevance than to the role played by sensory attributes when purchasing and eating organic food than do those of younger consumers. This may be due to the fact that older consumers expect that organic food will mimic food that they used to eat when they were children. This may have important implications for marketing strategies, suggesting that experience, education, and training in 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, odor, etc., in comparison with conventional products.

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

Fifth, in terms of sensory marketing, consumers appear to be attracted by particular colors, images, symbols, or keywords linked to organic food. If suitably emphasized (e.g., by using sensory la-

bels), these elements could increase the chances of purchase. Thus sensory marketing could be an important tool to build awareness, and training consumers in particular sensory properties of organic food could be very important in order 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 components, and modification of taste during shelf-life when these factors are directly linked with sensory attributes.

The use of an experiential marketing approach—for instance, reproduction of sounds associated with organic production method as well as tastings, contests, games, and oral advice at the point of sale on how to prepare and consume organic food—may contribute to stimulating and enhancing the interest for these products.

Finally, we suggest that further marketing research should address the need for segmenting organic consumers on the basis of 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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