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ORGANIC FOOD MARKET IN POLAND – MAIN CHARACTERISTICS AND FACTORS OF DEVELOPMENT

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Abstract

Since the early nineties of the twentieth century in the international arena began the interest in the issues of sustainable consumption and production. Undoubtedly, an important category of products, which have a significant impact on the environment, are food products. The intensive agriculture focused mainly on performance and reduction of manufacturing costs leads inevitably to destructive actions that have measurable adverse effects on the environment.
The main aim of this paper is to present the results of consumer research concerning attitudes and opinions of customers towards organic food products. In a society the awareness of the importance of organic production for society is growing. However, the interest in organic products appears to be still relatively small. In these circumstances it seems to be important to discover and describe the factors which could potentially increase the interest of the costumers in organic food, which would lead to the growth in the demand for it.

Keywords: organic food, quality, marketing of food products, food industry, consumers' behaviour

JEL classification: M3, R2, Q1

1. INTRODUCTION

In the early nineties of the last century began global interest in the issues of sustainable production and consumption. One of the more important branches of industry, which has a significant impact on the environment is the food production sector. Contemporary intensive agriculture is primarily focused on productivity improvement and the reduction of manufacturing costs. This consequently leads to destructive actions that have measurable adverse effects on the environment and the society in general. These include mostly: global warming, water and air pollution, biodiversity, use of toxic chemicals, deforestation.

Never before the world had to face such enormous challenges. The Earth's systems are under constant pressure due to adverse impacts from human activity. We use more energy, create more waste, and produce more air pollutants than ever before. The most significant impacts are now those that affect the global community. It seems obvious that countries can

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no longer be concerned only with environmental effects within their own borders. They must work together across the world to solve problems such as global warming (Iannuzzi, 2012).

In recent years in many countries, especially those with the developed economies, activities are carried out which are aimed at the reduction of negative results of the relationships between economic growth and resulting from it harmful environmental effects of production and consumption. One of the possible solutions of this problem could be the development of the organic agriculture. This kind of agriculture is aimed to promote and enhance ecosystem health, including biological cycles and the biological activity of the soil. This approach is gaining more and more interest of consumers each year. People all over the world realize benefits resulting from the consumption of ecological food products. They would like to consume more organic food. However, there are some significant factors limiting the demand and supply of this kind of food.

2. THE ORGANIC FOOD MARKET

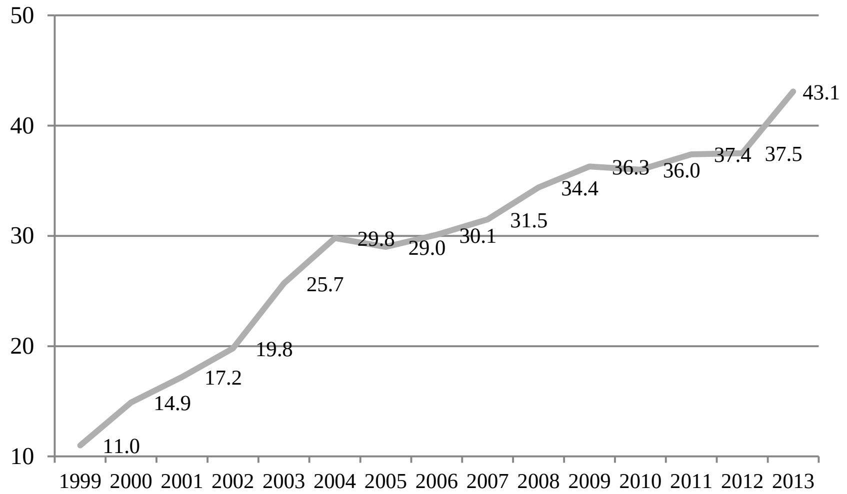
Organic agriculture may be described as a production management system that aims to promote and enhance ecosystem health, including biological cycles and the biological activity of soil. It is based on minimizing the use of external inputs, and represents a deliberate attempt to make the best use of local natural resources. Methods of production are selected to minimize pollution of air, soil and water. Synthetic pesticides, mineral fertilizers, synthetic preservatives, pharmaceuticals, genetically modified organisms (GMOs), sewage sludge and irradiation are prohibited in all organic standards (Food and Agriculture Organization of the United Nations, 2014a). The demand for organic food is increasing continuously for more than twenty years. It is caused by the positive consumer trends resulting from increased awareness and orientation on quality. The quality of organic food is the key source of competitive advantage in relation to food produced with the use of conventional methods (Kowalska, 2010).

The level of expenditure for organic food, per capita, depends on factors of various nature. Among them the most important are: income, consumer awareness, sales strategy and forms of distribution. In developed countries, where the production of organic food represents a large share, and education of the consumer is at a high level, expenditures on organic food are the highest (Smoluk-Sikorska, 2010).

Consumer interest in organic food increases constantly worldwide. The value of the organic food market in the world in 2011 was estimated at 62.9 billion dollars. For comparison, in 1999, it was only 15.2 billion USD. This means a more than fourfold increase in the reported period (www.organic-world.net).

The growing interest in organic crops, livestock, and forest and fish products is mainly driven by health and food quality concerns, although the primary aim of organic production is to ensure that food production and processing methods respect the environment. The natural response to the growing demand is the increase in supply.

The area of agricultural land intended for production of organic food increased worldwide from 11 million hectares in 1999 to 43.1 million hectares in 2013. The detailed data is presented on Figure no. 1.



Source: FiBL-IFOAM-SOEL-Surveys 1999-2014

Figure no. 1 – Places of purchase of organic food

In 2011, in the whole world were registered 1.8 million organic producers. More than three-quarters of them operate in Asia, Africa and Latin America. The country with the greatest number of producers is India (547 591), followed by Uganda (188 625) and Mexico (169 570) (Willer and Lernoud, 2013). These numbers indicate that there are significant differences in the level of development of organic production in different parts of the world.

Also in Poland the organic food market is growing systematically for many years. The first legislation in this regard introduced the law on organic farming in 2001. Since 2004 Poland has implemented the Community rules regulating issues connected with organic farming. In recent years there can be observed a systematic increase in the importance of organic production throughout the European agricultural sector. Despite the difficulties, the number of organic agricultural producers in Poland increased between 2004-2012 from 3705 to 25944, which means a sevenfold increase. At the same time, the number of organic processing plants increased from 55 to 312. These figures testify to the rapid acceleration of growth processes taking place in organic agriculture in Poland after 2004 (Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, 2013).

In comparison, the European Union, by 2012, registered over 239 000 ecological farms. The majority of them were located in Italy (43 852), Spain (30 462) and Poland (25 944). Besides them there were about 36 000 food processing plants. Most of them were located in Germany (9 183), France (8 957) and Italy (5 873). In 2012, in the European Union countries, the area of organic agricultural land occupied more than 8.7 million hectares. The largest areas of organic farmland were located in: Spain (1 593 197 ha), Italy (1 167 362 ha) and France (1 032 939 ha) (Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, 2013).

Between 2012 and 2013 was also noticed an increase in organic agriculture's share of farming in the region. Organic agriculture share of agricultural land increased by 1.5 percentage points in the EU other and EFTA group and 0.9 percent in European Union

(Central and Eastern), while Central Asia and South Eastern Europe showed more modest increases (Food and Agriculture Organization of the United Nations, 2014b).

Important and slightly alarming may be the fact that contemporary agricultural sector of organic production is becoming progressively dominated by corporate entities that may not share the intangible benefits of ecological philosophy. Corporations are beginning to understand more clearly the need of focusing more on protecting their reputation and that their products should provide a social benefit (Hollender and Breen, 2010). Companies are realizing that they can earn profit and competitive advantage by providing the customers with the value they need and expect.

To get more successful in future years, the food companies' product portfolio will have to include the offer of ecological products. This means that in the foreseeable future can be expected an increase in the supply of organic food. In the developing organic food market can be found products that are increasingly complex and highly processed. This puts an additional burden on authorities operating the system of certification, control and traceability of organic products. To ensure the authenticity of the food labelled and sold as organic, it is necessary to ensure a robust and precise control system.

In 2010, a global Green Brands Survey concluded that “consumers plan to spend the same or more money on green products in the coming year, with more than 70 percent of consumers in China, India and Brazil saying they will spend more". A strong global demand for greener products was indicated by over 60 percent respondents in all countries surveyed, indicating that they want to purchase products from environmentally responsible companies (Cohn & Wolfe, 2010). This survey demonstrates the growing desire of consumers for more sustainable products. It is striking that an interest in the environment and sustainability appears to be on the rise in markets all across the world.

Support for organic farming should be strictly linked to the level of organic food market supply. Therefore, a rapid increase in the number of organic farms requires a series of parallel activities aimed at stimulation of the development of the internal market for organic food. Otherwise, its high growth rate will not lead to adequate growth of the food market and its products (Łuczka-Bakuła, 2013).

3. RESULTS OF THE RESEARCH

The aim of the study was to investigate attitudes, opinions and behaviour of consumers of the organic food products. The study was conducted in November 2014 on a sample of 377 respondents. The method of research was a survey, a questionnaire was used as the tool. The study sample consisted of 373 people and was composed of 234 females (62.73% of respondents) and 139 men (37.27%). In the group of participants 54.69% lived in towns with over 100 thousand residents, 12.87% lived in cities the size of 20-100 thousand residents. Cities up to 20 thousand represented 11.80% of participants and 20.64% lived in rural areas. When it came to the level of affluence, the largest group, 70.24%, identified it as average and 17.69% estimated it to be high or very high. Low and very low levels of income reported total 12.07% of respondents. The structure of the survey sample reflects a group of consumers showing interest in organic food consumption. This type of food is purchased primarily by residents of large cities, with secondary and higher education, being in a good financial situation (Hughner *et al.*, 2007).

In the first part of the questionnaire, respondents were asked to declare the frequency with which they buy different kinds of organic foods. The obtained results are presented in Table no. 1.

Table no. 1 – Frequency of purchase of various types of organic foods (1 means never, 4 means each time).

Specification	Average	Standard deviation
Fruits and vegetables	2.88	0.71
Honey and sweeteners	2.79	1.04
Bread	2.70	0.83
Dairy products	2.56	0.83
Juices and beverages	2.45	0.86
Meat and cold cuts	2.43	0.82
Fats, oils	2.39	0.93
Pasta, groats, rice	2.34	0.91
Coffee and tea	2.10	0.94
Fish and fish products	2.05	0.85
Snacks	1.77	0.81
Mayonnaise, ketchup, mustard, sauces	1.70	0.76
Sweets	1.70	0.81

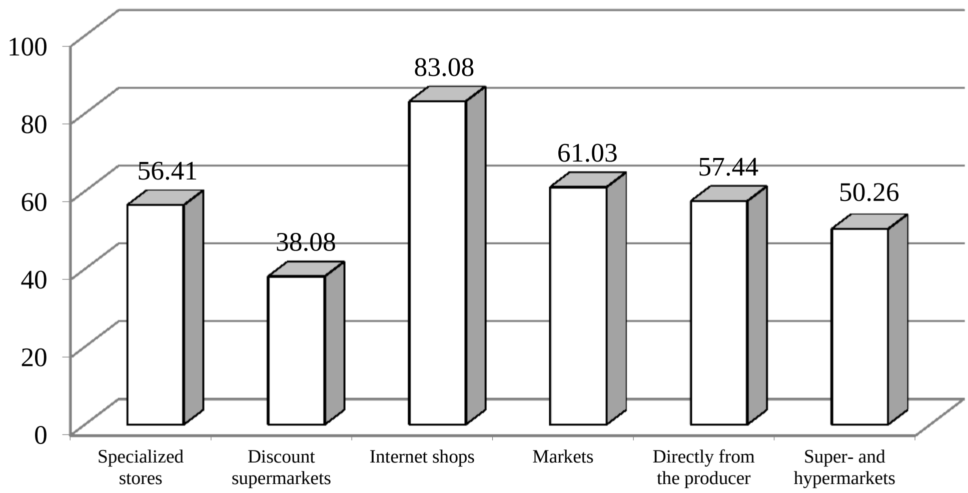
Source: Developed on the basis of own studies.

As may be concluded from the data presented in the Table 1, the most frequently purchased organic food products were: fruits and vegetables (2.88 with the lowest standard deviation - 0.71), honey and sweeteners (2.79), bread (2.70), and dairy products (2.56). In turn, the least frequently purchased by consumers organic products turned out to be: snacks (1.77), condiments (mayonnaise, ketchup, mustard, sauces), and sweets (1.70). Such a distribution of results can indicate the preferences of consumers for types of organic foods. This may of course result from the availability of different categories of products in the market. Among all products indicated, fruits and vegetables seem to be the easiest accessible products.

Currently prevailing fashion for ecology and living in harmony with nature means that almost everything that has in its name the word "organic" or its derivatives, enjoys greater interest of consumers. Many entrepreneurs operating in food business take advantage of this situation by continuously extending their offers of organic products. These products are offered not only in, emerging at an impressive speed, specialty stores, but also on the shelves of almost every store. However, among this range can also be found products which are only pretending to be organic products (Urząd Ochrony Konkurencji i Konsumentów, 2014).

Sale of organic food takes place through several distribution channels. These include: traditional direct sales, specialty stores, general stores and the Internet. Until recently, organic food producers sold their products mostly directly or through specialty stores. These stores offer an average of about 300-500 of organic products (Łuczka-Bakuła and Smoluk-Sikorska, 2009). However the forms of distribution of organic food are evolving. Currently, many large retailers have introduced to their offerings organic products. They can be found increasingly often even in the discount stores.

The next question of the questionnaire related to sources of supply of organic products. The results are shown in Figure no. 2. In this question, respondents could choose several answers.



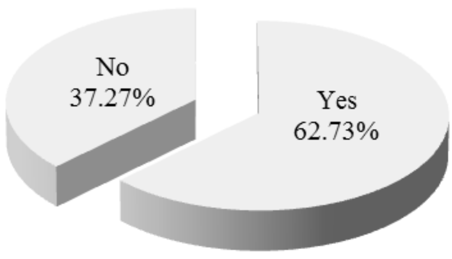
Source: Developed on the basis of own studies.

Figure no. 2 – Places of purchase of organic food

Among the respondents purchasing organic food, 83.08%, declared that they buy it on the Internet. In second place for purchases were traditional markets (61.03%). In third place for purchases in terms of frequency, 57.44%, was the direct channel - the farmer. A little less important (56.41%) appeared to be specialty shops. Fewer respondents (50.26%) buy organic food in supermarkets. The fewest amounts of respondents buy it in discount supermarkets. Presented results allow one to conclude about consumers' routines related to purchasing. The results clearly show the large role of the Internet as a channel of sale of organic food. They also indicate places in which should be concentrated marketing activities aimed at stimulation of demand.

The greatest driver for developing greener products is when the marketplace demands it. When the customer asks for products that have lower environmental impacts, the company should notice it and prepare proper offer.

In the survey respondents were asked whether they would like to consume more ecological food. The results are shown on Figure no. 3.



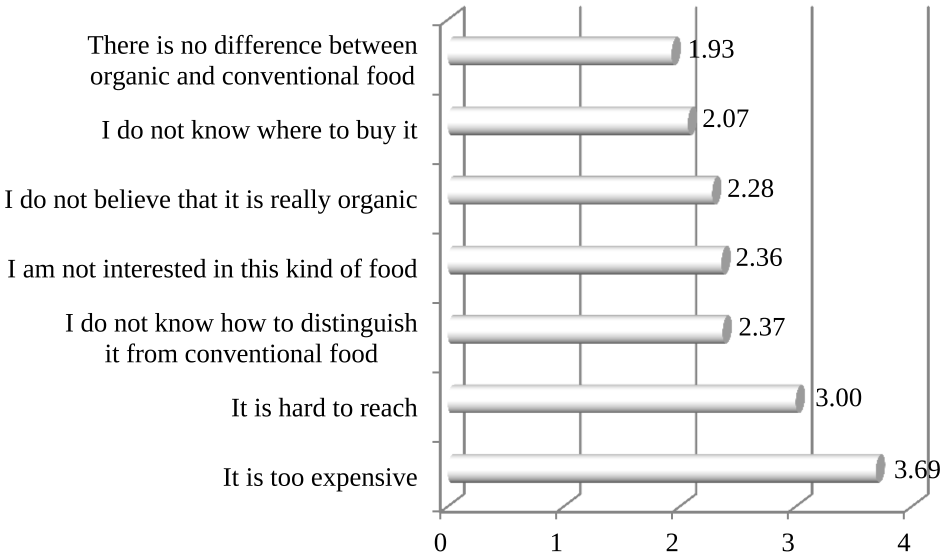
Source: Developed on the basis of own studies.

Figure no. 3 – Willingness of more frequent consumption of organic food

As is apparent from the data presented in Figure no. 3, the vast majority (62.73%) of respondents declare their willingness for more frequent consumption of organic food. This demonstrates that in the future can be expected an increase in demand for this type of food. To actually be able to increase sales of these foods, it seems necessary to fulfil several conditions. The first element is the increase of consumer awareness. An important factor limiting the consumers' interest in organic food is also the relatively high purchase price compared to conventional food. In addition, the range of certified organic products is relatively small. It seems that changing these elements could give a chance to run greater demand.

Particularly interesting issue is the question about the possible causes of limited consumer interest in organic food. The factors limiting the purchase of it include, among others: limited availability, high prices, lack of sufficient knowledge about organic products (Hjelmar, 2011).

Therefore, in the next section of the questionnaire respondents were asked to identify the causes that limit in their case organic food shopping. The obtained results are presented on Figure no. 4.



Source: Hermaniuk and Kawecka, forthcoming
Figure no. 4 – Reasons for not buying the organic food

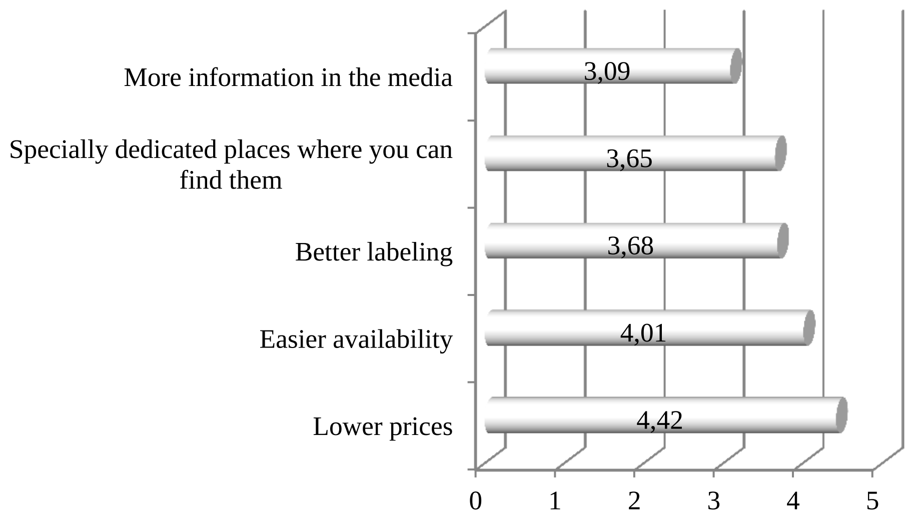
As the main reason for the low share of the organic food market in Poland are indicated its high prices. This results from the fact that certified organic products are more expensive than their conventional counterparts. The most important reason (mean: 3.69) limiting the consumption of these products proved to be price too high. As the second most important cause (mean: 3.00) were indicated the difficulties with the availability of organic food. Further, respondents pointed to the difficulty in distinguishing organic food than conventional (2.37). Another reason was the lack of interest in this kind of food (2.36). Then respondents pointed out the lack of conviction to the fact that the food is actually organic.

Another reason was the lack of awareness about places where one can buy organic food. The cause of the least importance (1.93) was the fact that the respondents do not recognize the difference between organic and conventional food. Based on these results it can be concluded that if there were made some changes in the level of prices, availability of products and the level of consumer awareness, the increase in demand for organic food would be possible.

Therefore, it is necessary to undertake systematic and coordinated actions covering those areas that will contribute to the growth of consciousness. This in turn should translate into increased demand. Increased demand should result in an increased supply of organic food from producers. This in turn should cause pressure on prices and limit prices. Lower prices will attract the group of clients who were not so far interested in this kind of food for economic reasons.

Knowing the answer to the question why customers are not interested in buying organic food, it seems logical to verify the most important factors that, according to the respondents, could encourage them to more often reach for this type of food.

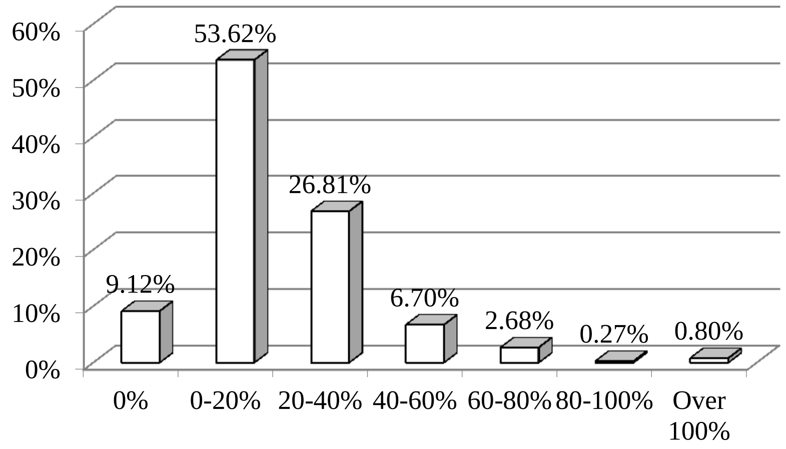
Figure no 5 presents the results of answers to the question concerning factors that could contribute positively to the increase in the consumption of organic food. Respondents had to choose the number from 1 (not important) to 5 (very important).



Source: Hermaniuk and Kawecka, forthcoming

Figure no. 5 – Factors that could increase the consumption of organic food products.

As can be seen from the data provided, the most important factor limiting the consumption of organic food is its higher price compared to conventional foods. In this connection it seems interesting answer to the question: if the higher price level would be acceptable to buyers. Another question in the survey concerned exactly this issue, and the results are shown in Figure no. 6.



Source: ded on the basis of own studies.

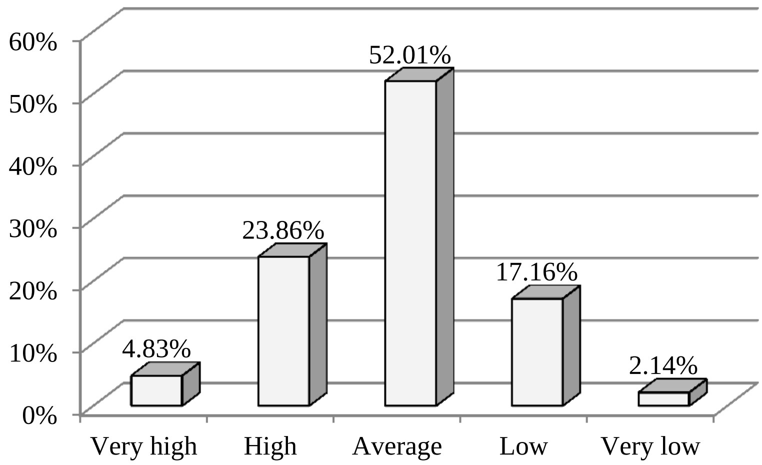
Figure no. 6 – Opinions of consumers on the accepted level of prices of the organic food comparing to conventional food

As can be seen from the data provided, the largest group of respondents (53.62% would be willing to spend on organic food to 20% more compared to conventional foods. The second in terms of number group of respondents would be willing to accept the difference in price between 20 and 40%. In turn, 9.12% of the respondents would not want organic food in general was more expensive than conventional. The three largest groups represent up to 89.55% of respondents. Therefore it must be concluded that in the case of organic food prices higher by more than 40% compared to conventional, it is difficult to expect significant interest of consumers. As practice shows, that food is often much more expensive. This confirms that the high level of price is the main factor limiting demand for organic food.

The second, beside the price level, determinant of the demand for organic food is the level of knowledge and awareness. The assessment of this level is not an easy thing to do. In this connection it seems interesting to get information about own assessment of knowledge made by consumers.

In the next part of the survey, respondents were asked to define their own level of knowledge about organic food. The results are shown in Figure no. 7.

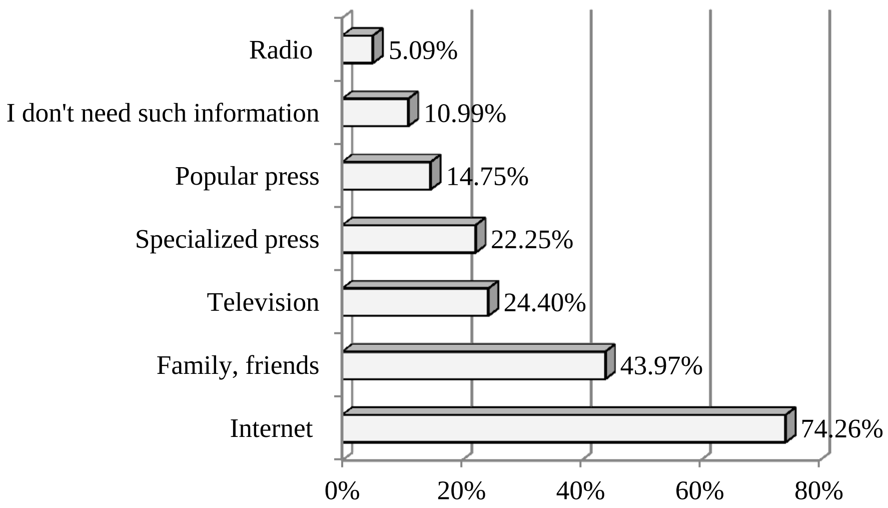
As was indicated earlier, the level of knowledge and consumer awareness is one of the elements that may play an important role in development of the organic food market. The data presented in Figure no. 7 indicates that the majority of respondents (52.01%) assess their knowledge concerning organic foods at an average level. Nearly a quarter of respondents (23.86%) assess their knowledge at a high level. Nearly 5% of participants declared a high level of knowledge. On the other hand, 17.16% of respondents felt that their knowledge in this area is low and 2.14% considered it to be very low.



Source: Developed on the basis of own studies

Figure no. 7 – Self-assessment of consumers own knowledge about organic food

The obtained results allow one to conclude that the level of knowledge of surveyed consumers is not at a very high level. Therefore, it seems necessary to take appropriate actions, which will give a chance to change the status quo. However, to carry out an effective information campaign, it is necessary to have knowledge of the reliable media from which the consumers derive their knowledge. Therefore, in the next question, the respondents were asked to indicate the sources of information they use most often. The results are shown in Figure no. 8.



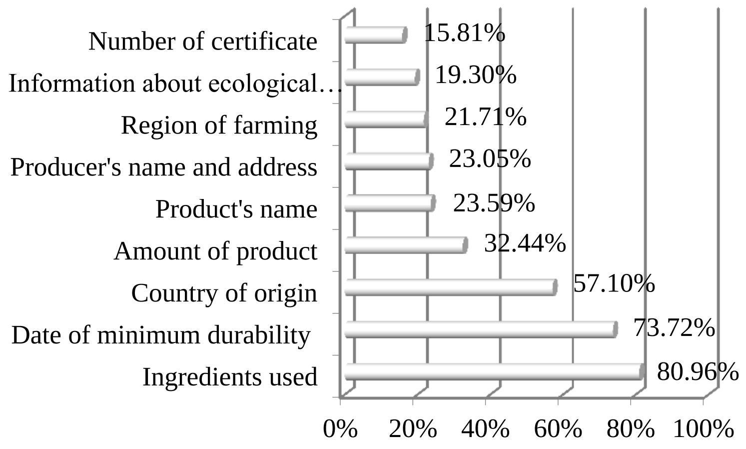
Source: developed on the basis of own studies

Figure no. 8 – Sources of information on the organic food products

The results presented in Figure no. 8 illustrate clearly the most frequently used sources of information. The most important of them (74.26% of answers) is the Internet. As an universal and common medium it allows almost unlimited access to much valuable information. The second most frequently indicated source (43.97%) was found to be people directly from the consumers' own environments (family and friends). As the marketing experience indicates it is the most reliable source of information. Although it has no mass character, its strength stems from the trust that people usually have for these groups. The third in terms of relevant sources of information was a television (24.40%). Slightly fewer people declared that they seek information in the specialized press (22.25%). The least group of respondents (5.09%) declared that they obtain such information from the radio.

The presented results allow us to conclude the possible effective ways of delivering to consumers the information they seek. Special attention should be paid to the Internet. Its universal character and constantly growing range allows the effective reach of a very wide group of customers representing various social groups.

Consumers that have knowledge on organic products will seek relevant information on the product packaging. This is a very important source of many important information that can significantly improve consumer decisions. Therefore, in a subsequent question, respondents were asked to indicate what kind of information they usually seek on food packaging. The obtained results are presented on Figure no. 9.



Source: developed on the basis of own studies

Figure no. 9 – Information searched by customers on packages of food products

As is apparent from the data presented in Figure no. 9, the largest part of respondents checks the list of the ingredients used in a product. This is undoubtedly one of the most important information that consumers can find on the package. Further information checked by consumers relates to the date of minimum durability of a product (73.72%), and the country of origin of the product (57.10%). It appears that relatively few consumers are seek information related to the characteristics of organic products. Of the respondents, less than 16% of search for information on the certificate number, and 19.30% check data showing the organic nature of the product.

4. CONCLUSIONS

Consumer interest in organic food increases constantly worldwide. The market is demanding greener products and the demand for organic food is continuously growing. Manufacturers need to fully realize the growing pull for products with enhanced environmental and social benefits. In developed economies the trend for ecology and living in harmony with nature is getting more and more popular each year that almost everything that has in its name the word "organic" or its derivatives, enjoys greater interest of consumers.

The study reveals some facts regarding behaviour of organic food consumers. Probably the most important fact is that the vast majority (62.73%) of respondents declare their willingness to more frequent consumption of organic food. This demonstrates that in the future can be expected an increase in demand for this type of foods. To achieve this it seems necessary to bring the level of knowledge of consumers to a higher level. Therefore, it seems necessary to take appropriate actions, which will lead to the better education of customers. This can be done by effective delivery to consumers the information they need and understand. In this field the Internet seems to be the most useful medium, especially when the group of young consumers is taken into consideration. The research reveals that among the respondents purchasing organic food, 83.08%, declared that they buy it on the Internet.

Special attention should be also paid when it comes to packaging of organic food. Probably the labels and used symbols should be more exposed and visible. Taking this kind of actions gives a chance for the increase of demand for organic food in the close future.

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