Władysława **ŁUCZKA**

CHANGES IN THE BEHAVIOR OF ORGANIC FOOD CONSUMERS

Władysława **Łuczka,** Prof. (ORCID: 0000-0002-1997-8119) – *Poznan University of Life Science, Faculty of Economics and Social Sciences*

Correspondence address:
Wojska Polskiego Street 28, 63-637, Poznań, Poland
e-mail: wladyslawa.luczka@up.poznan.pl

ABSTRACT: The purpose of this paper is to discuss the purchasing behavior of organic food consumers based on survey findings, and to identify the change patterns by comparing these findings with a 2010 study and selected conclusions from other research carried out in Poland. A PAPI survey was carried out in 2018 with 214 respondents who buy organic food in stores located in Poznań. The results were analyzed using descriptive statistics metrics. The survey revealed the growing importance of health and environmental concerns among the motives for buying organic food, as indicated by the consumers. Compared to findings from previous research, there are improvements in consumer awareness and a transition from an egoistic to an altruistic approach to how their purchasing decisions affect the natural environment. Positive developments also include the increase in the share of regular consumers who form the basic segment of the organic food market, and the fact that online sales are viewed as a prospective place of buying organic food.

KEY WORDS: consumer, purchasing behavior, market, organic food

Introduction

Modern science offers extensive empirical evidence that processes taking place in the food chain have many adverse environmental impacts (Stern et al., 1997). Therefore, measures taken to change these processes are of key importance to sustainable development efforts. Implementing the sustainable development concept requires a new approach to production, trade and consumption processes. In parallel, opposite processes take place which distort sustainable development, excessively burden the natural environment and are focused on short-term benefits. Today, consumers need to choose between consumerism and sustainable consumption; between generating excessive quantities of products, waste and environmental burden and a rational use of products focused on future consequences of their decisions; and between an egoistic and ethical consumption.

A positive development is the growth trend followed by environmentally-friendly attitudes and behaviors that are consistent with the sustainable consumption concept. Purchasing decisions are increasingly guided by the awareness of their long-term environmental and social consequences. The purchasing and consumption activities of an aware, environmentally responsible consumer have an effect on the sustainability, nature and extent of production processes and on the condition of natural resources and environmental burdens. Therefore, it is important to forge environmental awareness and attitudes among consumers to promote the principles of sustainable development and, more precisely, the principles of sustainable consumption. The cognitive component of consumer attitudes is based on knowledge and information which is delivered not only by traditional communication tools but also, increasingly often, by new digital media (Łaszkiewicz, 2017). This provides unprecedented opportunities for building the environmental and social component of consumer attitudes in a faster and more extensive way.

In the food economy sector, an important part of sustainable consumption is organic food produced based on natural production measures and low amounts of external inputs. The greater the consumption of organic food, the smaller the environmental burdens. Growing interest in and demand for organic food is an important change in the behavior of Polish consumers which has been observed in the last couple of years. Organic food consumers form a stable and distinctive market segment. Their attitudes and behaviors reflect the growing health and environmental awareness, the changing market and the availability and quality of products. However, these are the characteristics of a minor part of consumers. Hence, although consumer interest in organic products has been growing, organic product markets continue to be a niche (Vermeir, Verbeke, 2006).

An informed purchasing process becomes increasingly complex in the sense that it takes place in the context of a large excess of supply, excessive product quantities, strong advertising efforts, intensive marketing messages and growing market information. The growing interest in and demand for organic food may encourage the use of unfair and abusive practices by producers of fake organic food. This is why organic food consumers are expected to have certain knowledge of organic farming labeling. Lack of adequate knowledge makes decision-making more risky and results in behaviors inconsistent with consumer needs and values. Knowledge is an integral part of the sustainable consumption model proposed by Jager (2000). This especially means actionable knowledge rather than knowledge of facts (Tanner, Kast, 2003). Knowledge of facts relates to definitions, causes and consequences of environmental problems (e.g. what is the greenhouse effect?). Conversely, actionable knowledge refers to information on possible activities (e.g. what human behaviors are related to the greenhouse effect?). Unlike knowledge of facts, actionable knowledge has an effect on environmental behaviors of market operators.

Literature review

So far, the behavior of organic food consumers has been a topic addressed in many Polish empirical studies which differed in their area of focus, population surveyed, sample size and findings. Some of these studies are of limited cognitive value due to the methodology they are based on. This is true for studies carried out with the general population of food consumers without making an attempt to separate the group of organic food consumers. Such surveys are mostly a way to discover the perception of organic food among conventional food consumers. However, they fail to provide grounds for extending the knowledge on the organic food consumer segment, its basic characteristics, evolving motivations, purchasing preferences, market assessments, market weaknesses and opportunities for reducing them. Meanwhile, the knowledge of organic food consumers is a way to learn more about the components and basic characteristics of, and conditions for, sustainable consumption.

In the group of Polish researchers into diverse aspects of organic food consumer behaviors, particular attention should be given to papers by Żakowska-Biemans (2017), Nestorowicz and her team (2017), Bryła (2016, 2018), Grzybowska-Brzezińska and Grzywińska-Rąpcy (2016, 2018), and Wojciechowska-Solis, Soroka (2016). Some results corroborate certain generally known research findings, especially the perception of and characteris-

tics associated with organic food. These studies, however, do not answer the research questions related to the motives for consuming organic food, preferred places and frequency of purchasing, and willingness to accept prices. Despite extensive research efforts, there is still a deficiency of knowledge in this respect, all the more so since some surveys deliver different and incomparable findings. Moreover, it is difficult to tell whether these discrepancies are caused by the findings being not fully correct or by the large variations in consumer behavior. Some studies, e.g. those focusing on the motives for buying organic food, fail to take any account of the motive related to environmental concerns which is a major shortcoming (Wojciechowska-Solis, Soroka, 2016). Other studies replace that motive with one generally referred to as "ecological" (Bryła, 2016). In turn, when identifying the place of purchasing, some studies fail to take account of organic farms as a direct distribution channel (Wojciechowska-Solis, Soroka, 2016, p. 357) or of online sales as a developing distribution channel (Grzybowska-Brzezińska, Rudzewicz, 2015).

The new research questions tackled in recent years include attempts made to determine the degree of ethnocentrism of organic food consumers, to segment the consumers by diverse criteria, and to look for opportunities to transform occasional consumers into regular consumers through marketing improvements. According to research, a relationship exists between the frequency of buying organic food and an ethnocentric attitude (Nestorowicz, Jerzyk, Pilarczyk, 2016). Organic food buyers proved to be more ethnocentric than people who buy organic food occasionally or do not buy it at all.

The studies on segmentation included interesting attempts to classify organic food consumers into types by different criteria. These efforts had a great knowledge enhancing potential. According to the literature, gender, age and other demographic characteristics are not so important in segmenting the organic food market as psychographic characteristics, lifestyles, value systems and behavioral criteria (expected product features, product uses, contextual situations during the purchasing process, frequency of buying). In the case of sustainable consumption, too, demographic characteristics are not a clear criterion for market segmentation (Witek, 2015).

The psychographic classification into types by food lifestyle, carried out by Żakowska-Biemans and her team (2017), includes 4 consumer segments with similar shares in the organic food market, varying in the range of 20% to over 30%. Setting aside the demographic characteristics, the distinctive features are: the degree of interest in buying organic food; attitudes towards and willingness to accept higher prices; and the product's country of origin. This research resulted in identifying the following consumer segments: 1/ the disinterested group (26%): the least interested in buying organic food, not willing to pay a higher price for organic food; 2/ aspiring environmental-

ists (21.4%): interested in organic food, they declare to be willing to pay a higher price for organic food; 3/ the demanding group (20.2%): they find it important that organic food be cheap and made using traditional methods; 4/ traditionalists (32.6%): they value the Polish origin of organic food and traditional production methods.

As shown by previous research, the identification and description of characteristics of organic food consumers as a new segment in the food market requires diverse and detailed time comparison analyses. This will allow to determine the trends followed by purchasing preferences of these consumers, their hierarchy of motivation, and the features that make them different from or similar to consumers of conventional food. This paper makes an effort to sort that out.

Research methods

The purpose of this paper is to discuss the purchasing behavior of organic food consumers based on survey findings, and to identify their evolution by comparing these findings with a 2010 study and selected conclusions from other research carried out in Poland. A survey was carried out in 2018 with 214 respondents who buy organic food in stores located in Poznań (a Paper and Pencil Interview, PAPI). The survey questionnaire included 28 questions. Some answers used the ordering scale and the 1-to-5 Likert scale. The survey questionnaire included questions that enable characterizing the consumers of organic food in terms of their knowledge of the organic farming logo, motivation, places of purchasing, range of products purchased, frequency of purchasing, acceptance of prices, and willingness to pay more. Some of the key research findings were compared with a 2010 study carried out with 395 organic food consumers in 5 specialized organic food stores located in the city of Poznań. The description section was based on a study of the relevant literature; the empirical section was based on basic metrics of descriptive statistics.

Results of the study

In the survey sample, women had a greater share (66.1%) than men which is a typical demographic feature of purchasing surveys where women predominate. Two groups, young and middle-aged people, accounted for nearly 2/3 of respondents: 19-30 years old (27.2%) and 31-50 years old (45.4%). Most interviewees had a secondary (36.0%) or tertiary (34.5%) education; this is an important finding as it affects consumer knowledge which drives health and environmental awareness. There is evidence in the

literature that a significant relationship exists between education and recognition of organic food (Dziekan, Konieczny, 2017). Indeed, knowledge has a stimulating effect on organic food consumption whereas ignorance is a barrier to the development of the organic food market.

As shown by this survey, the greatest group of consumers (43%) were unable to clearly indicate the extent of their knowledge of organic food. They were followed by the group who believed to have a good knowledge of it (41%). More women than men declared to have quite good (37%) or very good (22%) knowledge of organic food. According to a study by Kawa and Cyran (2015), there is a greater percentage of men than woman who find their knowledge of organic products to be good or very good (44.4% and 24%, respectively). The declared levels of knowledge differed between the age groups. The highest share rated it as very good and good in the age group 18-24 (50%), as sufficient in the age group 40-59 (52.7%) and 60 and more (45%). The survey suggests that consumers do not have enough knowledge on organic food. This is also confirmed by other national and international studies. In a survey by IMAS (2017), only 16% of the interviewees associated organic food with the organic farming certificate. Meanwhile, knowledge and information have an impact on the cognitive component of environmental attitudes among consumers.

As shown by a comparative analysis of research findings regarding the sources of information on organic food, TV and press have seen their importance decline in recent years. In many studies, these media were long regarded by the respondents as the key source of information (Żakowska-Biemans, 2009; Kucińska, 2009; Samolińska, Kaczorowska, 2013). The growing role of Internet as a source of information was noted in studies by Olech, Kuboń (2014) and Cichocka, Krupa (2016). That pattern was corroborated by the distribution of replies to the question on the sources of information on organic food in a survey by Jarok-Guzy (2018). The importance of these sources is ranked as follows: 1. Internet (33% of replies), 2. product label (28%), 3. feedback from friends (13%), 4. TV advertisement (10%), 5. in-store information (9%), leaflets (7%).

In the author's own study, the vast majority of respondents equate organic food with such concepts as healthy food (79%) and high-quality food (67%). Nearly half of respondents associated it with high taste qualities (41%). This is confirmed by other research where more than 50% of respondents equated organic food with healthy food (Jarczok-Guzy, 2018).

The symbols of certificates placed on food products include the organic farming mark in the form of the Euroleaf (figure 1). The Union logo for products originating from certified organic farming and growing was introduced by Commission Regulation (EU) No. 271/2010 of March 24, 2010. Consumer

knowledge related the use of that mark is of key importance to the identification of organic products and to the credibility of their value added (Schleenbecker, Hamm, 2013).

Figure 1. Organic farming logo applicable in European Union countries since 2010
Source: www.biocert.pl [29-01-2019].

Table 1. Knowledge of the organic farming logo among consumers

Source	Year of the study	Sample	Percentage of respondents who declared to know the Euroleaf logo
Eurobarometr	2012	1,000 (a sample of the Polish population)	12,0%
Nestorowicz (2017)	2013	444	24.8%
Kaczorowska et al. (2018)	2016	146	51.0%
Żakowska-Biemans et al. (2017)	2017	1,424	27.8%
Bryła (2018)	2017	1,000	20.5% know it well, 40.7% know it poorly, 38.8% do not know it
Jarczok-Guzy (2018)	2017	1,159	16% recognize it properly, 19% recognize it improperly, 44% do not know it
IMAS (2017)	2017	518	33%
IMAS (2018)	2018	1,000	44.0%

Source: author's own work.

In this survey, more than half of respondents (almost 53%) declared to know the Euroleaf mark when asked about the recognition of the logo of organic farming products. This means that nearly every second consumer of organic food is unable to recognize the mark of products purchased, which puts him/her at risk of making wrong purchasing decisions. Surveys con-

ducted with the general food consumer population yielded different findings regarding the lack of knowledge of the logo (table 1). Some of the studies found an increase in the levels of knowledge. For instance, according to IMAS data (2017, 2018), the recognition of the organic farming logo grew from 33% in 2017 to 44% in 2018 among online respondents who declare themselves to be organic food buyers.

The behavior of organic food consumers is determined by motivations of different nature, strength and sources. Consumer decisions are driven by a multitude of motivations whose nature refers to tangible and intangible values. From the perspective of the nature of their motivations (2014), three types of organic food consumers can be identified (Mazurek-Łopacińska, Sobocińska, 2014):

- consumers who consider organic products as a basic thing due to their vital effects; these are the ones who want to address their core values,
- consumers who find it very important to seek harmony with the environment because this provides them with peace of mind while also being a way to express their responsible attitudes,
- consumers guided by integrated motivations who consider the consumption of organic products in a holistic way because the practical values of products purchased coincide with spiritual values; these are the most educated and most aware consumers who strongly believe that harmony with the environment-reached by purchasing organic products-has an impact on satisfaction and self-fulfillment.

According to the declared motivations for buying organic food, Polish consumers are guided by basic values related to the beneficial effects it has on their lives. As shown by the survey, this is mostly the need for health safety which is derived from strongly felt individual needs rather than from social needs related to environmental concerns or from the need to support farms and their local nature. In this survey, health concerns were the top-ranked motivation with 78.4% replies. In turn, environmental concerns were only ranked fifth with 22.1% of replies (table 2). The comparison of findings between 2010 and 2018 evidences the growing importance of health concerns as a motivation for buying organic food. Conversely, environmental concerns continue to be ranked low (fifth), although their importance has slightly increased. The studies differed in the percentages recorded for environmental concerns as a motivation: IMAS (2017) 17%; Pilarczyk, Nestorowicz (2010) 14.6%; Escher, Petrykowska (2014) 25.9%; in a survey by Grzybowska-Brzezińska, Grzywińska-Rąpca, it was 46% (i.e. 33% more than what was recorded in 2010). In other countries, organic food consumers not only exhibit high levels of health awareness but are also socially and environmentally responsible (Nasir, Karakaya, 2014).

Table 2. Motivations for buying organic food in 2010 and 2018 [% of replies]

Motivations	2010	2018
Health concerns	58.4	78.4
Preferring a healthy lifestyle	48.2	52.1
Increased health risks	26.4	34.8
Health issues	25.4	26.3
Environmental concerns	12.9	24.1
Organic food as a trendy choice	0.5	1.5

Source: author's own work.

Nearly half of respondents (48.7%) found the availability of organic products to be good while 30% found it to be sufficient. The range organic food product becomes increasingly wider although the improvements are slow. Nevertheless, there is shortage of many products; according to the consumers surveyed, this is especially true for raw and processed meat (56.2%). Every third respondent (29.6% of replies) believes fruits and organic food for ill people (allergy/diabetes sufferers) to be offered in insufficient quantities. The response rate for confectionary was nearly identical (28.5%). Also, certain vegetables, milk, milk products and organic bakery are not part of the product range (24.8% of replies). The smallest percentage of interviewees (4.4%) believe there is shortage of juice in the organic product market.

According to the survey, some changes are taking place as regards the preferred places of buying organic food (table 3). Although most respondents continue to buy organic food in specialized stores (77.5%) and supermarkets (62.1%), some data shows that in the future, organic shopping is likely to move towards other distribution channels, such as discount stores, hypermarkets and online stores. The organic food market can be expected to converge with the conventional market which means it will gradually merge with the mainstream food distribution system: from intermediate channels through to wholesales and retail sales.

Table 3. Places of buying organic food in 2010 and 2018 [% of replies]

Specification	2010	2018
Specialized organic food stores	77.2	77.5
Supermarkets and hypermarkets	68.1	62.1
Street markets and marketplaces	60.1	34.8
Grocery stores (including discount stores)	55.2	58.3
Organic farms	46.1	34.1
Online organic food stores	19.7	21.2

Source: author's own work.

Organic food offered at discount stores such as Lidl and Biedronka-who used their own brands to generate demand from occasional consumers-proved to be particularly successful in the market (figure 2). The purchasing potential of these consumers was not timely seized by specialized stores whose competitive strategy based (in some cases) on high prices proved to be poorly effective. The strategic error of specialized stores was/is a price policy based on high margins and on the conviction that high prices, as a distinctive feature of premium products, would attract new consumers.

Figure 2. Own brands of organic products in discount stores

Source: websites of organic stores.

Also, growing interest in online sales should be expected; it will grow in importance as the New Economy becomes more and more widely adopted. The advantages of online sales are not only the reduction of information asymmetry between consumers and producers but also the limited number of intermediaries in the supply chain, which has an effect on price levels. Currently, 19% of consumers declare they buy food products online and intend to do so more frequently in the future (E-commerce, 2017). In the Internet, organic food is mainly offered by specialized stores who, just like conventional stores, rely on the high-price policy. The transactional costs of shipments are relatively high and not competitive compared to stores offering other product ranges. This is typical of an unbalanced market where the producer/seller is in a privileged position.

Therefore, Stefańska (2010) used the criterion of the place of purchasing organic food to identify 3 consumer segments whose shares in the organic food market vary in the range of below 20% to over 50%. The first segment, "moderate consumers" (53%), prefer specialized stores, followed by supermarkets and street markets. Members of this group believe the access to organic product information to be insufficient. The second segment, "impressionable consumers" (19%), prefer supermarkets followed by specialized stores. They expect the store staff to be committed to make their offering more credible. The third segment, "incisive consumers" (27%), are the most

convinced of the advantages of organic food. When choosing the place of buying, location is the most important criterion for them.

One of the most complex problems affecting the organic food market is the price level. The organic-to-conventional price ratio is high, reaching 300% in extreme cases (Łuczka-Bakuła, Sikorska-Smoluk, 2010). Consumer decisions on price acceptance affect the relation between the costs and benefits of a product. In the case of organic food, the benefits are of a tangible and intangible nature; they affect not only the vitality of consumers but also the natural environment, the condition of organic farms, the local economy etc. The costs are mostly the higher price paid for the value added, as well as the alternative cost incurred to travel to specialized organic food stores, and the lost benefits related to lower sensory value. This is why the willingness to pay a higher price, although economic in nature, is also related to the consumers' environmental and social awareness. The consumers' willingness to pay (WTP), defined as the maximum price the buyer is willing to pay for a good, depends on product type, market maturity, and the consumers' environmental awareness and purchasing behavior (Grunert et al., 2009). Informed, regular consumers of organic food exhibit the highest levels of WTP.

Generally, the organic food consumers' price sensitivity does not change despite the growth in income and in purchasing power. According to the author's own study carried out in 2018, most consumers (57.2%) are willing to accept the price of organic food if higher by 10% to 20% compared to conventional food. This is consistent with previous research (Sojkin, Witczak, 2009). If higher by 20% to 40%, the price is accepted by 28.3% of consumers; 40% to 60% by 10.4% of consumers; and 60% or more by 4.1% of consumers. The low willingness to pay a higher price for organic food continues to be the key barrier to the development of the Polish organic food market.

Conclusions

According to this survey, organic food consumers gradually become a segment with defined distinctive characteristics. This is evidenced by the motivation for and the frequency of buying organic food. Among the motives for buying organic food indicated by the consumers, both health and environmental concerns grow in importance. Compared to findings from previous research, there are improvements in consumer awareness and a transition from an egoistic to an altruistic approach to how their purchasing decisions affect the natural environment. Positive developments also include the increase in importance of conventional distribution channels for organic

food, such as discount and online stores, which will increase the share of occasional consumers in the organic food market. The changes presented in this paper reveal that organic food consumers play an increasingly important role in sustainable consumption patterns.

This study provided more extensive knowledge on organic food consumers and sustainable consumption. These findings could become a conceptual framework for future research on this topic. It is advisable that in-depth studies be carried out on information barriers which affect the organic food market, and on the perceived credibility of organic products. Future research should preferably address the behavior of organic food consumers in other markets to determine whether, and to what extent, their environmental and social focus also plays a distinctive role in non-food markets and whether they form a coherent consumer segment which is consistent with the sustainable consumption concept.

Literature

Bryła P. (2018), *Uwarunkowania znajomości unijnego logo rolnictwa ekologicznego wśród polskich konsumentów, "*Handel Wewnętrzny" No. 4(375), p. 42-52

Bryła P. (2016), *Organic food consumption in Poland: Motives and barriers*, "Appetite" No. 105, p. 737-746

Cichocka I., Krupa J. (2016), *Znajomość żywności ekologicznej wśród mieszkańców województwa podkarpackiego, "*Handel Wewnętrzny" No. 6(365), p. 32-46

Chudzian J., Chatys M. (2014), *Znajomość znaków ekologicznych wśród młodych konsumentów,* "Roczniki Naukowe SERiA" No. XVI(6), p. 82-87

Dziekan R., Konieczny M. (2017), *Wykształcenie konsumentów żywności ekologicznej z województwa podkarpackiego a czynniki wpływające na jej zakup,* "Progress in Economic Sciences" No. 4, p. 37

E-commerce w Polsce (2018), https://ginter.pro/wp-content/uploads/2018/07/E-commerce_w_Polsce_2018.pdf [21-08-2019]

Eurobarometr (2012), *Europeans Towards Food Security, Food Quality And The Countryside. Report 389*, https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_389_en.pdf [21-08-2019]

Grunert K. et al. (2009), *Comparing Methods for Measuring Consumer Willingness to Pay for a Basic and an Improved Ready Made Soup Product*, "Food Quality and Preference" No. 20

Gębski J., Kosicka-Gębska M., Tul-Krzyszczuk A. (2017), *Wpływ Internetu na zachowania współczesnych konsumentów wobec żywności*, "Handel Wewnętrzny" No. 2(367), p. 103-112

Grzybowska-Brzezińska M., Grzywińska-Rąpca M. (2016), *Atrybuty żywności ekologicznej determinujące wybory konsumentów, "*Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego. Ekonomika i Organizacja Gospodarki Żywnościowej" No. 114

Grzybowska-Brzezińska M., Grzywińska-Rąpca M. (2018), *Rynek żywności ekologicznej w aspekcie rozwoju zjawiska świadomej konsumpcji,* "Handel Wewnętrzny" No. 2(373), p. 168-177

Grzybowska-Brzezińska M., Rudzewicz A. (2015), *Environmental management systems in food processing and production as a source of product value for the customer on the organic food market*, "International Journal of Business Performance Management" No. 16(2/3), p. 314

IMAS International (2017), Żywność ekologiczna w Polsce

IMAS International (2018), Żywność ekologiczna w Polsce

Kaczorowska J., Rejman K., Halicka E. (2018), *Wpływ certyfikatu rolnictwa ekologicznego na gotowość konsumentów do zapłaty wyższej ceny za owoce,* "Handel Wewnętrzny" No. 3(374), p. 197-207

Kawa M., Cyran K. (2015), *Wiedza konsumentów jako determinanta decyzji zakupowych na rynku żywnościekologicznej, "*Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego. Ekonomika i Organizacja Gospodarki Żywnościowej" No. 112, p. 63-74

Kucińska K. (2009), *Poziom wiedzy o żywności ekologicznej wśród mieszkańców Warszawy*, "Journal of Research and Applications in Agricultural Engineering" No. 54(3), p. 164-172

Łaszkiewicz A. (2015), *Konsument w dobie mediów społecznościowych – wyzwania i ograniczenia dla organizacji*, "Handel Wewnętrzny" No. 4(357), p. 307-316

Łuczka-Bakuła W., Smoluk-Sikorska J. (2010), *Poziom cen ekologicznych owoców i warzyw a rozwój rynku żywności ekologicznej,* "Journal of Research and Applications in Agricultural Engineering" No. 55(4), p. 12-14

Łuczka-Bakuła W. (2011), *Decyzje zakupu na rynku żywności a świadomość i zachowania proekologiczne konsumentów,* "Handel Wewnętrzny*"* No. 3, p. 52-59

Matysik-Pejas R., Cieślik J. (2016), *Konsumencka ocena rynku żywności ekologicznej,* "Roczniki Naukowe SERiA" No. XVIII(5), p. 164-170

Mazurek-Łopacińska K., Sobocińska M. (2014), *Badanie kodów kulturowych w tworzeniu marketingowych modeli biznesu,* "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu" No. 336

Nasir V.A., Karakaya F. (2014), *Consumer Segments in Organic Foods Market,* "Journal of Consumer Marketing" No. 31(4), p. 263-277

Nestorowicz R. (2018), *Asymetria wiedzy a rozwój rynku żywności ekologicznej w Polsce*, "Handel Wewnętrzny" No. 5(376), p. 212-224

Nestorowicz R. et al. (2016), *Postawy etnocentryczne konsumentów (w ujęciu lokalnym) a szanse i bariery rozwoju rynku żywności ekologicznej*, Raport z badań, file:///C:/Users/user/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/postay-etnocentryczne-konsumentow-a-szanse-i-bariery-rozwoju-rynku-zywnosci-ekologicznej%20(1).pdf [21-08-2019]

Nestorowicz R. et al. (2016), *Etnocentryzm konsumencki w ujęciu lokalnym jako czynnik rozwoju rynku żywności ekologicznej w Polsce*, "Roczniki Naukowe SERiA" No. XVIII(6), p. 144-151

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

Olech E., Kuboń M. (2015), *Motywy wyboru produktów ekologicznych przez konsumentów segmentu demograficznego z terenu Małopolski*, "Roczniki Naukowe SERiA" No. XVII(1), p. 164-169

Samolińska W., Kiczorowska B. (2013), Żywność e*kologiczna w opinii internautów – doniesienia wstępne*, "Problemy Higieny i Epidemiologii" No. 94(3)

Schleenbecker R., Hamm U. (2013), *Consumers perception of organic product characteristics*, "Appetite" No. 71

Sojkin B., Witczak J. (2009), *Konsument na rynku żywności* ekologicznej, "Handel Wewnętrzny" No. 4-5, p. 79-86

Stefańska M. (2010), *Preferencje konsumentów w zakresie miejsca nabywania żywności ekologicznej*, "Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy Zarządzania, Finansów i Marketingu" No. 609, p. 215-226

Stern P.C. et al. (1997), *Environmentally signi*f*icant consumption*, Washington, DC: National Academy Press

Tanner C., Kast S. (2003), *Promoting Sustainable Consumption: Detreminants of Green Purchanses by Swiss Consumers,* "Psychology Marketing" Vol. 20(10), p. 883-902

Witek I. (2015), *Konsument zrównoważony jako segment odniesienia dla działań marketingowych przedsiębiorstw,* "Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy Zarządzania, Finansów i Marketingu" No. 865, p. 183-191

Wojciechowska-Solis J., Soroka A. (2016), *Kryteria zakupu żywności ekologicznej przez polskich konsumentów w odniesieniu do konsumpcji światowej*, "Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego, Problem Rolnictwa Światowego" No. 12, p. 353-362

Vermeir I., Verbeke W. (2006), *Sustainable food consumption: exploring the consumer "attitude – behavioral intetion" gap*, "Journal of Agricultural nad Environmental Ethics" No. 19, p. 169-194

Żakowska-Biemans S. et al. (2017), *Marketing, promocja oraz analiza rynku, analiza rynku produkcji ekologicznej w Polsce, w tym określenie szans i barier dla rozwoju tego sektora produkcji*, Raport z badań, http://wnzck.sggw.pl/wp-content/uploads/2015/08/Raport_MINROL_15_11_2017_upowsz.pdf [21-08-2019]