# +Factors underlying consumption of organic food in the opinion of Polish consumers

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Abstract. Organic food market in Poland is still at the early stage of development and there are many barriers to overcome, related to both supply as well as demand for organic produce, in order to develop domestic organic food market. Analyses of own data from 2004, 2005 and 2007 face to face interviews with representative samples of Polish consumers show that the most important factors driving purchases of organic food are health, safety and taste. However, other concerns like animal welfare are also pronounced. Organic food have positive connotations in the opinion of Polish consumers. Besides the positive points of organic food, various negative comments also arose, resulting not so much from the essence of organic food itself, but its availability, information on organic food as well as the feeling it is overpriced.

Key words: consumer, organic food, motives, barriers to buy

#### INTRODUCTION

Organic food consumption is a growing trend among consumers in Eastern European countries and several attempts have already been made to reveal the concepts underlying this food category. However, a deep understanding of how consumers in these immature markets interpret and perceive the concept of organic food, what motivates them to buy organic food and what are the barriers to organic food consumption is still insufficient to implement successful communication strategies. The paper aims at reviewing the factors that impact consumption of organic food in Poland and confront them with general trends observed in development of demand for organic food. The main focus of the paper will be on declared motives and perceived barriers to consumption of organic food identified in own research conducted using face to face interviews with representative samples of Polish consumers in the years 2004, 2005 and 2007.

#### ORGANIC FOOD MARKET IN POLAND

The organic food market has become one of the rapidly growing sectors in the European Union. Poland like all the other countries that acceded EU in 2004 experienced a high growth in the number of organic farms and area under organic production due to financial support for organic farmers in the form of area payments.

At present there are more than 285,000 ha under organic production and the number of organic farms exceeded 15,000 in the year 2008 (Główny Inspektorat...,

2007; Główny Inspektorat..., 2008). As a result the supply of organic foods is steadily increasing but the assortment of domestic organic products is limited. Even though there are more than 250 processors certified in Poland representing various branches, the supply of domestic organic products remains marginal. In part, this is due to the fact that many processors do not direct their production to domestic market. The predominant part of the domestic supply available in Poland goes to fresh plant products, unprocessed and supplied only in season (Zakowska-Biemans, 2005). Animal products constitute a low percentage of the organic food assortment. The main reason for this situation is low and dispersed animal production.

What also appears to be a crucial factor in development of organic food market in Poland is the structure of sale channels and the price level of organic products. Direct sale remains the important sale channel for organic products. Specialized organic food shops have a high share in organic food sales but they have many disadvantages like unfavourable store location, low share of organic certified food and high prices due to relatively high gross margins (Zakowska-Biemans, 2008). There is a new trend observed in Poland to locate specialized organic food shops in prestigious shopping centres, often adjacent to supermarkets located therein. Most of the specialized organic food shops operates independently. There is no trend towards vertical integration in the organic retail sales observed that results both from the organisational weakness as well as reluctance to cooperate due to negative experiences from the past.

Michelsen et al. (1999) in their complex analysis of European organic markets at the beginning of 90s, argued that the conditions for developing organic food markets seem to be strongly related to a high level of supermarket sales. However, sales through supermarkets pose various challenges to organic sector because they demand large quantities of organic products of homogeneous qualities, delivered to schedule and supported by professional promotion. These conditions are still difficult or impossible to meet for the emerging organic sector in Poland. On the other hand, supermarkets are the only route for reaching mass consumers and consumer segments which are impossible to target either through direct trade from the farmer to the consumer or via specialized organic food shops. The fast growth of the share of sale in large retailers is expected due to trends observed in the development of organic food sales channels in the countries of mature organic markets and the activities undertaken by international retail chains operating on Polish market. Supermarkets will likely continue to gain market share at the expense of organic food shops, given the consumer trend toward one-stop shopping.

There is no monitoring of organic food prices but the price premia for organic food in Poland are still high due to limited supply, high distribution costs and relatively high gross margins (Zakowska-Biemans, 2005). In large part, consumer price premium levels depend on product origin (domestic, foreign). However, in the same sales channels, large differences show up in the pricing of organic products. This applies to both unprocessed products as well as processed foods.

Organic food market in Poland is still at the early stage of development, despite the significant growth of the number of organic farms and area under organic production. Underdeveloped processing industry, dispersed agricultural production, lack of appropriate infrastructure and organisation of trade in organic products and low market orientation of Polish organic producers are all considered as the factors hampering development of domestic organic market in Poland.

### MATERIALS AND METHODS

The empirical data was gathered applying quantitative approach. The questionnaires in all three survey consisted of several sections following a general structure: (1) behavioural and attitudinal items relating to food purchasing in general, (2) items probing for consumers' definition, attitude and perceptions of various types of food including organic food, (3) personal data related to lifestyle general interests, and socio-demographics. The questions aimed at identifying the motives to buy organic food were constructed using either 5 or 7 non comparative point interval rating scales of Likert-type agreement scales. The 5 point scale was applied in the surveys conducted in the years 2004 and 2005 while 7 point scale was used for the survey in the year 2007. To identify the barriers to buy there were multiple choice questions developed in the 2004 and 2005 survey. In the year 2007 the barriers to buy were measured on multi-item 7-point semantic differential scales. The scales were balanced with an odd number of response categories, and with the midpoint representing a neutral category.

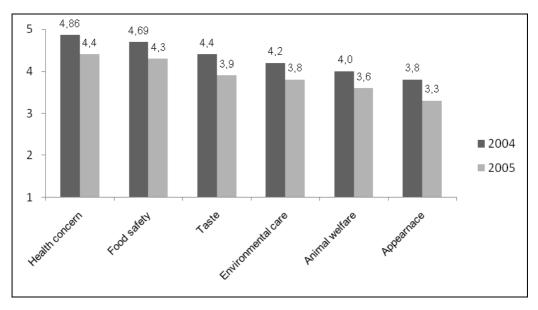
The surveys using face to face interview techniques were conducted, each on a representative in terms of gender, age, education and place of residence sample of at least 1000 Poles using CAPI (Computer Assisted Personal Interviews) technique. The fieldwork took place from 18 till 19 December 2004, from 17 till 30 December 2005, from 15 December 2007 till 20 January 2008.

Data analysis was carried out using SPSS PL 12 for Windows and responses for the purpose of the paper were evaluated using descriptive statistics. Mean values were calculated in case of scales to indicate general central tendency and were used as the main determinants of rank. To review the motives to buy organic food and perceived barriers to consumption of this food category the hierarchy of motives revealed in the three surveys and the most frequently mentioned barriers to buy organic food will be discussed.

# Motives to buy organic food

To identify the motives to buy organic food the respondents in all three surveys evaluated six items that represented different domains of organic food concept: healthiness, safety, taste, environmental impact, contribution to animal welfare and appearance. The questions were addressed to the consumers who declared that they knew the term "organic food" and bought such food products.

The results show that health and safety concerns are the primary motives for purchasing organic foods regardless the year in which the survey was conducted (Fig. 1). The figure included below refers to the results obtained in the 2004 and 2005 survey . The analysis of 2007 survey confirmed that the hierarchy of motives to buy organic food remain unchanged.



**Fig. 1.** The hierarchy of motives to buy organic food in the 2004 and 2005 surveys\*

\* mean values from 5 point agreement scale, where 1= not important at all and 5=very important. Source: own research

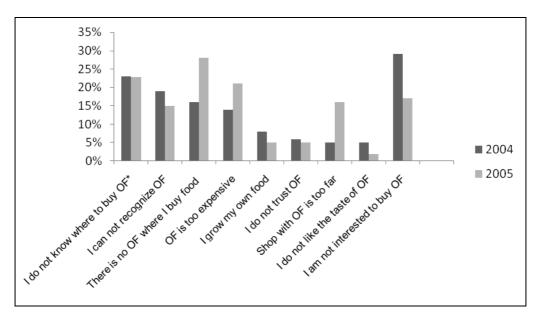
Subsequently mentioned in the hierarchy of motives to buy organic food were hedonic aspects such as sensory properties (taste) and environmental concern. Arvola et al. (2008) emphasize that many consumers experience organic food choice as a morally right thing to do (moral responsibility for environment), which provides an internal reward, and this moral feeling further related to intensions to purchase organic food. The analysis of Polish consumer motives to buy organic food in the years 2004-2007 shows that moral concerns of consumers, like environmental care are ranked high and should be more used in communicating the attributes related to organic farming and organic food.

Polish consumers increasingly express concern about how their food products are produced, processed, and regulated (Ozimek et al., 2005). They tend to consider organic food as the safest food category (Zakowska-Biemans, 2008b). One can argue that organic food produced according strictly defined standards is a product that meets the expectation of contemporary consumers concerned with various aspects of food safety and buying organic food could be a certain risk reducing strategy. Despite the fact that there is no unambiguous evidence that organic foods are healthier than conventional foods, organic foods contain less harmful residues and on the basis of the precautionary principle alone, choosing organic foods appears to be an entirely rational decision (Chen, 2007). In the opinion of Polish consumers, organic farming and organic food have positive connotations when the concerns of contemporary consumers come into play: the health quality of food, the safety of consumed food, the influence of production methods applied in agriculture on the natural environment and genetic modification of food products (Tyburski & Zakowska-Biemans, 2007). Other concerns such as animal welfare were ranked lower in all the three surveys. However,

ethical concerns that belong to credence attributes, meaning that they cannot be experienced directly through consumption are playing increasingly important role in contemporary consumers' food choice.

# Perceived barriers to consumption of organic food

In the surveys conducted in the years 2004 and 2005 consumers were confronted with questions concerning several items reflecting the potential barriers to buy organic food. The most important factor responsible for Polish consumers' not purchasing organic food is lack of information and its absence in local or most frequently visited shops (Fig 2).



**Fig. 2.** Barriers to buy organic food in the opinion of Polish consumers identified in 2004 and 2005 surveys (% of answers)

\*OF means organic food Source: own research

The results of 2007 survey where consumers were asked to evaluate various attributes of organic food show that they are still dissatisfied with choice, availability, convenience and prices of organic food. Prices of organic products in Poland often far exceed an acceptable difference between the price of organic and conventional food (Tyburski & Zakowska-Biemans, 2007). The results of price survey conducted in the year 2004 show that the consumers' price premia for organic food in Poland are very diverse (Zakowska-Biemans, 2005). The price premia for organic fruit and vegetables ranged from 30 up to 150% and in case of animal products the lowest were for primary product like organic milk (15%) and the highest for processed food like organic yoghurt (173%). Thus, limited availability and high prices could be considered as a barrier related to the immature nature of organic market in Poland. Zanoli et al. (2004) suggest that in the case of organic food the price is either too high or consumers'

budgets are too low. The latter is one of the important factors limiting the purchase of organic food in Poland. Results of all three surveys show that interest in organic food is expressed much more frequently by younger consumers (up to 40 years old) and particularly families with children residing in urban areas that tend to have less disposable income. At the same time they are less inclined to pay higher prices for organic food. Another group of consumers that is affected by high prices of organic products are older consumers who belong to low and very low income groups in Poland. They tend to express interest in buying organic food but they experience numerous difficulties in satisfying primary food needs and rarely purchase organic food or purchase it in small quantities.

Another issue that shapes consumers interest in the purchase of organic food is the lack of confidence in the reliability of information on organic products. In Poland a significant portion of consumers who purchase organic food declare that they are not able to recognize organic food by the information that is included on the label (Zakowska-Biemans, 2005). There is no nationwide logo for organic products in Poland that is considered a prerequisite for further growth in demand for organic products. Polish consumers rely on information coming from shop assistants or they tend to buy organic food in shops that claim to offer organic products. However, the share of organic food in these shops is low and many of the products that are not organic are labelled in a way suggesting organic origin (Zakowska-Biemans, 2008a). Lack of trust is one important barrier for organic market development. Consumers feel who feel insufficiently informed about organic food have a high degree of "cognitive dissonance" in purchasing organic food. The barriers to buy organic food in Poland reflect immature character of Polish organic market and they do not refer to the essence of organic food itself, but its availability, information on places where organic food is available as well as the feeling it is overpriced.

### **CONCLUSIONS**

Organic food market in Poland is still at the early stage of development and can be considered as immature. Further increase of organic area will support overcoming the supply-related barriers to organic food demand growth but promotion of various attributes of organic food and building trust in this food category remain one of the key issues to ensure further development of organic consumption. The analyses of available data revealed that Polish consumers are motivated to buy organic food by hedonic aspects such as healthiness, safety and taste but they are dissatisfied with its availability, variety and price level. Limited availability and high prices could be considered a barrier related to the immature character of organic markets in Poland. The attributes of health associated with organic food reflect Polish consumers' search for food that has a positive health impact in a sense of providing more nutrients but also minimizing the risks associated with conventional food products. Organic food has positive connotation but there is more effort needed to communicate various aspects of organic food production referring to organic standards and common principles covering environmental, social and ethical benefits of organic food consumption.

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