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THE CHOSEN ASPECTS OF HAUSHOLD EXPENDITURES ON ORGANIC FOOD IN WIELKOPOLSKA

Abstract: The purpose of this article is to assess household expenditures on food with particular emphasis on organic food. This study included 102 people from the Wielkopolska province. The subject information of the analysis were obtained with the usage of a questionnaire and enriched with data from statistical publications of the Central Statistical Office of Poland. The article presents the level of earned income, its sources and structure of expenditure on different food groups. The results show that food expenditure represents a significant part of the costs that households have to bear. These results also affirm the Engel's law stating that the expenditure on food decreases while the income increases. Organic food still plays a minor role in the consumption habits of the population. This is caused mainly by its high price. The study also showed other barriers that constitute an obstacle to the acquisition of organic food, including in particular the unavailability of these products in places of making daily purchases.

Key words: household budgets, spending on food, conventional food, organic food

INTRODUCTION

The production, exchange and consumption are the three basic spheres of every properly functioning economy. Thanks to these elements which are mutually penetrating and influencing each other, economic growth and development becomes possible (Łuczka-Bakuła 2007). Therefore, it is extremely important that the production sphere, in which certain goods and services are produced, appropriately meets the needs of households, which in turn are the basis for the consumption sphere (Zalega 2012). This applies particularly to issues of food. According to the theory presented by American psychologist Abraham Maslow, it is the starting point for meeting the needs of a higher order. This is confirmed by data regarding household budgets, especially those relating to their expenses. On average, in Poland people spend approximately 24% of their income on food (Sytuacja gospodarstw domowych w 2014). Such high proportion of these expenditures in the total expenditure contributes to increasing competition among food producers (Witek 2014). This is because the factor taken into account by consumers when buying is not only the price but also the quality of the purchased food. As a result the organic food market in Poland has been developing for several years now (Grębowiec 2010). This is somewhat related to the changes that have taken place in the Polish economy after 1989, which in turn resulted in the transformation of population consumption habits. Particularly the imitation effect⁵⁸ has been highlighted here, however, other factors, such as fashion or advertising were also significant. The interest in the consumption of more expensive food started to grow among the Polish buyers (Kwasek 2013). Such food included: safe, comfortable, functional and organic food (Gałązka 2013). The organic food market is the rapidly growing food production sector both in Poland and in the world. It is estimated that it increases at about 20% per year (Polski rynek żywności ekologicznej 2017). This is related mainly to the enrichment of societies, increasing awareness about healthy lifestyle and the increased

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⁵⁸ The imitation effect is described in the literature as a desire of consumers to catch up the people who are the reference group for consumer behaviour in terms of consumption level (6).

interest of the producers themselves in manufacturing of such products (Golinowski 2013). Currently, the organic food cultivation area is 37.5 million hectares and it is being developed in 160 countries (Smoluk-Sikorska, Bakula 2015).

MATERIAL AND METHOD

The development of organic food production in Poland is conditioned by an adequate change of demand, especially the domestic one. Research hypothesis sounds as the growth of income considering food purchase, quality of goods increases enormously. The main objective of the research is to determine the size of household expenditure on food, with particular emphasis on organic food. The primary materials designed to achieve the main objective were the basics. They were completed from consumers surveys gained from a questionnaire. Research conducted in Wielkopolskie voivodeship during fairs called 'Tastes of Regions' and weekly taken place market 'Green Market' in 2016. It was tested among random chosen 102 people. Among the respondents, the people aged 21-30 years (about 2/3 of the respondents) with higher education (67%) dominated. The questioned people were mainly working people (70% of all surveyed) but also students (24%) and non-employed persons (6%). The results came from towns (82%). Inhabitants of a countryside accounted for 18% of respondents. Holdings with 2 (29%) or 4 people (21%) dominated. The respondents were asked about their household finances (the amount of earned income, its sources and the expenditure on food) and about their preferences regarding food product, with particular emphasis on the organic food (food designations knowledge, motives and preferences of purchases). Data from the Central Statistical Office on the situation of households in 2014 was also used in the study.

RESULTS OF THE STUDY

One of the most important determinants of households spending is their financial situation measured by the level of disposable income achieved.

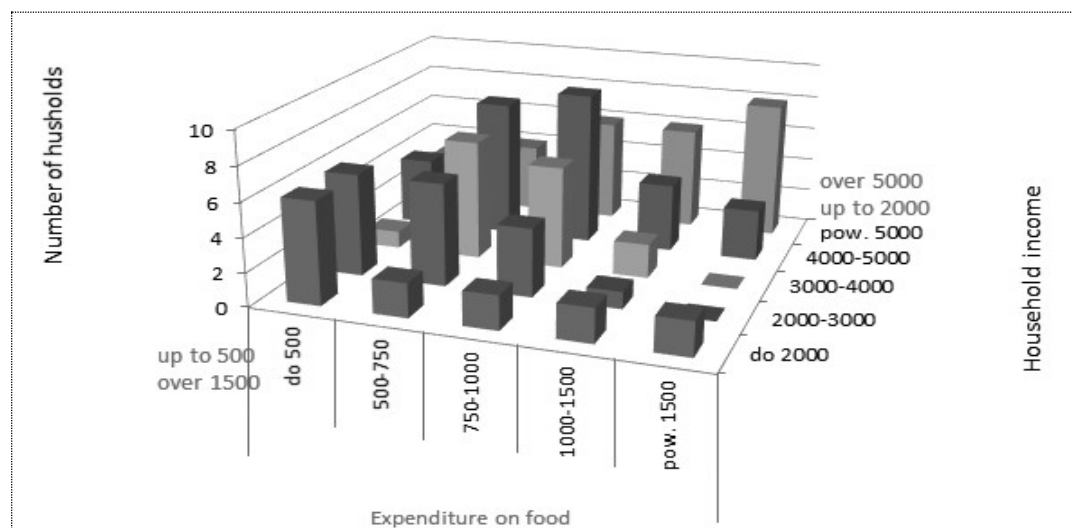


Figure 1. Household income (zł) and expenditure on food

Source: Self-study based on questionnaire surveys, N=102.

Linking income earned with the amount of spending on food is showing that households having higher incomes contribute less money to purchase food products than those which incomes



are relatively lower. This confirmed the Engel's law which says that when income rises, the expenditure on food falls (Figure 1), though in an increasingly slower pace and at the same time spending on food in total expenditure decreases. For the examined group of consumers, the correlation coefficient between estimated income (total and per one person on the household) and the proportion of food expenditure in income amounted to -0,50. Therefore, after exceeding a certain level of income, households spend a greater part of their income to buy the goods which enable to meet the needs of a higher order, and the absolute increase in spending on food products is slower than the increase in income (Tomaszewicz, Welfe 1978). In Table 1 the food groups on which households spend the income used to purchase food are presented. The structure and level of household consumption is one of the most important indicators thanks to which it is possible to assess the behaviour and attitudes of consumers. Expenses constitute an essential factor which indicates not only the quantity and quality of satisfying needs, but also differences in the level and scale of the income distribution (Zalega 2011).

Table 1. Structure of expenditure on food according to product groups (%)

Type of product groups	Share of total expenditure on food
Bakery and cereal products	20,0
Meat and meat products	30,0
Fish	5,0
Milk, cheese, eggs	15,0
Oil and other fats	5,0
Vegetables and fruit	15,0
Other food products	10,0

Source: Self-study based on questionnaire surveys, N=102.

The research has shown that the largest part of households expenditure devoted to food purchases is spent on buying meat and meat products (30%) and bakery or cereal products (20%). Of less importance are the following groups of products: milk, cheese and eggs (15%) and vegetables and fruit – also 15%. Households spend the least on the fish, and oils and other fats (5%).

Buying organic food is declared by 48% of survey people (49 people), 52% of respondents do not buy this type of food. The analysis shows that the main reason for conscious resignation from purchasing organic food are the prices. As many as three-quarters of respondents indicated that the main barrier to purchase organic food is that it is expensive (74% of them considered this factor as very important). Another factor is the unavailability of organic food in typical places of food purchasing. The lack of knowledge about points of sale or inability to distinguish organic from conventional food were less important aspects.

The importance of economic factors in choosing organic food is confirmed by the issue of income in decisions about purchasing organic food. It appears that only in the wealthiest groups (with household income above 4000 zł per month) there were more households buying organic products than in the groups indicating the contrary (table 2.). Although variance analysis showed no statistically significant differences (on the level $p < 0.05$) between the averages for groups of buyers and non-buyers of organic food, the average estimated income for one person in a group of people buying organic products was 16% higher (245 zł / person) than for non-buyers, and the estimated share of expenditure on food was 5 percentage points lower. These findings indicate that an increase in demand for organic food and the resulting from this market factor in development of organic products' market (independently of agricultural policy in this area) will be conditioned by the increase in household wealth.

Table 2. Dependence of decision of buying organic food on household income

The ranges of total monthly income	The number of households declaring the purchase of organic food		Total
	Do not buy	Buy	
Up to 1500 zł	3	1	4
from 1501 to 2000 zł	5	5	10
from 2001 to 2500 zł	7	4	11
from 2501 to 3000 zł	5	1	6
from 3001 to 4000 zł	11	4	15
from 4001 to 5000 zł	10	18	28
Over 5001 zł	12	16	28
Total	54	49	102

Source: Self-study based on questionnaire surveys, $N=102$.

The purchasers of organic food pay attention to the information and signs appearing on the products. Studies have also shown that people who do not buy that food are also familiar with organic food designations. Among the signs typical for organic farming the most recognizable characters (among surveyed individuals) are the "Euro-leaf" and "Ekoland" (Figure 2 and 3).



Figure 2. "Euro-leaf"



Figure 3. "Ekoland"

Source: <http://www.minrol.gov.pl/>

Consumers usually associate the organic food with high price and high quality. Recent research of the American market (March 2015) shows that on average, organic food is about 47 percent more expensive than the conventional⁵⁹. The analysis of the material indicates that respondents identify organic food with greater recognisability and exclusion of its mass production. In contrast, the least important element is the fact of a long tradition in manufacturing and applied recipe. Figure 4 shows the factors that determine the purchase of organic products.

The most important factors that influence the purchasing decisions of organic food, include those relating to health reasons. Of great importance is also good quality, lack of preservatives and nutritional value of such food. This is because a modern consumer more often attaches importance to a healthy lifestyle and wants to acquire and consume traditionally-made sausages and bread, naturally matured cheese or freshly squeezed juices which contain no preservatives (Waszkiewicz-

⁵⁹ The cost of organic food (2017), <http://www.consumerreports.org/cro/news/2015/03/cost-of-organic-food/index.htm> (sampling date: 27.08.2017)



Robak 2002). The surveyed people frequently search for information on ecological products in the Internet or consult friends who previously had any contact with this kind of food products. More and more often the source of knowledge of this subject is also television in which various types of advertisements, programs and campaigns promoting Polish organic food are introduced. The least individuals derive information about the discussed food from its producers and the press.

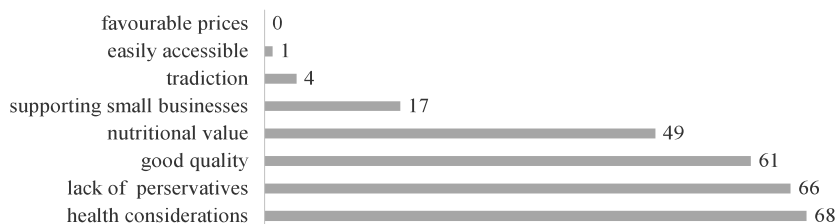


Figure 4. Factors determining organic food purchase (%)

Source: Self-study based on questionnaire surveys, $N=102$.

Respondents who were asked about the place of buying organic food indicated that such places were usually local markets - so called "Green Markets", malls (where one can find the island-points selling such food) and retail stores, specializing in organic food sales. A places where the surveyed individuals made purchases of organic products the least frequent were discount stores.

As previously indicated, organic food is characterized by high quality which is also connected with a high price. The respondents pointed out that they would be willing to pay 23% more for organic products in relation to the conventional with the exception that people already buying organic products would accept prices by 26% higher, and the group of non-buyers just 19%. The size of the expenditure they devote to buying this type of products fluctuates around 10% of the total budget devoted to food purchases.

SUMMARY

Research confirmed the hypothesis that along with the increase of income obtained by the Poles, their expenditure on food of good quality grows, however, the share of money they spend on food in general decreases in the total expenditure. The main goal was also implemented. „Organic Products are becoming more popular. It is predicted that in the next five years the market on which the organic products are offered may increase by 2-3 times, and manufacture of articles of high quality will represent more than 10% of Polish agri-food production”⁶⁰. There are favourable conditions in Poland - both environmental and economic - for production and organic farming development. The increase in the production of this type of food will positively affect the price which is currently the greatest obstacle preventing people from buying this kind of food. Another condition for market growth is an increase in consumers' incomes along with improving their food awareness.

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⁶⁰ The statement of the General Director of Polish Federation of Food Industry Andrzej Gantner.



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