THE FEARS OF ELDERLY PEOPLE IN THE PROCESS OF PURCHASING FOOD PRODUCTS

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Abstract

Research background: The growing segment of elderly consumers implies the need to permanently explore the needs and expectations of older people in relation to the offer of food products. This is because, as the research results show, the households of the elderly are characterized by the different fulfillment of needs compared to others.

Purpose: The survey conducted among people over 60 in 2019 was aimed at determining the selected concerns of senior consumers related to the safety of food products.

Research methodology: The research among people over 60 years of age was conducted in the Wielkopolska region (of Poland) in 2019 on a sample of 373 people. The respondents were selected using the quota selection method.

Results: The vast majority of seniors point to a variety of concerns about the safety of food products. This is surprising, as the respondents equally often emphasize that food in Poland is safe.

Novelty: The observations are an important implication for producers or commercial agents – their task is to prepare messages to confirm that the food products offered meet the quality requirements. The process of educating older people can be made difficult – primarily through their well-established (over the years) nutritional practices related to the purchase and consumption of those products that are essential for life.

Keywords: consumer behavior, seniors, older people, food safety, food consumption

JEL classification: D12, D91, J14, O39

Introduction

Recent years have allowed us to notice the growing trend aging societies both in Poland and around the world. This is a result of the improvement in the quality of life, increasing life expectancy and higher standards of health care. Along with the aging process of people, people are subject to general changes in the physical, physiological and mental sphere, which influences their market behavior. Numerous studies have shown that human aging has a radical impact on his consumption and shopping behavior (McKay-Nesbitt, Manchandab, Smith, Huhmann, 2011; Ammatulli, Guido, Natarajan, 2015). The importance of identifying the purchasing processes of older people is primarily because Poland is the fastest aging society in the European Union. In 2018, the number of people aged 60 was over 9.5 million, or 24% of the population, and in 2050 it will be almost 14 million, or 40% of the population. The gradually growing number of older people thus results in the growing importance of this consumer market.

Food products play an essential role for consumers because of their meeting first-order needs (nutrition, health security). The specific characteristics of food associated with the need for its regular consumption, its short duration, storage requirements, a major impact on people's lives and health – all this causes consumers to assign great importance in buying it. It should also be emphasized that food has no substitutes, and in the hierarchy of needs – regardless of the income situation of the consumer – will always be a priority (Zalega, 2016, p. 146).

In recent years, many types of food have appeared on the market, e.g. enriched, organic, natural, healthy, convenient, functional, etc., gaining the interest of buyers. Whatever name one might use for it because of the varied criteria, it has to fulfill one fundamental requirement: be safe for the consumer (Piskula et al., 2011, pp. 91–92). The issue of food safety is particularly important in the context of the consumer aging process. Aging is irreversible, and its course can be modified by many factors that affect the body throughout its entire life. Proper nutrition promotes maintaining good health, delays the aging process of the body and thus helps to maintain longevity (Frąckiewicz, Kałuża, Roszkowski, Brzozowska, 2009). As we age, it becomes harder for our immune systems to fight off harmful bacteria. This means that older adults can come down with a serious illness if they eat contaminated food. For this reason, it is very important for older adults, and those who prepare food for older adults, to pay close attention to food safety (Kendall, val Hillers, Medeiros, 2006).

The need to provide safe food for elderly consumption results from the special sensitivity of the senior body to external factors (especially harmful substances) and dynamically changing nutritional needs that appear in old age. Older adults are considered more vulnerable to foodborne

illness due to a lowered immunity. Adults aged 60 years and older are more likely than younger adults to experience complications, hospitalization, and death because of food-borne infections (Smith, 1998; Buzby, 2002). EUFIC (2003) emphasised that the susceptibility to food borne illness increases with age and indicates the problems that the elderly encounter as being in a high-risk group for food borne diseases. These include an age-associated decrease in cellular immunity, age-related changes in the gastrointestinal tract, malnutrition, lack of exercise, entry into nursing homes, and excessive use of antibiotics. One reason for more frequent foodborne infections among the elderly is that many of the body's functions become impaired with age (e.g. problems with vision; the sense of smell becomes less acute with age; many elderly people cannot walk without assistance and find it hard to bend or to remain standing for long periods; some elderly people are malnourished, which increases their susceptibility to infections, including those caused by pathogens in food). Perceived financial constraints may cause other food safety related problems for the elderly. They may be reluctant to throw away food, even when it is in poor condition (Jevsnik et. al, 2013).

In the literature, the problem of the perception of food safety by consumers is often raised. Many studies have identified socio-economic characteristics that determine the perception of food safety. The results indicated that socio-economic variables (gender, education and household income) and behavioral variables (consumption of organic food and consumption of low priced genetically modified food) had considerable effects on consumers' awareness of food safety. A number of studies have identified socio-economic characteristics as important determinants of food safety concern: age, sex, education, demographic characteristic, attitude towards the health of consumers. (Kilic, Eryilmaz, 2015). The results of research carried out in China show that demographic factors such as gender, age, type of residence, education, and census register are positively correlated with food safety satisfaction, while annual income is not significant (He, Han, Liu, 2019). In a study of food safety-related trends and perceptions, Fein, Lando, Levy, Teisl, and Noblet (2011) found that adults age 65 and over had a lower perception of food safety-related risk than adults aged 18–29.

Several studies have revealed gaps in older adult's food safety knowledge and practices. We found that although older adults consider themselves to be knowledgeable about food safety, many are not following the recommended food safety practices (Cates et al., 2009). Lin, Jensen and Yen (2005) found that older adults were less likely than younger adults to know about important foodborne pathogens. Older adults in the Elderly Nutrition Program reported risky food-handling behaviors and were found to underestimate both the prevalence and risk of foodborne illness (Roseman, 2007). Similarly, in a study of Kentucky consumers, older adults

reported a high level of confidence in the safety of the U.S. food supply, and greater confidence in the food supply was associated with an increased likelihood of practicing unsafe food behaviors. Other research has shown that certain subgroups within the older adult population engage in practices that can lead to foodborne illness in the home. It also turns out that older men exhibited more risky behaviors than older women, as did older adults with higher education and higher incomes (Anderson, Verrill, Sahyoun, 2011). A review of the literature investigating older consumers' safe food handling knowledge and behaviors highlight important areas that could be targeted for avenues for future research in this group to better prepare older adults' transition into their latter stages of life (Thaivalappil, Young, Paco, Jeyapalan, Papadopoulos, 2019).

Due to the systematic increase in the number of elderly people, the nutrition of this group of people is significant but also a complex problem (Jabłoński, Kaźmierczak, 2005). This is strengthened by the fact that one characteristic feature of the consumption of senior households is the relatively high level of expenditure necessary, among others on food and housing. Expenditure on the food of people over 60 in 2017 accounted for 26% of the budget, while that of households without older people slightly less – 22.9% (*Information about the situation of elderly people in Poland in 2017, 2018*). In Poland, there had been a number studies on food safety knowledge among (Baryłko-Pikielna, 2011; Żakowska-Biemans, 2009; Kowalska, 2018; Ozimek, Gutkowska, Żakowska-Biemans, 2004; Żakowska-Biemans, 2011; Szlachciuk, Ozimek, 2016) however the area of seniors' attitudes towards food safety was not discussed.

1. Applied research methods

The purpose of the paper is to identify the concerns of senior consumers regarding the safety of food products. As part of the research, specific goals were distinguished: determining the level of knowledge among elderly people about food and nutrition, determining the opinion of seniors regarding the level of food safety in Poland, identifying the types of perceived fears/doubts related to the purchase and consumption of food products and establishing the sources of information preferred by seniors thus reducing their purchasing risk. The formulated goals and the conducted analysis of the literature allowed for a hypothesis subject to empirical verification: despite a positive assessment of the food safety condition, older consumers have doubts about the purchasing of food products.

The research was carried out among people over 60 years of age and was conducted in the Wielkopolska region in 2019 on a sample of 373 people. The respondents were selected using

the quota selection method; the structure of the sample examined according to the criterion of gender and age was the same as the structure of the elderly population in the Wielkopolska region.¹

The choice of Wielkopolska as a research region resulted from the adopted hypothesis about its representativeness for the entire territory of Poland in terms of food consumption by the elderly. Based on the statistical data of the Central Statistical Office in Poland (GUS), the distribution of population by age and sex (60 years and older) is generally consistent, moreover, the level of expenditure and food consumption per 1 person per month in households showed slight differences (approx. 5%) (Household Budgets, 2019). However, the author emphasizes great caution in generalizing conclusions and treating the results only as an element supplementing the knowledge about the behavior of senior consumers.

As a part of the analysis, descriptive statistics were used to determine the structure of the surveyed population: structure and intensity indicators (proportions, percentages), location and variability measures (mean and standard deviations). The coefficients of the variation of two independent variables referred to the correlation between variables measured on a quantitative (student t-test) and qualitative (Kendall) scale (Akoglu, 2018; Croux, Dehon, 2010). While analyzing the information obtained, an exploratory factor analysis was carried out to isolate the synthetic main factors which determine the innovation behavior of senior consumers. The following analytical procedure was used in the paper (Larose, 2005; Stewart, 1981):

- a) determination of the degree of probability between individual variables – the use of Pearson's linear correlation coefficient as a measure of the similarity of variables of counterparts;
- b) calculation of the usefulness of the data using the KMO (Kaiser-Meyer-Olkin) indicator and Bartlett's test;
- c) calculation of the total explained variance, which shows to what extent the components explain the resource of common variation and allow the number of components to be interpreted;
- d) using the principal components method, factor loadings for individual variables were determined. Varimax orthogonal rotation was used in each of the calculations carried out (significant factor loadings above 0.5).

¹ Based on the statistical chi-square (χ^2) test, p-value was calculated, which was 0.97 (age) and 0.99 (sex), respectively. The values indicate that the structure studied is the same as the structure (age and gender) of older people in Wielkopolska (p-value > 0.005).

In constructing survey items, researchers must consider question complexity and evaluate the significance of requiring the specifics of time and place as these may be areas for potential sources of error. In constructing the survey items, researchers must consider question complexity and evaluate the significance of requiring the specifics of time and place as these may be areas for potential sources of error. older adults are more vulnerable than younger persons to the “truth effect,” or the tendency to find repeated statements as more valid and believable than a statement presented only in a nice way (Law, Hawkins, Craik 1998). Difficulties in the ability to recollect the source of information can also result in greater vulnerability to confusing perceived and imagined experiences, or memory distortions, including false recall and recognition. And while data collected from older adults are less likely to incur bias from the question order, there is evidence that increases in response order effects may be related to age (Quinn, 2010). The use of the Likert scale in studies of the elderly was because growing evidence suggests that older and younger respondents are differentially affected by questionnaire features (Schwarz, 1999; Yoon, Feinberg, Schwarz, 2010). Andrews and Herzog (1986) found that the percentage of true score variance in survey measures tends to decline as respondent age increases and that the percentage of random and correlated error variance increases. These findings demonstrate that item complexity presents a cognitive challenge for older adults and that this problem can be rectified through simplifying the items (Knäuper et al., 2016). Ultimately, the adoption of a specific methodology for examining elderly people resulted from the conclusions of the literature reviews carried out by Zniva and Weizl (2016) and Moschis (2012). The cafeteria of questions about the types of concerns about food safety was based on a survey prepared by the European Food Safety Authority (EFSA) (Food Safety in the UE, 2019). Hazards from microbiological, chemical or physical compounds, including allergens, pose a challenge in making sure the food is safe for consumption (Ruby et al., 2019). Microbiological hazards arise from microorganisms such as bacteria, viruses and parasites while chemical hazards are usually due to the use of pesticides in agriculture or chemicals in food processing. Physical hazards come from fragments found in food as a result of the manufacturing process (glass, metal, rubber, and plastic) (Batt, 2016).

2. Research findings

The starting point in recognizing doubts related to the safety of food consumed by the elderly was the determination of the level of subjective knowledge of seniors about food and proper nutrition. Generally, it should be stated that despite considerable shopping and

consumption experience, the knowledge of seniors on the problems analyzed can be assessed as unsatisfactory.

Table 1. Level of food and nutrition knowledge among the elderly (%)

Level of knowledge	I know a lot about it	I am quite knowledgeable	I am knowledgeable – I know the basic elements	my knowledge is limited, I only know a bit	I know very little – almost nothing
About food and nutrition	10.2	27.9	44.8	13.9	3.2

Source: own research.

It turns out that the largest group of respondents (44.8%) admit only to basic knowledge of the area related to food and nutrition, while 38.1% declare that they have significant knowledge on these topics; as much as 17.1% report major deficiencies in information on food products and diet.

The level of knowledge about food varies greatly according to the variables describing the senior segment (Table 2). The correlation analysis shows that there is a statistically significant relationship between the level of knowledge and the cognitive age of older people,² their health condition, the declared financial situation, education, and calendar age.

Table 2. Correlation coefficients between the level of food and nutrition knowledge and selected variables

Level of knowledge		Cognitive age	Age	Education	Health	Financial situation
Kendall's Tau b	about food and nutrition	–0.397*	0.187*	–0.221*	0.393*	–0.250*

* Significant correlation at 0.001.

Source: own study based on research results.

It turns out that young seniors, and above all those who feel young, declare greater knowledge of the studied problems. It can also be seen that a greater amount of information on the relationship between food and health and compliance with the principles of proper nutrition may translate on to the declared better well-being of people above 60. As one might have guessed, people with higher education declare that they have a higher level of knowledge about

² Cognitive age – the well-being of the elderly, was determined by measuring the respondent's compliance with his chronological age (I feel younger, just older than my calendar age indicates), com. M. Awdziej, Limits of the "older consumers" market in Europe – chronological age versus cognitive age of buyers, *Handel Wewnętrzny* 1/2005 (in Polish).

health and food than people with lower education. Interestingly, the information resources in the analyzed areas depend on the subjective assessment of the health status of the elderly – the worse the declared health status of the respondents, the more often there are opinions about limited knowledge regarding the problems under consideration. In other words, it can be said that having knowledge about food and nutrition translates into a specific health condition of the elderly.

The analysis was deepened by formulating the hypothesis about the impact of respondents' gender on the formation of opinions regarding the level of knowledge about food and nutrition. In order to verify this hypothesis, the student's t-test was used, which confirmed it (with a range of $p < 0.05$); as one might have supposed, women over 60 declared greater knowledge of food and nutrition than men.

As part of the investigation of the process of purchasing food products by seniors living in Greater Poland (the Wielkopolska region), the assessment of food product safety by senior consumers was determined (Table 3). It turns out that over 60% of respondents believe that food in Poland is safe, and 29% express their concern about this condition.

Table 3. Opinions of older people on the state of safety of the food consumed (%)

Opinion	Definitely agree	Slightly agree	Hard to say	Slightly disagree	Definitely disagree
Food in Poland is safe	14.2	48.8	31.4	5.1	0.5
I am concerned about food safety in Poland	9.4	19.6	33.0	29.0	9.1

Source: own research.

However, it is extremely surprising to see that almost 1/3 of the surveyed seniors cannot (or do not want to) clearly define their opinion on food safety in Poland. Trying to understand the attitudes of older people, it can be assumed that the analyzed problem is an incomprehensible issue for a significant group of respondents. It is also probably an expression of a safe or withdrawal attitude adopted by seniors, consisting in avoiding expressing unambiguous judgments and opinions.³

The main goal of the research was to determine consumers' concerns about the safety of food bought and consumed (Table 4). Research results indicate that over 60% of respondents

³ Attitude is also seen in other publications on the behavior of senior consumers, com. A. Dąbrowska, A. Kusińska, T. Olejniczak, T. Słaby, M. Światała, T. Zalega.

express their concerns about the various possible problems of food compliance with safety requirements.

Table 4. Elderly people's concerns related to food safety (%)

Elderly people's concerns related to food safety I'm AFRAID	Definitely	To a certain extent	Probably not	Definitely not	I don't know
Of the presence of pathogenic microorganisms, e.g. salmonella, in food	46.4	31.1	14.5	5.6	2.4
Farmers' use of chemical plant protection products – pesticides in food	34.6	42.4	16.1	3.8	3.2
Inadequate storage of food in a warehouse or store	32.4	38.9	18.8	6.2	3.8
Inadequate animal nutrition	26.8	44.8	20.4	4.8	3.2
The use of food additives – preservatives, sweeteners, dyes	35.7	35.4	18.5	5.9	4.6
The presence of solid impurities, e.g. hair, nails, buttons in packaged products	40.2	27.1	22.5	7.2	2.9
Presence of genetically modified ingredients in products and dishes	36.2	26.8	21.7	8.8	6.4

Source: own research.

Elderly people to the greatest extent (more than 3/4 of respondents) indicate that they have doubts about food safety related to the presence of pathogenic microorganisms or the content of pesticides in the raw materials used for its production. At this point, it should be emphasized that food poisoning, due to aging-related weakening of the immune system, can be particularly harmful to seniors. The weaker immune system of the elderly makes them more susceptible to the development of serious bacterial infections and associated complications (Cheong, 2019).

72.3% of seniors are concerned that food safety may be threatened by the inadequate storage of food in a warehouse or store, a similar size of respondents has doubts about the use of food additives by producers, including preservatives or dyes, and their impact on the quality of the finished product. A slightly smaller number of respondents are afraid of solid impurities that may be present in packaged food products.

The multiplicity and diversity of older people's perceptions about food safety concerns lead to attempts to replace them with new synthetic agents; this will allow us to deepen the reasoning and specify the perception of doubts related to the purchase and consumption of food.⁴

The procedure of performing a factor analysis was carried out using the SPSS 25 program where, using the principal components method, factor loadings for individual variables were determined (Table 5).

⁴ KMO = 0.837; total explained variance = 73%.

Table 5. Matrix of rotated components – elderly people's concerns related to food safety

Elderly people's concerns about food purchasing and consumption I'm AFRAID	Component		
	1	2	3
Of the presence of pathogenic microorganisms, e.g. salmonella, in food farmers' use of chemical plant protection products – pesticides in food	0.661		
Inadequate animal nutrition	0.693		
The use of food additives – preservatives, sweeteners, dyes	0.870		
Inadequate storage of food in a warehouse or store			0.848
Presence of genetically modified ingredients in products and dishes	0.575		
Presence of pathogenic microorganisms, e.g. salmonella, in food		0.782	
The presence of solid impurities, e.g. hair, nails, buttons in packaged products		0.856	

Source: based on research result.

Ultimately, from seven dimensions of consumer concerns, due to the factor analysis conducted, three coherent groups of components have identified that form the main synthetic types of doubts of older people related to food safety:

- a) the first component is associated with concerns about ensuring safety at the stage of the preparation of raw materials for production and the production of food in enterprises;
- b) the second group of variables – manifests itself in the doubts of older people regarding the safety of finished products, packaged for sale;
- c) the third factor – seniors' concerns related to the liability of commercial agents for the product – its improper storage in a warehouse and in a store, which may cause problems with the quality of food products.

The obtained picture of the concerns of senior consumers clearly indicates the need to care for the quality of food products at every stage of creating its value: from the stage of production, distribution, and storage to sale in a retail outlet.

Factors differentiating the opinions of older people regarding food safety concerns include, first of all, variables concerning the assessment of the level of knowledge of the respondents about food and nutrition, the level of education, financial situation and subjectively felt age (Table 6).

The more information about food and proper nutrition as well as general knowledge seniors have, the more often they are overwhelmed by their doubts as to the level of food products' safety. Those feeling younger also more often report a variety of food concerns. It can be concluded that the greater amount of information and knowledge of older people fosters distrust as to the level of the quality of the food products offered.

Table 6. Correlation coefficients between selected variables and elderly people's concerns related to food safety

Elderly people's concerns about food safety I'm AFRAID		Level of knowledge about food nutrition	Cognitive Age	Education	Financial situation
Tau b Kendalla	farmers' use of chemical plant protection products – pesticides in food	0.171**	–0.171**	–0.205**	–0.173**
	inadequate animal nutrition	0.170**	–0.104*	–0.122**	–0.124**
	the use of food additives – preservatives, sweeteners, dyes	0.153**	–0.090*	–0.145**	
	inadequate storage of food in a warehouse or store	0.239**	–0.182**	–0.154**	–0.123**
	presence of genetically modified ingredients in products and dishes	0.139**	–0.116**	–0.118**	–0.116**
	presence of pathogenic microorganisms, e.g. salmonella, in food	0.135**	–0.128**	–0.141**	–0.110*
	the presence of solid impurities, e.g. hair, nails, buttons in packaged products	0.146**	–	–	–0.092*

* Significant correlation at 0.05 (two-sided).

** Significant correlation at 0.01 (two-sided).

Source: based on research result.

Older people's concerns about food safety can be effectively reduced by accessing information and shaping food and nutrition knowledge on this basis. Therefore, it is advisable to specify ways to communicate with seniors about food safety (Table 7).

Table 7. Communication channels related to food safety preferred by seniors (%)

Information sources	Definitely	To a certain extent	Probably not	Definitely not	I don't know
Information from a doctor – dietician	42.1	36.7	13.9	4.8	2.4
Popular breakfast TV shows	31.1	43.7	18.2	4.0	2.9
Newspapers and magazines	30.0	41.0	19.0	5.1	4.8
From the seller in a store	23.6	41.0	24.7	6.4	4.3
Brochure leaflet in a store	19.8	44.5	25.5	7.0	3.2
Booklet brochure in mailboxes	18.5	31.9	28.2	16.6	4.8

Source: own research.

It turns out that among the most preferred – by older people – sources of food product safety information are a doctor/dietitian and popular TV (breakfast) shows. Over 60% of respondents expect that information confirming the safety of a food product will be available in a store (in personal form from the seller or impersonal as a leaflet/brochure). More than half of the

respondents (50.4%) indicate special brochures delivered directly to their home as a source of information reducing consumers' concerns about food's proper compliance (with safety requirements).

Food products are special goods that are important in the shopping basket for older people. Currently, they devote more and more attention to the issue of product quality, not just the quantity available in the commercial offer. As indicated in the literature, the consumer is not only a recipient of food that makes a choice and pays and at the same time the one who bears the whole risk of the health consequences associated with food consumption; hence it is understandable that food safety is a priority of interest of buyers (Baryłko-Pikielna, 1999).

Conclusions

To sum up, it seems worrying that the vast majority of seniors point to a variety of concerns about the safety of food products. This is surprising, as the respondents equally often emphasize that food in Poland is safe. This may highlight the fundamental problem of the lack of convincing information about the safety of food products purchased by older people: despite the overall positive opinion about the level of food quality, the level of reported doubt is high.

Conservatism, a lack of trust, may also be the result of the shopping experience of seniors acquired during the period of a centrally controlled economy. The observations set out above can be an important implication for producers or commercial agents – their task is to prepare messages effectively confirming that the food products offered meet the quality requirements. And although there are many social campaigns in the public space that make us aware of the importance of food product safety for life and health, it should be emphasized that the process of educating older people can be made difficult – primarily through their well-established (over the years) nutritional practices related to the purchase and consumption of those products that are essential for life.

The research and conclusions that have been drawn have their limitations related to the adopted research procedure and the research method and technique used. It is worth emphasizing that the respondents' answers, and thus also the results of the research, are only of a declarative nature. Respondents' statements regarding attitudes are not always identical to subsequent decisions taken in commercial establishments. As mentioned before, a large number of seniors avoided unambiguous answers and it is difficult to predict their real behavior when shopping for food products. It should be emphasized that the research of older people is complicated due to

the difficulty of reaching them and the small openness of seniors to enter into relationships with strangers, unknown persons.

When generalizing the conclusions on the fears of seniors purchasing food products one should also remember the limitations resulting from the selected spatial scope of the research. They were implemented in Wielkopolska, a region with similar parameters describing the consumption and living conditions of Poles in selected product categories, but differing in many variables, e.g. the structure of the number of households, the amount of income obtained, or the diversified supply of new food products. You should also keep a distance from your research and be careful when making conclusions. Consumer behavior sometimes undergoes dynamic changes in the face of the strong impact of various factors, and the literature underlines the ambiguity in determining the determinants of the market behavior of seniors.

Despite the limitations, the research results have undoubtedly a practical dimension and can be useful both at the stage of creating new food products, as well as in the process of managing the offer of products already on the market and their possible changes. The application value can be considered primarily to present the direction of changes desired by seniors in current food products on the market. This provides a lot of information necessary to understand the market behavior of seniors, especially in the context of the intensifying aging processes of society, which increases the number of people aged 60 and more. The collected material can be used in the product portfolio management process of food companies, both at the stage of initiating and introducing innovations to the market, as well as at the stage of modifying existing products to obtain the approval of senior consumers. In conclusion, it should be emphasized that research does not exhaust issues related to the behavior of senior consumers in the process of purchasing food products. It would be interesting to continue research work that will allow us to more accurately identify the following economic phenomena: identifying barriers to the purchase of food product innovations, thoroughly investigating the hidden motives of senior consumers' behavior towards food. It would also be interesting to identify possible actions that the reduction of doubts about food products that could be undertaken by various consumer organizations. It should also be remembered with advancing age seniors experience a decline in appetite, food intake and dietary adequacy (Hare, Kirk, Lang, 2001) as well as a decreasing ability to taste and smell, chewing difficulties and limited dexterity. Food product developers and retailers should be aware of these changes and tailor their products and services to their customer needs.

The paper enriches social science in the discipline of economics, refers to one of its main problem trends, i.e. the possibility of satisfying unlimited needs in the conditions of limited

material and mental resources of senior consumers. Its main advantage is the adaptation of knowledge to the description of decision-making processes related to meeting the needs of older people.

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