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INFORMATION AS A FACTOR IN CONSUMER DEMAND FOR ORGANIC FOOD

This article identifies and assesses the importance of informational factors in shaping consumer demand for organic food in Poland, using demographic segmentation criteria, including gender, age, education, place of residence, and wealth. The empirical data came from a survey conducted among 850 randomly selected organic food consumers in Poland in December 2020, using the CAWI (Computer Assisted Web Interview) method, accessed via an internet panel. The collected and structured empirical data are presented in descriptive, tabular, and graphical form, using comparative analyses. The results of the research have allowed for the construction of three original models of organic food consumers, with regard to information credibility and reliability. Additionally, the results confirmed the research hypothesis, which assumes that consumers who recognize the credibility and reliability of information concerning organic food products purchase them more often and spend more on them. Thus, in the case of organic food, the impact of credible and reliable information on the process of shaping consumer demand is clear: it constitutes a significant factor that triggers demand.

Keywords: information, organic food, consumer demand.

1. INTRODUCTION

Dynamic development of information and communication technologies as well as increasing competitiveness and uncertainty governing the process of shaping the conditions in which economic entities function on the market raise awareness concerning the importance of market information. By using the information in the decision-making process entrepreneurs are likely to achieve specific economic results, which include: sales growth, cost reduction, profit increase, penetration of existing markets and acquiring new customers and markets. Usually, however, the problem is the lack of systematic feedback from the market, which makes it impossible to unequivocally assess the situation of the company. Information that allows to deepen the knowledge about consumers, to learn about their purchasing habits, tastes, preferences and beliefs is considered important, but not easily

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accessible. The data is very useful not only in terms of enabling the entrepreneurs and companies to adapt their offer to the needs of potential buyers, but also to find effective ways of communicating with their customers and shape their purchasing behaviour. It should be added that nowadays information sources are multiplying, with their number growing rapidly, but it is also often the case that the same information is repeated in various sources and it happens to be manipulated. Therefore, it becomes more and more necessary to determine whether it is original data, or rather its interpretation. Moreover, there is a problem of the excess of information that reaches entrepreneurs and companies, along with its timeline, as information must be updated on an ongoing basis to be valuable and useful. Moreover, for entrepreneurs and their companies, the issue of the importance of market information in shaping the demand of customers (consumers) for the products and services they offer is very important. Nevertheless, in the area of information on the organic food market, there is still much to be done and entrepreneurs should make efforts in this direction. In solving this problem, proper communication is of particular importance, enabling the creation of long-term relationships with customers, based on trust and loyalty (Martyniak, 2000; Kłosiewicz-Górecka, 2015; Becla, 2018; Kułyk, Michałowska; 2018; Deszczyński, 2020).

The organic food market is perceived as the place confronting the offers to buy and sell the goods. The organic food market is the most dynamic food production sector in the world. Since the beginning of the 1990s, it has been increasing by about 20% per year. Its development is accompanied by positive changes in social welfare and the increase in consumer awareness concerning healthy lifestyle, food quality, food safety and its impact on health. Purchasers are looking for nutritional value in the food they buy, paying more and more attention to factors such as freshness, taste, ecology and the origin of the product. Organic food is produced on farms and processing plants that are certified for compliance with the principles of organic farming and organic processing, which results in higher content of substances desirable and safe for human health in the produce. When compared to conventional food, organic products contain more nutrients, vitamins and minerals, and less pollutants and water. Farmers and producers, seeing the wide demand for organic food, try to match their product range to the demand. Customers can find a lot of products labelled as “natural”, “healthy”, “straight from the peasant”, “without preservatives”, “from the cleanest areas of Poland” and “ecological”. Sometimes these catchy phrases do not have a direct bearing on the product itself, as they are often abused by producers who want to increase their sales by using various marketing gimmicks. Polish organic food market, despite still being too poor and having a small product line, is still developing. Organic products are becoming more and more popular among consumers. The growth, resulting from the inclusion of organic products in the portfolio, is an opportunity for processors, wholesalers and retailers. The prospects for the development of this market are increasing, and the entities participating can meet consumer’s expectations and satisfy their own needs, that is, generate more and more profits. In order to minimize the risk of marketing activities and at the same time to increase profits, it is necessary to carefully monitor consumers’ behaviour and preferences (Łuczka-Bakuła, 2007; Ruiz de Maya, López-López , Munuera, 2011; Szymańska, 2011; Kuboń, Kwaśniewski, Malaga-Toboła, Tabor, 2014; Mulder, Liu, 2017; Ham, 2019).

Local organic food, i.e. food produced in the vicinity of the consumer's place of residence, is gaining more and more popularity. The term “local” refers to the smallest unit

to describe the origin of a food and is usually associated with a direct relationship between the consumer and the producer, or at least with the fact that the consumer is familiar with the place where the food is produced. The term is often defined in terms of the distance between the production site and the point of sale, which can vary considerably depending on the context of the local area. It is assumed that it is the area of one province or the neighbouring districts belonging to other provinces. However, it should be emphasized that the definition of local food networks and short supply chains focuses not only on the distance between the place of production and the point of sale of the product, but also on the number of links in the supply chain, with the aim of reducing them to an absolute minimum. The shorter the supply chain, the easier it is to preserve and convey the authenticity and originality of food, its cultural identity, traditional production methods and the origin of ingredients (Peters, 2012; Rogala, 2014; Milestad, Kummer, Hirner, 2017; Bosona, Gebresenbet, 2018; Massey, O'Cass, Otahalet, 2018).

The most frequently mentioned factors determining the choice of local organic food are its freshness, taste, lack of preservatives and high quality. Running a business related to the production and sale of local organic food (so-called direct sales) brings many various benefits, ranging from additional income, contact with people, acquisition of new skills, strengthening family ties, improving farm's aesthetics, independence, self-reliance, as well as proximity to the place of work, through satisfaction with providing consumers with high-quality food products. In addition, the production and sale of local organic food can contribute to rural development as direct farm products are highly desirable. The production of local products, especially ecological ones, attracts tourists and creates new jobs. This type of activity also has positive impact on regional promotion. What is more, strong relationships between organic food producers and consumers, possible only at the local level, are a factor that not only boosts the development of the organic food market, but can also contribute to improving the condition of the natural environment and stimulating local development (Torjusen, Lieblein, Wandel, Francis, 2001; Zając, 2014; Gradziuk, 2015; Milestad, Kummer, Hirner, 2017; Petrescu, Oncioiu, Petrescu, 2017; Bosona, Gebresenbet, 2018; Massey, O'Cass, Otahalet, 2018; Ditlevsen, Denver, Christensen, Lassenet, 2020; Tandon, Dhir, Kaur, Kushwah, Salo, 2020).

In all these activities, an important role is played by the information on the perception of ecological products by potential customers. Its presence enables the correct interpretation of the signals flowing from the environment, and thus enables an appropriate reaction adapted to the market conditions. Information is an essential means of reducing uncertainty in decision making. It is a kind of management catalyst, a factor that unites management functions and determines its effectiveness. It is a strategic resource of the company, which may largely affect the achievement of a competitive advantage by the entity. This is the company's most valuable resource, which should be optimally managed and carefully protected against competition (Sołtysiak, 2011; Sołtysiak, 2013; Kornai, 1977; Koźmiński, Piotrkowski 1998; Oleński, 1997).

The need to gain a competitive advantage forces the economic entities to create an efficient information acquisition system. Such a system meets the demand for information reported by individual departments of the entity. The amount of information available about consumers' interest in purchasing organic food and how the demand for these products is influenced by information factors directly influences the functioning of entities in this sector, and the manner and type of their chosen strategy of operation. Therefore, it is

impossible to allow a situation in which the phenomena of "information overload" or "information anemia" may occur. Because too much information can be just as damaging as not having enough information. In carrying out all these activities, it is important to remember that information has value only when the right person receives it at the right time (Sołtysiak, 2011; Sołtysiak, 2013; Martinet, Marti, 1999).

It should also be noted that organic food consumers claim that the information on product packaging cannot be contradictory and complicated, but simplified and easy to understand. Such information makes it easier to choose healthy products and encourage people to reach for this type of food (Niewczas, 2014; Zhu, Lopez, Liu, 2015).

Taking the above into account, it should be stated that due to its specificity, ecological production, requires specific scientific support in regard of practical activities. Hence the need to conduct a variety of research and experiments assisting the development of the sector. It should be noted that customer needs and behaviour are very diverse and depend on many factors. Owing to the fact that it is impossible to adjust actions to all expectations, market segmentation is carried out. Its results depend on the criteria that are selected to divide consumers into particular groups. The next stage is the analysis. There are many classifications of buyers in the food market. Because of its relevance, range and diversity one of the most common is the demographic segment. However, in order for the analysis to comprise a wide group of respondents, the following variables are taken into account, i.e. gender, age, place of residence, financial situation and education. Ecological farming is gradually developing every year. Research aimed at analysing the market in terms of customer needs and improving the existing and new distribution channels is also carried out more frequently. The conducted analyses and their conclusions are a valuable source of information for agricultural producers. They provide information on the direction in which organic food producers should advance and what to pay attention to when implementing the product in order to be successful and strengthen their market position, including establishing stronger relationships with consumers (Kuboń, Kwaśniewski, Malaga-Toboła, Tabor, 2014; Olech, Kuboń, 2015).

The conducted studies of the literature on the subject indicate the need for research on the importance of information in shaping consumer demand for organic food, which can and should provide knowledge in this field, useful primarily to producers of such food, but also to intermediaries in its turnover between producers and consumers. It should be added that such a need is fulfilled by the research presented in this article and their results.

2. PURPOSE, EMPIRICAL MATERIAL AND RESEARCH METHODS

The aim of the article is to identify and assess the importance of informational factors in shaping consumer demand for organic food in Poland in terms of demographic segmentation including gender, age, education, place of residence and wealth.

The research results are intended to answer the following questions:

1. Is there enough information on organic food on the Polish market?
2. When buying organic food, do consumers pay attention to the information on the packaging?
3. What is important for consumers when choosing organic food?
4. How is the credibility and reliability of information concerning organic food perceived by consumers?

The paper presents a research hypothesis which assumes that consumers who recognize the credibility and reliability of information concerning organic food, decide to buy it more often and to spend more on it. The empirical material of the article is the result of a survey conducted among 850 randomly selected organic food consumers in Poland in December 2020, using the CAWI (Computer Assisted Web Interview) method, via an internet panel. The structure of respondents depending on their characteristics, such as: gender, age, education, place of residence and wealth, is presented in Chart 1. The majority of respondents are women, young people, with secondary and higher education, as well as inhabitants of larger cities and moderately wealthy people.

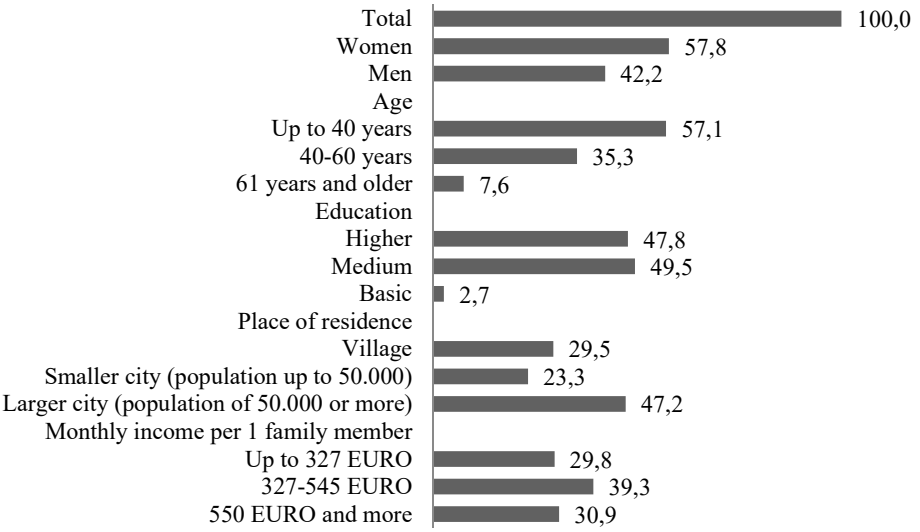


Chart 1. The structure of respondents depending on their characteristics, such as: gender, age, education, place of residence and wealth (in%)

Source: Own elaboration based on the conducted questionnaire.

The collected and structured empirical material has been presented in a descriptive, tabular and graphical form, using the method of comparative analysis. In addition, the study constructed original models of organic food consumers with regard to such aspects as: credibility and reliability of information (Model I – organic food consumers recognizing the credibility and reliability of information about it; Model II – organic food consumers partially recognizing its credibility and reliability. information about it; Model III – consumers of organic food who do not recognize the credibility and reliability of information on it), indicating the characteristics of consumers belonging to separate models, as well as the frequency of their purchase of the products and monthly amounts of money spent on the purchase and the place of making it. It should be emphasized that this is a new approach to the research problem discussed in the article.

3. THE RESULTS

Research has shown that there is a shortage of information on organic food on the Polish market, as less than half of the surveyed consumers claim that the data is sufficient for them. Women put greater importance on this type of information, i.e. it is more important for them than for men, because they are more critical (stricter) in their assessment. The situation is similar in the case of the oldest consumers of organic food and people with secondary education, as well as those living in cities, especially the larger and less affluent ones (Chart 2). Other authors and the results of their research also point to the problem with information on the organic food market (Pilarski, 2007; Kułyk, Michałowska, 2018).

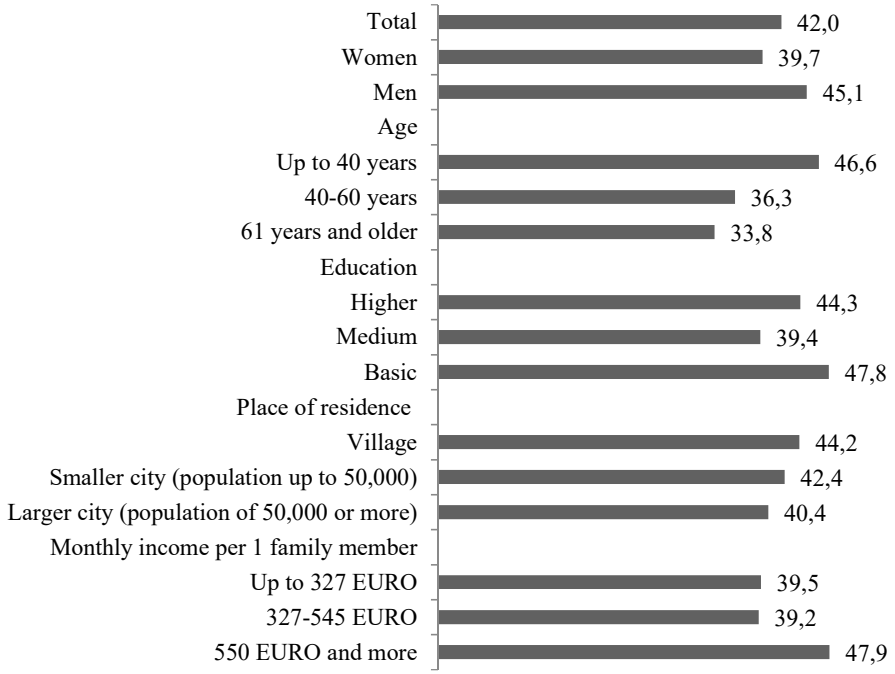


Chart 2. Percentage of organic food consumers claiming that there is enough information on organic food on the market

Source: Own elaboration based on the conducted questionnaire.

The vast majority of the surveyed consumers of organic food pay attention to the information on the packaging when buying it. This is especially true for women and younger and better educated consumers, as well as the people living in cities and the middle class (Chart 3). The information on the packaging of organic food is therefore an important factor deciding about its purchase, which is also emphasized by the results of research by other authors (Niewczas, 2014; Zhu, Lopez, Liu, 2015).

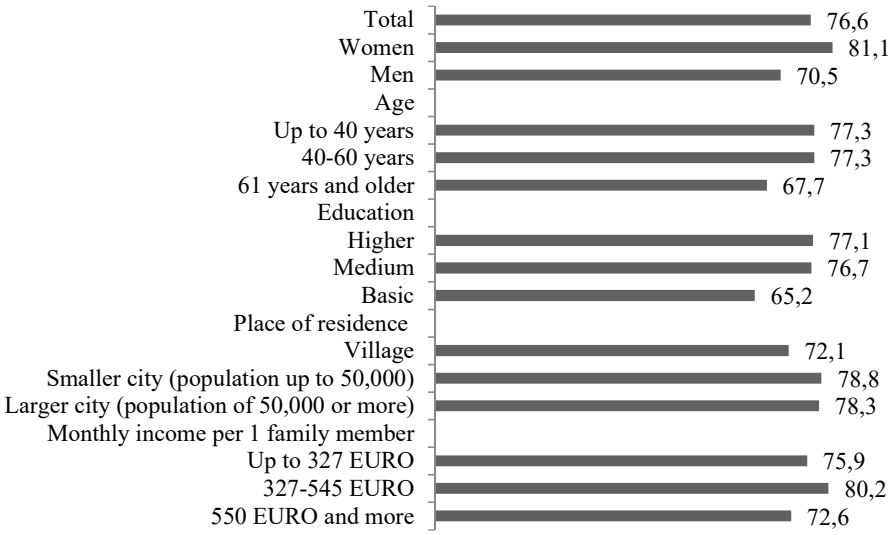


Chart 3. The percentage of organic food consumers paying attention to information on the packaging

Source: Own elaboration based on the conducted questionnaire.

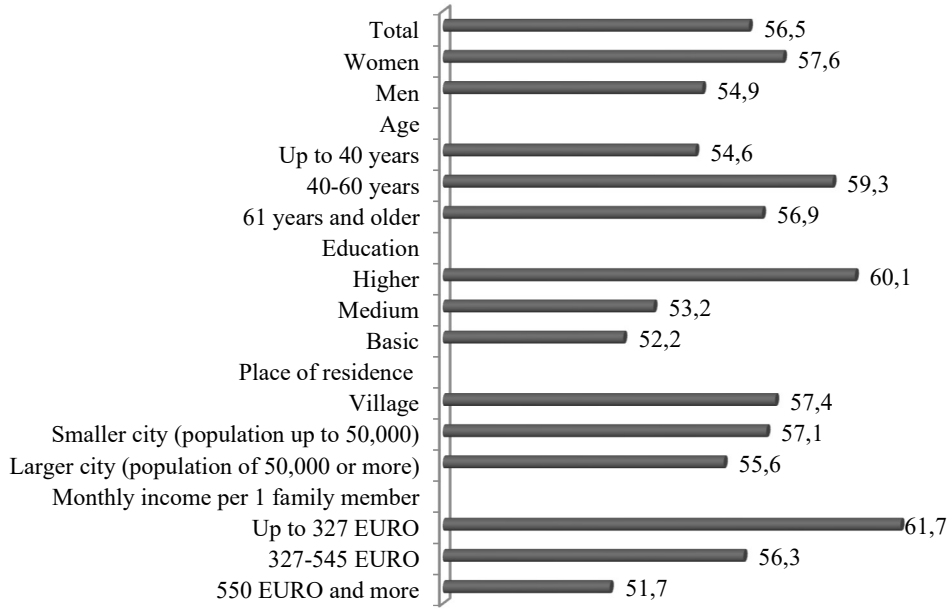


Chart 4. Percentage of organic food consumers paying attention to the locality of the product

Source: Own elaboration based on the conducted questionnaire research.

The research has shown that more than half of the consumers of organic food pay attention to the information concerning whether the product is local when buying it. This applies in particular to women, middle-aged people and people with higher education, as well as those living in rural areas and smaller towns, and the least affluent (Chart 4). The research results of other authors also show the growing interest of organic food consumers in the local product (Rogala, 2014; Gradziuk, 2015; Milestad, Kummer, Hirner, 2017; Bosona, Gebresenbet, 2018).

Almost half of the consumers of organic food pay attention to whether the product is domestic, produced in their country, when buying it. This is especially true in the case of men, the oldest and better educated people, and those living in larger and more affluent cities (Chart 5). The results of studies carried out by other authors also indicate that for the consumers of organic food it is important that it is domestic food (Kułyk, Michałowska, 2018).

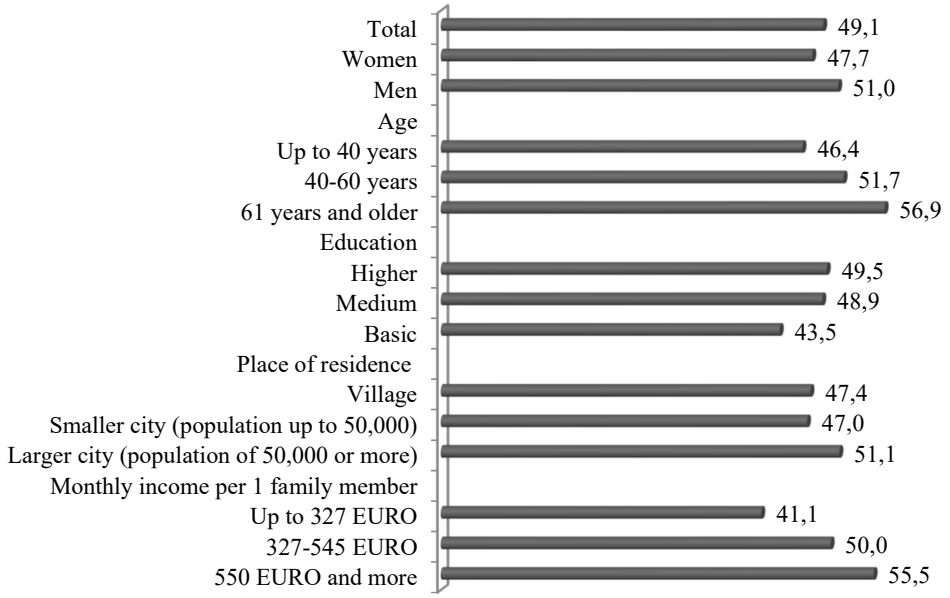


Chart 5. Percentage of organic food consumers paying attention to whether the product is domestic

Source: Own elaboration based on the conducted questionnaire.

The conducted research has shown that less than half of organic food consumers pay attention to information concerning the place of origin of raw materials when buying it. This applies more often to women, the youngest respondents with secondary education, as well as those living in the countryside and the moderately wealthy (Chart 6).

Research has shown that only one in four consumers of organic food pays attention to information about the producer's brand when buying it. This applies more often to men, as well as the oldest and youngest respondents, as well as people with primary education and living in cities, especially the smaller and the most affluent (Chart 7).

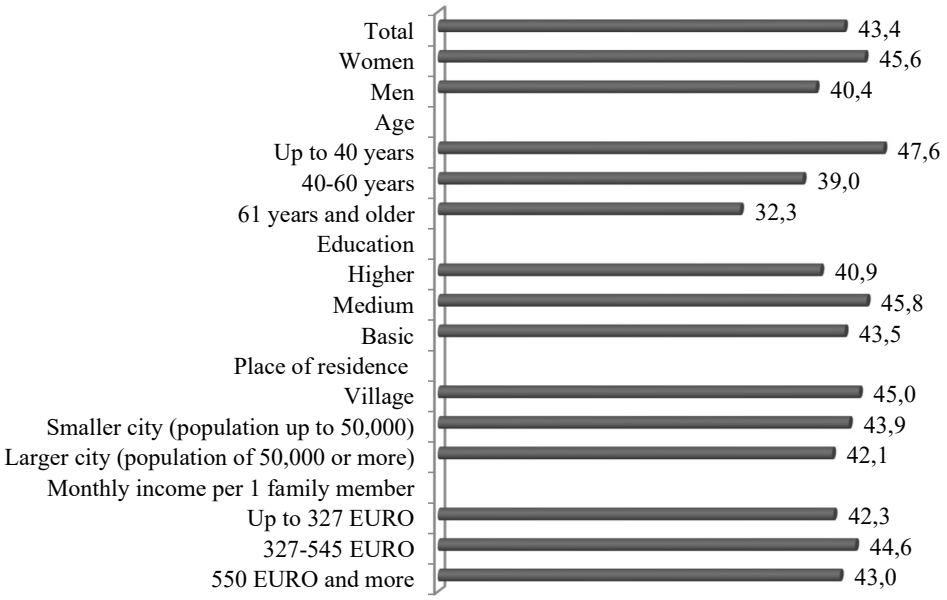


Chart 6. The percentage of organic food consumers paying attention to information about the origin of raw materials in the product

Source: Own elaboration based on the conducted questionnaire.

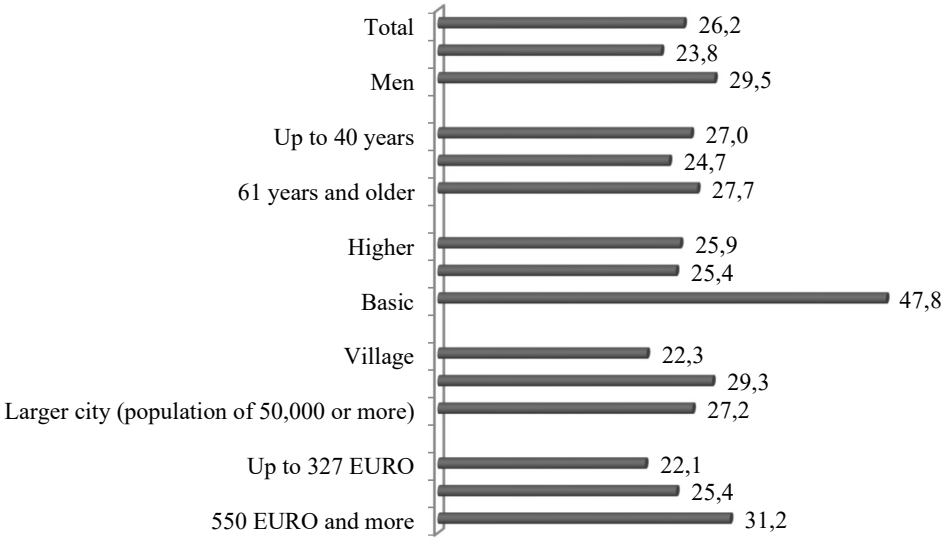


Chart 7. The percentage of organic food consumers paying attention to information about the producer's brand

Source: Own elaboration based on the conducted questionnaire research.

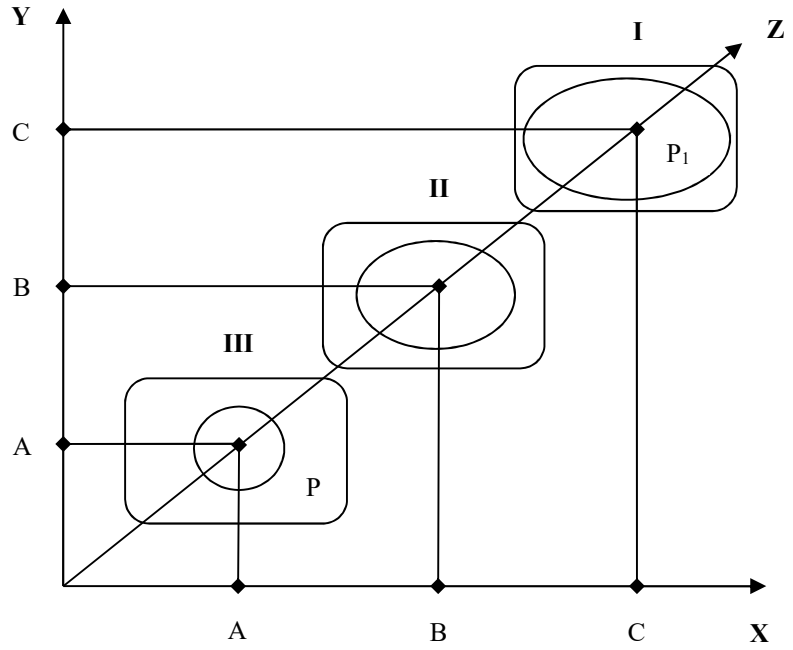
Table 1. The percentage and the behaviour of organic food consumers recognizing the credibility and reliability of information about the products and the others (i.e. partially recognizing and not recognizing) – original consumer models

Description	Total consumers [N = 850]	Consumer models *		
		Model I [N = 101]	Model II [N = 663]	Model III [N = 86]
Percentage of consumers [N = 850]	100.0	11.9	78.0	10.1
Consumer behaviour				
Women	57.8	65.3	59.4	36.0
Men	42.2	34.7	40.6	64.0
Age of consumers				
Up to 40 years	57.1	34.7	58.2	74.4
40-60 years	35.3	46.5	35.3	22.1
61 years and older	7.6	18.8	6.5	3.5
Consumer education				
Higher	47.8	31.7	48.1	64.0
Medium	49.5	60.4	49.8	34.9
Basic	2.7	7.9	2.1	1.2
Place of residence				
Village	29.5	43.6	29.4	14.0
Smaller city (population up to 50,000)	23.3	32.7	22.5	18.6
Larger city (population of 50,000 or more)	47.2	23.8	48.1	67.4
Consumer affluence (monthly income per 1 family member)				
Up to 327 EURO	29.8	49.5	28.2	18.6
327-545 EURO	39.3	34.7	41.5	27.9
550 EURO and more	30.9	15.8	30.3	53.5
Consumers buying organic food often, i.e. at least a few times a week and more often (%)				
X	37.8	76.2	34.2	19.8
Consumers who monthly spend more on organic food, i.e. at least EUR 50 and more (%)				
X	40.6	67.3	38.6	24.4
Consumers buying organic food on the local market (%), including:				
X	58.1	78.2	60.2	18.6
consumers buying food from an organic farm (direct sales) (%)				
X	16.4	39.6	14.2	5.8

Explanations to the table: * Model I – organic food consumers recognizing the credibility and reliability of information on it; Model II – organic food consumers partially recognizing the credibility and reliability of information on it; Model III – consumers of organic food do not recognize the credibility and reliability of information on it.

Source: Own elaboration based on the conducted questionnaire research.

The results of the conducted research allowed for the construction of three original models of organic food consumers with regard to credibility and reliability of information concerning the products (Table 1, Drawing 1).



Explanations to the drawing: Axis X – shows the frequency of purchasing organic food by consumers; Y axis – shows the amounts of money spent monthly by consumers on buying organic food; Z axis – presents models of organic food consumers; P – means the place where consumers purchase organic food, and P_1 – means that this place is the local market, including organic farms (direct sales).

Drawing 1. Credibility and reliability of information on organic food, and the frequency of its purchase and amounts of money spent monthly on the purchase and place of purchase – original consumer models

Source: Own elaboration based on the conducted questionnaire.

Model I – consumers of organic food, recognizing the credibility and reliability of information about the products. This group of consumers includes people who buy organic food more often and spend more on it, and who buy more organic food locally, including direct sales from the farms. Moreover, this group of consumers more often includes women, the elderly, the less educated, living in the countryside or in smaller towns, and the least affluent.

Model II (indirect) – organic food consumers partially recognizing the credibility and reliability of information about the products. It is the largest group of consumers in terms of the number of consumers, and also the most similar in terms of the analyzed characteristics to the total number of respondents. Therefore, this group of consumers is dominated by women, young people, people with secondary and higher education, as well

as residents of larger cities and moderately wealthy people. In addition, the most similar, compared to all respondents, is the percentage of consumers who often buy organic food, i.e. at least a few times a week and more often, and those who spend larger amounts per month on buying this food, i.e. at least EUR 50 and more, as well as consumers buying organic food on the local market, including on an organic farm (direct sale).

Model III – consumers of organic food who do not recognize the credibility and reliability of information about the products. This group of consumers includes people who purchase organic food least often and spend the smallest amounts of money on it, and who least often buy organic food locally, also directly from the farms (direct sales). Moreover, this group of consumers more often includes men, the youngest, with higher education, living in larger cities and the most affluent (Table 1, Drawing 1).

The results of the conducted research and the original models of organic food consumers constructed on their basis allow to verify and confirm the research hypothesis posed in the work, which assumes that consumers who recognize the credibility and reliability of information on organic food, buy it more often and spend more on its purchase (Table 1, Drawing 1).

4. CONCLUSIONS

The analysis of the research results and information presented in the graphs claims that according to the consumers of organic food, the Polish market has a shortage of information concerning the products, which may constitute a significant barrier to creating demand for this type of food. Most consumers of organic food pay attention to the information on the packaging when buying it, which means that it is an important factor influencing the demand. The most important information for them is that it is a local product and that it is national food. On the other hand, in-formation about the place of origin of organic food raw materials is less important in this respect, and information about the producer's brand is of the least significance. It should be added that the percentage of respondents' indications in this respect is slightly differentiated depending on such characteristics as: gender, age, education, place of residence and wealth.

The results of the research allowed for the construction of three original models of organic food consumers with regard to such aspects as: credibility and reliability of information about the products. They also confirmed the research hypothesis, stating that consumers who recognize the credibility and reliability of information on organic food, buy it more often and spend more on it.

Thus, the impact of credible and reliable information on shaping consumer demand for organic food is clearly visible. Therefore, the importance of information in this respect is considerable, as it constitutes an essential factor that triggers the demand.

It should be added that the presented results of research on the importance of information in shaping consumer demand for organic food provide significant and up-to-date knowledge in this field, which may be useful primarily for producers of such food, but also for intermediaries in its turnover between producers and consumers. At the same time, it justifies the need to continue research in this area.

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