
Consumer Determinants of Purchasing Decisions on the Dairy Products Market

Submitted 11/07/21, 1st revision 04/08/21, 2nd revision 24/08/21, accepted 30/09/21

Grębowiec Mariusz¹

Abstract:

Purpose: The aim of this study was to try to define the basics and various factors that determine the purchasing behavior of consumers on the modern milk and milk products market.

Design/Methodology/Approach: The study used the results of the author's empirical research in which 464 respondents were selected for the study in a purposeful manner. The main selection criterion was the respondents' declaration of regular purchase and consumption of dairy products in households. The research tool was a standardized questionnaire, which consisted of closed questions, both single and multiple choice, and it was fully anonymous. The obtained results allowed to draw conclusions and compare them with the general market trends taking place in the analyzed sector as well as with the results of research published by other authors dealing with related issues.

Findings: The obtained results show that most of the purchasing decisions of dairy consumers are routine decisions. The main reason for consuming dairy products is the fact that they are suitable for direct consumption without their prior preparation, as well as the fact that the respondents have long become accustomed to the dairy diet in their households. In the hierarchy of factors determining the purchase of dairy products, the most important were sensory and functional impressions and the use-by date, but also various marketing stimuli are an important element.

Practical Implications: The article contains information as well as guidelines for producers of dairy products, both for production and marketing. Thanks to the conducted research, the main directions of changes in the interests of buyers following contemporary consumer trends on the global market, which will become increasingly important in the future, have been shown.

Originality / Value: The study contains significant findings regarding the variables affecting the direction of future consumption of dairy products on the market.

Keywords: Milk, consumer, purchasing decisions.

JEL Classification: M31, L11.

Paper type: Research paper.

¹Warsaw University of Life Science-SGGW, Institute of Economics and Finance, Poland.
ORCID 0000-0002-2631-3940, e-mail: mariusz_grebowiec@sggw.edu.pl

1. Introduction

The dairy market is one of the most dynamically developing markets for food products, and milk and dairy products are widely consumed by consumers (Bórawski *et al.*, 2021). They are valued not only for their taste, but also for their special nutritional and prophylactic properties.

Despite the huge variety of dairy products, as well as milk processing companies, there are still opportunities for further development of this segment on the domestic market (Ioanid, 2020). In such a situation, it becomes extremely important for entrepreneurs to get to know the consumer, his needs, preferences and criteria that guide him when choosing specific products, since the purchase of dairy products can be influenced by various factors, including: economic, psychological, social factors, etc. In order to function and be successful on the market, a company should look at its products through the eyes of buyers. It is also necessary to constantly evaluate and analyze the offer of enterprises and continuously improve it. Nowadays, a manufacturer, in order to be able to compete effectively on the market, is forced to encourage consumers to buy through various forms of promotion. Moreover, the market situation forces producers to diversify their product offer more and more, and to introduce various innovations to the market, both of a product and marketing nature (Meimankolova, 2018). One of the main directions of market changes, including changes in the commercial strategies of enterprises, is the modernization of existing distribution channels, as well as the launch of new ones with the use of modern sales techniques.

Although the conditions influencing consumer behavior on the dairy products market have been the subject of many studies, the factors influencing purchasing decisions are constantly changing. Therefore, research on this problem should be repeated and updated on an ongoing basis, so that enterprises can adapt their offer as accurately as possible to the current purchasing preferences.

2. Research Objectives and Methodology

The aim of this study was an attempt to define the basics determining the purchasing behavior of consumers on the milk and dairy products market. Based on the available literature, an interpretation was made of the factors influencing purchasing decisions on the dairy market. The theoretical considerations were supported by empirical research.

The study, thanks to the conducted research, was aimed at indicating, among others: What factors are the buyers driven by during their daily purchasing decisions on the dairy products market? What is the assortment structure of dairy products purchased by consumers? In addition, determining the role of the brand and marketing (promotional) activities carried out by enterprises in purchasing decisions. Defining the perception of product and marketing innovations and their impact on the

purchasing process as well as the speed of acceptance of these novelties by consumers. 479 respondents took part in the study, of which, after the initial selection, responses obtained from 464 people were sent for further analysis. The selection of the research sample was deliberate. The main selection criterion was the respondents' declaration of regular purchase and consumption of dairy products in households. The research tool was a standardized questionnaire, which consisted of closed questions, both single and multiple choice, and it was fully anonymous. The obtained results made it possible to draw conclusions and compare them with the general market trends taking place in the analyzed sector. Moreover, they were compared with the results of research published by other authors dealing with related issues.

3. Review of Conditions Influencing Consumer Purchasing Attitudes

Due to the development of the theory of consumer behavior, the assumptions of the concepts related to the process of making purchasing decisions are becoming more and more adequate to the current market situation, and the diversity of goals and approaches is reflected in different definitions, thus indicating different types of purchasing behavior (Smyczek and Sowa, 2003). Consumer decisions may be conditioned by many different factors that come from both the broadly understood external environment and the internal conditions of the consumer himself. These factors interact and are constantly evolving.

The basic factors determining consumers' purchasing decisions include: *economic, psychological, social and cultural factors* (Haiyan, 2018).

Economic factors are among the most noticeable and easily measurable determinants of consumer behavior. In their analysis, attention is paid mainly to the impact of the economic environment in which the consumer functions. The most important economic factors determining the possibilities of satisfying consumer needs include, among others price level, individual income, demand, product type, product distribution method and savings. The above-mentioned factors indicate the so-called the consumer's standard of living, i.e., his potential purchasing power and preferences. They determine the behavior of customers in the selection and purchase of food products on the market (Maciaszczyk, 2014).

Another group of described factors are *social factors*. Social relations are a dynamically developing area of life in the modern world, as well as an important factor conditioning purchasing behavior. Consumption has become a means of emphasizing social status and belonging to specific groups (Eckhardt and Giana, 2020). Consumers are sensitive to the show effect, which, on the one hand, allows them to feel belonging to a specific reference group, and on the other hand, allows them to stand out and emphasize their individuality. It is visible in the consumption of products of certain brands, as well as in making purchases in appropriate places and circumstances. The purchase process itself has gained a social dimension and

often goes hand in hand with meeting the needs, which include, among others, making interpersonal contacts or spending free time with family and friends (Schiffman and Kanuk, 2004), (Mirońska, 2010). Each consumer functions in a specific social environment, belongs to a specific class or social group. Participation in a given social group obliges to comply with the standards in force in it (Manstead, 2018). The elements of the social environment that are important from the point of view of influencing the choice of food include, first of all, the family and peer groups, as well as opinion leaders and model-forming groups (Cardello *et al.*, 2000).

Another group of factors are *cultural factors*. Culture is defined as the entirety of the spiritual and material heritage of society, which is passed down from generation to generation. These are customs, beliefs and patterns of behavior that have a large impact on the consumption of individual groups of buyers. The harmonization of consumption patterns on a global scale is the result, on the one hand, of the increasing mobility of consumers who, acquiring various experiences from other cultures, also adopt new consumption patterns.

On the other hand, it can be stated that it is the result of actions of global enterprises, directing a unified offer to various cultural groups and thus influencing the experiences and purchasing preferences of these groups (Zhou *et al.*, 2008). The influence of other cultures on eating attitudes is more visible among young, educated people, representing a higher level of wealth, and seeking innovation. Older, less educated and usually lower-income people show ethnocentric attitudes (Gutkowska and Ozimek, 2005).

The marketing policy currently pursued by the companies (Wongleedee, 2015) is of particular importance on the food products market. Due to the increasing level of customer orientation towards the quality and brand of the product, various pro-innovative activities are gaining importance (Iyer and Pramod, 2019). They concern the introduction of new techniques of product production, changing the composition, improving the sensory attractiveness and packaging of the product, etc., (Tonkova, 2017). The importance of innovative products is much greater in the case of expensive brands than in the case of standard products, where the consumer is usually influenced by a low price (Szwacka, 2007; Tourilla, 2001). The brand plays an important role in the process of selecting products from among those available on the market. The loyalty of buyers to the brand has a significant impact on increasing its reputation and sales, it also contributes to the further development of the company.

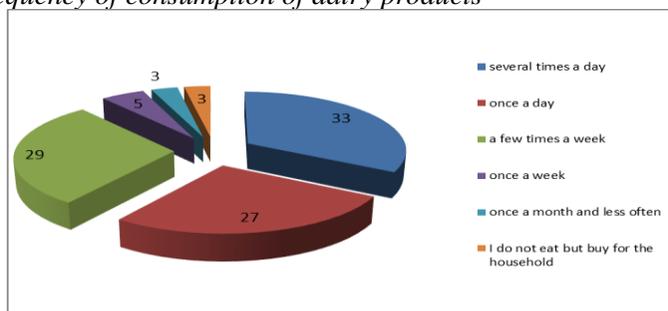
Enterprises operating in the food market are forced to constantly monitor changes in the marketing environment and to adapt activities to the prevailing conditions (Erdal 2020). Adapting the product offer to the changing expectations of customers is the most important from the point of view of creating value for the customer and achieving the goals set by the company (Mirońska 2010).

4. Research Results and Discussion

The study population was 69% female and 31% male. The most numerous group among the respondents were people aged up to 25 (54%), those aged 26-40 were 21%, 41-50 (14%), over 50 (11%). Taking into account the level of education, more than half of the respondents (55%) were people with higher education, 34% had secondary education, and 11% had vocational education. The respondents living in the countryside accounted for 21% of the respondents, 34% of the respondents represented residents of a city with over 500,000 inhabitants. Among the opinion makers, 18% stated that they lived in the city from 20,000 to 100,000 inhabitants. Residents of cities from 100,000 to 500,000 inhabitants constituted 19% of the respondents, while the least numerous group, i.e. 8%, were people living in cities up to 20,000 inhabitants. The most numerous group were schoolchildren/students who constituted 68% of the respondents.

Among the respondents, 33% declared that they eat dairy products even several times a day (these were mostly female people). 29% consume them several times a week. Slightly less, because 27% chose the answer once a day, while 5% of the respondents stated that they eat dairy products once a week. Only 3% of the respondents chose the answer once a month and less often. The same number of people only buy dairy products for other family members, but do not consume them regularly. The obtained results show that dairy products play a significant role in the daily diet of the respondents.

Figure 1. Frequency of consumption of dairy products



Source: Own elaboration based on research results.

According to the research, it was women who more often than men declared to make a purchase decision, and also showed a greater frequency of consumption of dairy products, especially due to their pro-health and dietary values. Taking into account the criteria differentiating consumers' attitudes towards the features of purchased dairy products, it can be concluded that it is women (Szwacka-Mokrzycka and Kociszewski, 2013) who attach more importance to the various features of food products taken into account during the product selection (purchase) process (Uberiziova and Iveta, 2019). They buy them, as a rule, not only for themselves, but also for other members of households with which they live together. Thus, they very

often impose the type of products consumed on a daily basis, thus taking on a specific role of a "household leader" and following the current market trends (Boaitey and Kota, 2020).

Analyzing the responses to the frequency and type of assortment of the groups of dairy products purchased, it can be concluded that the surveyed consumers most often bought traditional milk (most often UHT containing more than 2% fat) (75%) and various types of yoghurts (67%). Consumption of products from the group of yoghurts and various types of milk delicatessen, such as breakfast cheese or drinking yoghurts, was more often declared by people aged 18-25 (53%), most often singles or still living in shared households with parents. The most frequently consumed highly processed products in this age group were natural products without additives, and products enriched with various types of additives, such as fruit or muesli, etc. Of the respondents, 47% of women declared regular consumption of probiotic products, believing in their health-promoting and dietary properties. The importance of respondents is also growing in terms of purchasing organic products (27%), as well as lactose-free products (13%).

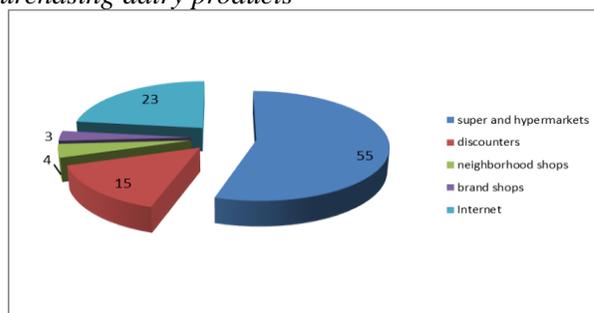
A large proportion of the respondents (64%) declared that they usually buy products such as: cream, butter, cottage cheese, and processed cheese several times a month when making larger purchases for the whole family. In the case of buttermilk, kefir and blue cheese, more than half of the respondents declared that they buy and eat them incidentally. Products such as natural kefir or natural or flavored buttermilk are eaten more often in the summer, e.g., to quench thirst, or as a supplement to the daily diet with dairy products during a break at work on hot days, when the demand for other food products decreases. When it comes to yellow cheese, more than 40% of respondents said that they buy it once a week, and only 7% of people said that they did not buy it at all, most often they were from the oldest part of the study group and who often suffered from food intolerances. and dietary related to the composition of these products.

As many as 55% of the respondents mentioned super- and hypermarkets as their preferred place of purchase due to the rich and varied assortment offer. Discount stores (15%) were next. From among the respondents, only 4% stated that they shop for dairy products in local stores, and 3% obtained their supplies in sponsored stores, if of course there was such a possibility in their place of residence.

On the other hand, the importance of making everyday purchases via the Internet is growing nowadays (23%), given the circumstances in which the research was conducted (COVID 19). Moreover, it should be remembered that the study involved young people in most large cities for whom this type of shopping is not a problem. It should be presumed that the tendency to make this type of shopping will continue to deepen (Seth, Jagdish, 2020) due to the ease and possibility of making them without leaving home and wasting time on traditional shopping. Purchases of the vast majority of dairy products are routine purchases due to their high frequency, as well

as their relatively low unit value and the universality of physiological needs satisfied in this way. The conducted research shows that consumers very often decide to eat dairy products because, according to them, it is a food that is convenient to use (eat). Most of these products are suitable for direct consumption, without the need to put effort into preparing them before consumption.

Figure 2. Place of purchasing dairy products



Source: Own elaboration based on research results.

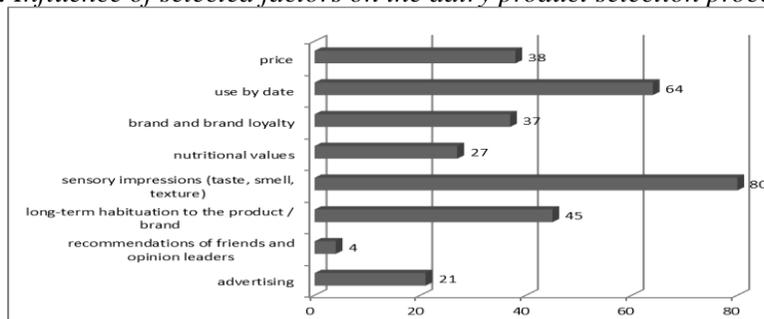
Therefore, these products can be eaten freely regardless of the buyer's location (44%). Many of the respondents buy dairy products out of a habit they learn from family homes (42%), and this process is in many cases closely related to the current model of their household functioning, based in many cases on an easily digestible diet, also in line with the current market trends created by incl. nutritionists and opinion leaders or celebrities.

The research also shows that the most important in the process of choosing a specific type of dairy product are, apart from the above-mentioned factors (technical), also their functional and quality values, such as taste, smell, texture, color (80%) and nutritional values of the product (27%), moreover, an important factor in making decisions about the purchase of a dairy product was also the use-by date (64%) due to the fact that, as it is commonly known, these products are perishable. Almost half (45%) of the respondents stated that their decisions are also influenced by long-term habituation to the purchased product, as well as brand loyalty (37%). Another factor that should be considered in the process of selecting a specific product is the ratio of the price of a given product to the prices of competing brands (38%) within the same product category. Moreover, the important role of advertising activities related to brand promotion was emphasized.

Due to the fact that, as declared by the respondents in making everyday purchasing decisions, one of the most important factors is the role of the brand in making a purchase decision (Kusz, 2020), the study also attempted to clarify what the respondents associate a branded product with. Most of the respondents answered that the brand of a dairy product is closely related to a specific price (60%) and a specific (i.e. acceptable in many respects) quality of the products of a given brand preferred by consumers (57%). For 29% of respondents, satisfaction with use is extremely

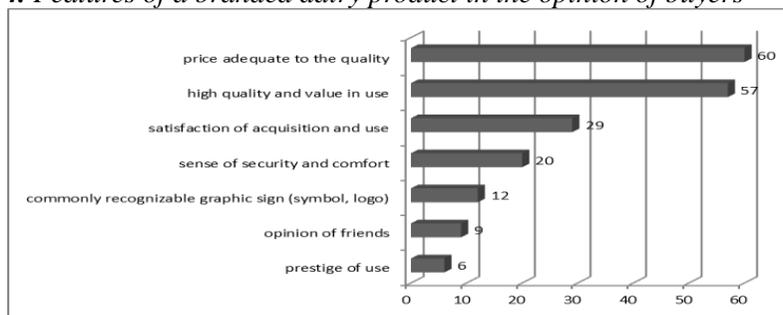
important, and for 20% the sense of security of the purchased product and the comfort of its use. 9% of respondents take into account the opinion of friends about a given brand of a product, while 6% suggest the prestige resulting from the purchase and use of a given product brand.

Figure 3. Influence of selected factors on the dairy product selection process



Source: Own elaboration based on research results.

Figure 4. Features of a branded dairy product in the opinion of buyers



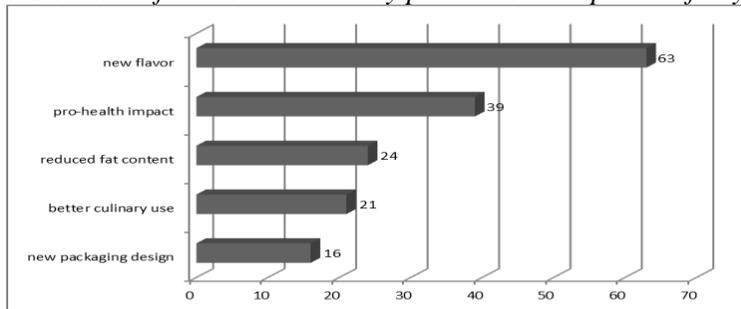
Source: Own elaboration based on research results.

Fixing the brand in the minds of buyers usually reflects the great commitment of producers to all kinds of promotional activities. Advertising is one of the forms of promotion by which enterprises communicate with the client by providing him with valuable messages (e.g., place, time of promotion, introduction of a new product, reminder of an existing product brand, etc.).

The directions of development and diversification of the dairy products market result from the consumption trends mentioned in the theoretical part of the study, as well as from the constantly changing needs and preferences (Kowalczyk and Szymański, 2017) of consumers. In addition to traditional dairy products, the consumption of which is deeply rooted in the daily diet of many households, there are also completely new or significantly changed products on the market, referred to as innovative (Burzińska and Kaczyński, 2016). The innovativeness of such products may be perceived in various ways by consumers (Naspetti, 2021).

Therefore, the survey asked consumers about the features of an innovative dairy product and the respondents' approach to the speed of acceptance of these novelties. Over 60% of respondents stated that such a product has a new taste (new, natural additives), and according to 39% of respondents, that it has an additional pro-health effect (extending the functional properties of products, often reflecting contemporary nutritional trends). According to 24% of respondents, an important feature of the new product is the reduced fat content or its better use of its culinary possibilities (21%). In the opinion of 16% of respondents, an innovative product should necessarily have a new, more recognizable packaging and a new design.

Figure 5. Features of an innovative dairy product in the opinion of buyers



Source: Own elaboration based on research results.

The declarations of the respondents regarding the approach to the speed of acceptance and the purchase process of innovative dairy products are varied. Almost half said that they buy such products when someone recommends them to them. Although the purchase of dairy products, due to the relatively low unit value of these products, is not very risky, especially for the richest part of the respondents, it turns out that it obtains faster approval when the product is recommended by other buyers or opinion leaders. Among the respondents there are people who are open to new products and buy them right after they appear in the store (12%), or buy them relatively quickly (27%). A significant part of the respondents, almost a quarter, declared that they do not buy innovative products in the first stage of their appearance on the market. Such an answer was given by people who are traditionalists, with many years of habits and prefer to buy proven products.

5. Conclusions

Consuming dairy products and making choices when buying them is a phenomenon conditioned by many factors, both external and internal. Systematic observation of changes in consumer behavior is extremely important from the perspective of adjusting the offer of enterprises to the diverse requirements of buyers.

The analysis of the conducted survey relating to consumer behavior on the dairy products market allowed for the formulation of the following statements and conclusions:

Dairy products are widely consumed by respondents, with most consuming them several times a day, once a day or several times a week.

- 1) Among the dairy products, the most popular among the respondents are milk and yoghurt. On the other hand, the least frequently purchased dairy products are buttermilk, kefir, blue cheese and dairy desserts. The respondents buy these products mainly in super- and hypermarkets, which offer a wide range.
- 2) The purchasing decisions of dairy consumers are mostly routine decisions due to the high frequency of purchasing this type of product. The main reason for consuming dairy products is that they are suitable for direct consumption and from the point of view of long-term habits of the respondents.
- 3) In the hierarchy of factors determining the purchase of dairy products, the most important were sensory and functional impressions and the use-by date, but also marketing stimuli turned out to be an important element.
- 4) The brand of a dairy product plays an important role for the respondents in the selection process, albeit diversified for various reasons. More than half of the respondents declare that the brand is of great and great importance. When choosing a specific brand, respondents take into account the price and high quality guaranteed by a specific brand.
- 5) Promotional activities, and in particular advertising, constitute an important element in making everyday purchasing decisions, in combination with the product's functional features, habits and a brand that has been established in the minds of buyers for years.
- 6) Most of the respondents associate an innovative dairy product with a new taste and an additional pro-health effect. The respondents are willing to buy new products, but mainly after they have been tried and recommended by friends or opinion leaders.

References:

- Bierzuńska, P., Kaczyński, Ł.K., Cais-Sokolińska, D. 2016. Rynek innowacyjnych produktów mlecznych, a zachowania młodych mieszkańców gmin wiejskich. *Gospodarka, Rynek, Edukacja* 17(2), 19-24
- Boaitey, A., Kota M. 2020. Determinants of Household Choice of Dairy and Plant-based Milk Alternatives: Evidence from a Field Survey. *Journal of Food Products Marketing*, 1-15.
- Bórawski, P., Guth, M., Parzonko, A., Rokicki, T., Perkowska, A., Dunn, J.W. 2021. Price volatility of milk and dairy products in Poland after accession to the EU. *Agricultural Economics*, 67(3), 111-119. doi:<http://dx.doi.org-1000757hf00a9.han.bg.sggw.pl/10.17221/459/2020-Agricecon>.
- Cardello, A.V., Schutz, H., Snow, C., Leshner, L. 2000. Predictors of food acceptance, consumption and satisfaction in specific eating situations. *Food Quality and Preference*, No. 11.
- Eckhardt, G.M., Bardhi, F. 2020. New dynamics of social status and distinction. *Marketing Theory*, 20(1), 85-102.

- Erdal, B., et al. 2020. Motivation and Health in the Embodiment of Organic Food Consumption Trends. *Fresenius Environmental Bulletin*, 29(7), 5523-5529.
- Grashuis, J., Skevas, Th., Segovia, S.M. 2020. Grocery shopping preferences during the COVID-19 pandemic. *Sustainability*, 12(13), 5369.
- Gutkowska, K., Ozimek, I. 2005. Wybrane aspekty zachowań konsumentów na rynku żywności - kryteria różnicowania. Wydawnictwo SGGW, Warszawa, 21-25.
- Ioanid, A. 2020. Factors influencing marketing decisions. *FAIMA Business & Management Journal*, 8(3), 53-61. Retrieved from: <https://search-proquest-com-1000757hf009b.han.bg.sggw.pl/scholarly-journals/factors-influencing-marketing-decisions/docview/2453147671/se-2?accountid=48272>.
- Iyer, P., et al. 2019. Market orientation, positioning strategy and brand performance. *Industrial Marketing Management*, 81, 16-29.
- Kowalczyk, I., Szymański, A. 2017. Innowacyjność konsumentów na rynku jogurtów. *Studia Ekonomiczne*, 328, 138-146
- Kusz, B. 2020. Consumers' Preferences for Places to Purchase Local Dairy Products. *AgroLife Scientific Journal*, 9(1), 198-204.
- Liu, H. 2018. Cross-Country Food Consumption Patterns: Theory and Measurement. Unpublished PhD thesis, University of Western Australia.
- Maciaszczyk, M. 2014. Teoretyczne aspekty zachowań konsumenckich osób niepełnosprawnych ruchowo. Monografia, Politechnika Lubelska, Lublin, 9.
- Manstead, A.S.R. 2018. The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. *British Journal of Social Psychology*, 57(2), 267-291.
- Meimankulova, Z., Samazhan, U. 2018. Strategic management and development market of dairy products on the basis of increasing domestic and innovation production. *Journal of Applied Economic Sciences*, 13(7), 1984-2003.
- Mirońska, D. 2010. Zachowania nabywców na rynku - trendy i wpływ na działanie przedsiębiorstw. *Zeszyty Naukowe nr. 27. Szkoła Główna Handlowa. Kolegium Gospodarki Światowej*, 114-115.
- Naspetti, S., et al. 2021. Consumer perception of sustainable practices in dairy production. *Agricultural and Food Economics* 9(1), 1-26.
- Schiffman, L.G., Kanuk, L.L. 2004. *Consumer Behavior*. Pearson Education International.
- Scott, M.L., Beth, V. 2019. Expanding the lens of food well-being: An examination of contemporary marketing, policy, and practice with an eye on the future, *Journal of Public Policy & Marketing* 38 (2), 127-135 127-135.
- Sheth, J. 2020. Impact of Covid-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research*, 117, 280-283.
- Smyczek, S., Sowa, I. 2003. Modele rynkowych zachowań konsumentów. *Wyższa Szkoła Zarządzania i Języków obcych w Katowicach, Katowice*, s. 21.
- Szwacka, J. 2007. Kierunki zmian na rynku żywnościowym w Polsce. *Zeszyty Naukowe SGGW, Ekonomika i Organizacja Gospodarki Żywnościowej*, nr 62, Warszawa, 88.
- Szwacka-Mokrzycka, J., Kociszewski, M. 2013. Zagrożenie i szanse rozwojowe rynku cukierniczego w Polsce. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego. Ekonomika i Organizacja Gospodarki Żywnościowej*, (103), 119-130.
- Tonkova, E. 2017. The Need for Balancing Marketing Innovations at Company Level. *International Conference on Management and Industrial Engineering*, No. 8. Niculescu Publishing House.
- Tourilla, H. 2001. Keeping up with the change: Consumer responses to new and modified foods. *Food Chain. Programme Abstract*, 38-40.

- Ubrežiová, I., et al. 2019. Gender differences in consumer preferences when buying dairy products in Slovakia and Russia. *Potravinárstvo Slovak Journal of Food Sciences*, 13(1), 720-729.
- Wongleedee, K. 2015. Marketing mix and purchasing behavior for community products at traditional markets. *Procedia-Social and Behavioral Sciences*, 197, 2080-2085.
- Zalega, T. 2007. *Konsumpcja - podstawy teoretyczne*. Wyd. WWZ, Warszawa, 55.
- Zhou, L., Teng, L., P.S. Poon, P.S. 2008. Susceptibility to global consumer culture: A three-dimensional scale. *Psychology & Marketing*, Vol. 25, No. 4.