



## **BEHAVIOURAL CONSUMER PREFERENCES IN ORGANIC PRODUCTS DISTRIBUTION IN MAŁOPOLSKA REGION**

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### **Abstract**

The objective of the paper was to learn about behavioural consumer preferences with regard to organic products distribution on the area of Małopolskie Voivodeship. The research studies covered purposefully selected a 100-person group of respondents. On account of the growing awareness of consumers concerning healthy food, they will even more often reach for organic products. Thus, the process of their distribution should be properly prepared so that the demand for this kind of food is the highest. The investigated respondents use a previously prepared shopping list and carefully read available products while shopping. Majority of them look for loose products. A proper quality of products and form of sale may increase the consumers' interest and consequently their distribution.

**Key words:** product, preferences, ecology, distribution, consumer

### **INTRODUCTION**

Food is a basic good which satisfies physiological needs of a man and food consumption has a specific nature. Functioning of a man in the socio-cultural environment enriches food needs with additional elements related to imitation, need to be prestige and other requirements. Thus, food satisfies not only a physiological need of eating but also numerous other demands like the need of safety, belonging and respect (Grzelak, Gałązka 2009). A consumer must be satisfied with food which he and his environment eats (inter alia on account of taste val-

ues). Therefore, the need to control the distribution process in order to adjust it to the consumer's needs (Jeleń, Sawicki, 2015) is rising. With regard to food consumption the increase in the interest in principles of rational feeding has been reported (Gutkowska, Ozimek 2005). The needs increase by, inter alia, a rising awareness among consumers concerning health threats which result from both food production based on GMO methods and intensive production methods. Therefore, a producer must care for appropriate organization of the distribution process (Ministerstwo Rolnictwa i Rozwoju Wsi, 2014). From the point of view of the safety of choice and purchase everything is based on credibility. Producers of such food have to care about it from the beginning. The client's trust may be earned by ability and motivation to meet their expectations (Thorsøe, 2015). Decisions related to distribution concern selection of a proper channel, intensity of this process, namely marketing logistics to location as well as shop decoration (Pilarczyk, Nestorowicz 2010). In Poland both supply and demand for organic food products will grow in relation to general dynamics of economic growth, increase of incomes, increasing dietary awareness of the society etc. However, in order to do so, one should neutralize factors which slow the growth of organic products market (Kuboń *et al.*, 2014). They include weakness of market organization and coordination of distribution of both food and processed food, too small role of horizontal integration among farms which sell to the market and a vertical one with food processing and trade (Pawlewicz, Gotkiewicz 2012). A developing market as well as growing needs and consumers' requirements give rise to the need of market research in order to facilitate the distribution process of food (Niewęglowski *et al.*, 2014). When making a decision on logistics of distribution one should carry out relevant analyses so that the choice is the best from the point of view of a producer. Therefore, any type of analyses of consumers and the market should be made to facilitate making a proper choice. In such case it is favourable to select a proper research group (Olech, Kuboń 2015). The use of the segmentation process gives an opportunity of obtaining advantages as a real source of information from the consumer. Application of the segmentation strategy emphasises the meaning of categorization and shaping consumers' behaviour based on their own suggestions referring to consumption and purchase (Mohcen, Dacko 2013). Thus, learning about the behavioural consumer preferences in the organization of the organic products distribution in Małopolskie Voivodeship was the objective of the paper.

## **METHODOLOGY AND SCOPE OF RESEARCH**

Opinions of clients from the behavioural segment were accepted for analysis. Knowing the opinion of this group is significant because they are loyal towards the product and brand, they are sensitive to marketing and have expecta-

tions towards the purchased product. Thus, a questionnaire was prepared for the group which has features of a behavioural segment and comes from the investigated region. A behavioural consumer is related to some material and non-material behaviour. Such person is detailed in the decision process. They consider their own ideas or current experience when taking a decision (Chaisuriyathavikun, 2016). The questionnaire was carried out in 2014 in three cities of Małopolska region: Kraków, Tarnów and Nowy Sącz. The research population covered a mixed sample of 100 persons. The scope of the research covered collection of information related to the amount of money spent on organic food purchase, frequency of eating, properties which influence the selection of the given product as well as how should packages for organic food look like and what should be the form of sold products. Knowing this information enables adjusting production and the product to specific requirements of the consumer and thus improvement of sale and increase of profit. In majority of questions, the respondents could choose more than one answer. Therefore, in the analysis presented on plots, the sum is usually more than 100%.

For detailed analysis of shopping preferences of clients, statistic analyses with the use of decision trees were carried out (Implementation of Statistica 12).

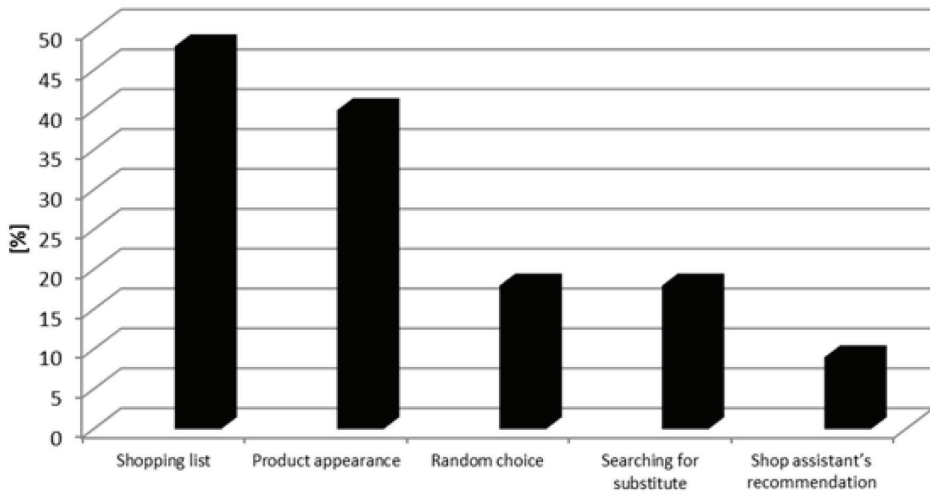
## **CHARACTERISTICS OF THE INVESTIGATED POPULATION**

Achieving the assumed objective required a wide scope of answers to the questions. All respondents knew the concept of organic food. Majority wants these products to be more available on the market. The analyses of materials proved that 54% of respondents were women and the remaining part consisted of men. The smallest age group was within 26-35 years old and constituted 33% of the entire test group. The smallest group consisted of persons above 45 years of age – 11%. With regard to the financial situation of the households the questioned respondents were divided into two groups. The first group which constitutes 58% of respondents declares that their situation is average, namely their monthly income per a household does not exceed PLN 3,000. On the other hand 42% declares that their situation is good – income above PLN 3,000. With regard to education the biggest group of respondents included people with secondary school education – 52%. Above 70% of respondents are people who are employed and have children.

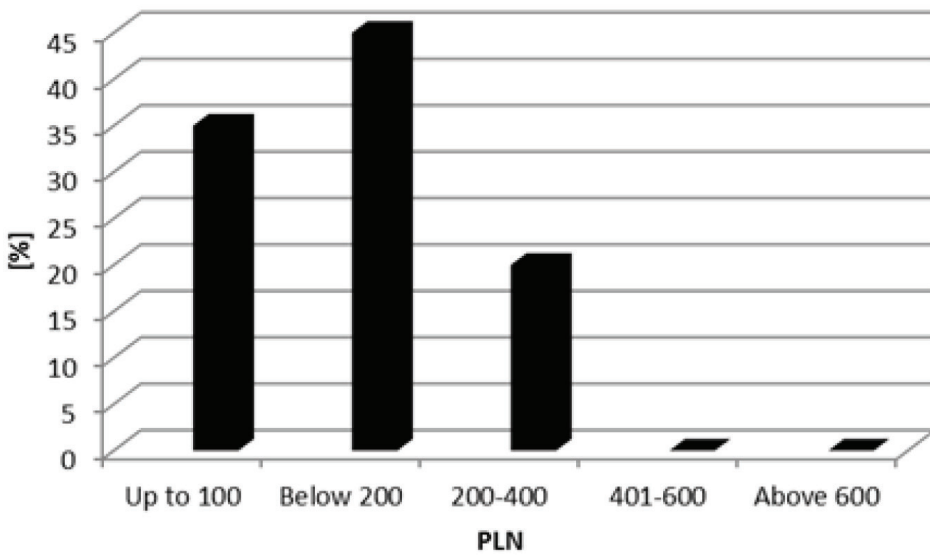
## **RESEARCH RESULTS**

Designing a proper distribution process requires proper analysis and review of the surrounding, where it should occur. Respondents were asked what

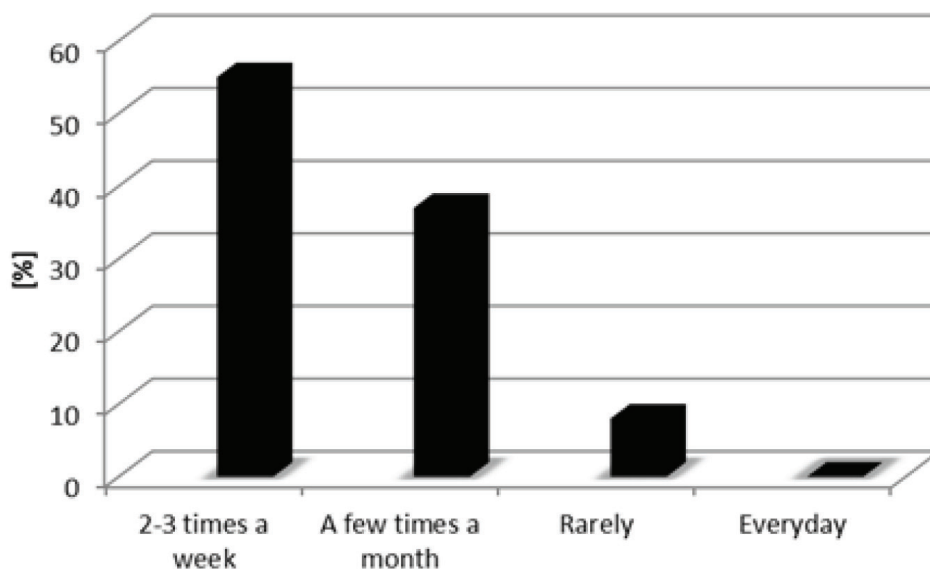
drives them during shopping and what motivates them. Figure no. 1 presents factors, which influence the fact that consumers buy organic products



**Figure 1.** Factors that influence purchase of organic products



**Figure 2.** Expenses incurred for purchase of organic food in PLN



**Figure 3.** Frequency of consuming organic food

It should be stated that consumers do shopping wisely. Almost 50% of respondents answered that they do shopping based on the previously prepared list of products and after a careful examination of the product on account of the quality in the store. Advice and assistance of shop assistants was the least important. Only 10% of respondents use such help, which proves low trust to products suggested by someone else. The respondents also noticed that the product they search for is unavailable, they do not look eagerly for a substitute although the choice of organic product by chance is also possible for them.

Over 60% of the respondents said that they expect a loose product. Thus they have a chance to select a product and its amount. Respondents even more often (also because of the environmental protection) choose products with multiple packaging – ca. 30% of respondents. The respondents also value packed products, in particular with the weight of to 1 kilo – 45% of respondents. Such form is suggested in particular with reference to fruit. Respondents purchase goods in big packaging less frequently – 20%. To conclude, a client prefers to do shopping more often and in smaller amount in order to have fresh product. Also, long shelf life products, hermetically packed are popular – over 30% of respondents expressed their interest. Type of a package in which products are packed is strictly correlated with their form. Over 60% of respondents buy non-processed food. The research show that processed food or partially processed food is



ping. Almost 50% of respondents declared that the distance from the shop with organic food is more than 10 km from the place they live. Only almost 20% of the surveyed people have a permanent access to organic food because a shop is located 1 km from their home.

Figure no 4 presents the results of classification analysis of the respondents' education developed with the use of decision trees. This analysis was to indicate factors shopping preferences which differentiate the investigated persons on account of education.

Analyses proved that the respondents' sentiment to 1 kilo packaging is a feature which differentiates the respondents' education (along with an accompanying feature). People with a degree level education eagerly choose small packaging (1 kilo) and detest big ones (10, 20 kilo). If they choose bigger packaging it happens mainly because the distance to shops is considerable (3-5 km). People with secondary school education are young people (18-25) who buy 1 kilo products (as people with a degree level education) or people who choose slightly bigger packaging but do not show their liking to multipacks. People with vocational education eagerly choose multi packaging. Respondents with vocational education often selected 1 kilo packaging but they admitted that such shopping was accidental or they said that they prefer products in big packaging (10-20 kilo).

## **CONCLUSION**

Progress of economy is strictly related to consumerism and distribution is one of the stages of its progress. Work on distribution is necessary because it is related to other fields. A consumer is an important factor if not the most important. He and his choices and thus his expenses result in a higher demand for products. Therefore to improve distribution – to increase demand, clients' preferences and in particular preferences of the selected groups, who are the best and the most credible reflection of the community, should be included. Adjustment of products and distribution to the consumer's needs causes the increase of demand and thus the profit for the producer and all medium stages of sale. Also foreign research carried out by TP Organics confirm it (Virtoris *et al.*, 2016). In order to know the development direction of the distribution process, research should be carried out among consumers regarding their preferences in this field. Carrying out the above, required a survey among the population of Małopolska region who are behavioural clients. By carrying out this analysis one should state that persons who take part in the research knew the concept of organic food and buy this kind of food. Analysis of materials proved that the respondents use the previously prepared shopping list and carefully examine the available products. It proves that they do the shopping after a second thought and are sensible when

making a decision. The shop assistance's help is rarely used which may prove lack of trust and the fact that consumers count on their own experience and intuition. The research show that currently the highest percentage of consumers spends no more than PLN 200 per a month on the purchase of organic food. It may be caused by a limited budget and low availability of products. It should be noticed that in the places of living there are considerable distances to the shops with organic food. Therefore, organic products are rarely consumed. Producers, in order to increase the demand for its products should adjust their price and the form of packaging to expectations and financial possibilities of consumers. Due to the fact that respondents usually eat organic products several times a week their number in packaging should be balanced and at the same time easy for short-term storage. An appropriate quality of products and the form of sale may increase the interest among consumers and thus increase sale. Similar results were obtained during the research carried out among consumers living in China. They strive for maintaining a proper quality of products since safety of their food is crucial for them. Packaging and information included therein are very significant because they can know composition and any and all information indicate whether they will purchase a given product (Cheng, 2016).

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### **REFERENCES**

- Chaisuriyathavikun N., Punnakitikashem P. (2016). A study of factors influencing customers' purchasing behaviours of gold ornaments, *Journal of Business and Retail Management Research* Vol. 10 Issue 3
- Cheng Y. G., Fok W., Fok L. Y. (2016). A study of the factors affecting trust towards organic food in China, *Allied Academies International Conference: Proceedings of the Academy for Studies in International Business*, Vol. 16(1):1-4.
- Grzelak A., Gałązka M. (2009) *Związki potrzeb, popytu i konsumpcji żywności – ujęcie teoretyczne*, SERiA s. 42-46
- Gutkowska K., Ozimek I. (2005) *Wybrane aspekty zachowań konsumentów na rynku żywności– kryteria zróżnicowania*, (s.24) Warszawa, Wydawnictwo SGGW
- Jeleń I., Sawicki P. (2015) *Kształtowanie sieci dystrybucji w warunkach zróżnicowanych form sprzedaży towarów*, *Logistyka – nauka*, Nr 2/2015: 301-309



Kuboń M., Kwaśniewski D., Malaga-Toboła U., Tabor S. (2014) Model solutions of distribution logistics with regard to organic products, *Agricultural Engineering*, 2(150): 77-90.

Mohsen M., Dacko D. (2013). An extension of the benefit segmentation base for the consumption of organic food: A time perspective, *Journal of Marketing Management*, Vol. 29(15–16): 1701–1728,

Niewęglowski M., Jabłonka R. (2014). Kanały dystrybucji surowców i produktów żywnościowych gospodarstw ekologicznych w regionie siedleckim, *SERiA, Roczniki Naukowe*, Tom XVI(2):195-199

Olech E., Kuboń M. (2015). Motywy wyboru produktów ekologicznych przez konsumentów segmentu demograficznego z terenu Małopolski, *SERiA, Roczniki Naukowe*, Tom XVII(1):164-169

Pawlewicz A., Gotkiewicz W. (2012). Kanały dystrybucji surowców żywnościowych z gospodarstw ekologicznych w województwie Warmińsko-Mazurskim, *Logistyka* 4/2012:1168

Pilarczyk B., Nestorowicz R. (2010). *Marketing ekologicznych produktów żywnościowych*, Oficyna, Warszawa, s.171

Thorsøe M. (2015). Maintaining Trust and Credibility in a Continuously Evolving Organic Food System, *Journal of Agricultural and Environmental Ethics* 28:767–787

Vietoris V., Kozelová D., Mellen M., Chreneková M., Potclan J. E., Fikselová M., Kopkáš P., Horská E. (2016). Analysis of Consumer Preferences at Organic Food Purchase in Romania, *Polish Journal of Food And Nutrition Sciences*, Vol. 66(2):139–146

Ministerstwo Rolnictwa i Rozwoju Wsi, (2014). *Ramowy Plan Działań dla Żywności i Rolnictwa Ekologicznego w Polsce na lata 2014 – 2020* Warszawa

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