

Consumer Preferences towards dairy products in Bosnia and Herzegovina

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Abstract

The dairy industry has been undergoing changes for years, introducing innovations and pushing the boundaries of the category and consumer experience. Numerous factors, such as economic, psychological, cultural, socio-demographic, personal and many others, influence the decision to buy and consume a certain dairy product. It is important to qualitatively research and identify factors that significantly influence consumer behavior. Consumers also set certain criteria when it comes to brand, taste, nutritional value, marketing, product origin, on the basis of which we conclude that knowing consumer preferences also means success in the market. Due to the previously stated reasons, the main goal of this paper is to determine consumer purchasing behavior towards dairy products and their preferences. The survey method was used in the research to collect primary data, and a survey questionnaire was used as a research instrument. A total of 250 respondents participated in this research, which is conducted in Bosnia and Herzegovina.

Keywords: *Consumer behavior, dairy products, involvement*

Introduction

The fundamental marketing concept posits that firms exist to fulfill needs. Marketers can effectively meet these needs only by thoroughly understanding the individuals or organisations who will use the products and services they offer (Solomon et al. 2016). Knowing how consumers behave in shopping is of great importance for marketing managers, because business that is oriented towards customer satisfaction ensures long-term success. Also, understanding what consumers specifically value in a product is complex due to the diversity in consumer behavior, which is shaped by varying socio-economic backgrounds, attitudes and behaviors (Schiffman and Kanuk 2009, Kotler et al. 2010, Ares and Gambaro 2008, Badar et al. 2015). To profitably meet customer desires, companies must understand which aspects of their products and services customer most value (Band & Shah, 2013). Also, Consumers' buying decision are highly complex and are typically influenced by their behavior, perception and attitudes. Purchase behavior is a crucial factor that customers consider when evaluating and deciding on a particular product (Keller, 2001; Jaafar et al., 2012). A good knowledge of the needs of consumers as well as their expectations form the basis for a successful appearance on the market. Only in a situation where the most significant values for the consumer, as well as his lifestyle, are known, all marketing activities and communications can be focused on his real needs. According to AMA, 2007, customer behavior is a dynamic interaction of cognition, behavior and environmental factors, which result in behavior and exchange aspects of customers' lives. According to Schiffman & Kanuk, (2006) customer behavior refers to searching, purchasing, using, evaluating and deciding on products, services and ideas that they expect to meet their needs. Customer purchasing behavior pertains to the buying habits of individuals and households who acquire goods and services for personal use (Kotler et al., 2006). It encompasses the study of how individuals, groups and businesses choose, purchase, use and dispose of products, services, ideas or experiences

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to meet their needs and desires (Kotler, 2014). Food purchasing decisions are becoming more complex as consumers are increasingly aware of, interested in and concerned about the quality, safety, provenance and sustainability of the food they buy (Garcia et al., 2010). Analysis of consumer behavior is actually an important part of marketing that combines elements of psychology, sociology, anthropology and economics in order to obtain answers to the questions of what consumers buy, when they buy, why they buy and how they make purchasing decisions. Knowing and understanding of consumer behavior is of particular importance to manufacturers of food products because it helps them develop new products, adopt the existing offer, direct communication with the market in the most efficient way and finally strengthen the competitive advantage (Kesić & Piri-Rajh, 2009). For any producer or seller to thrive in a market economy, they must create goods or services that potential customers perceive as valuable. Specifically, customers need to find enough value in these goods or services to justify paying a price that exceeds the production costs (Grunert et al. 1993). Also, consumers are increasingly attentive to store environment factors such as atmosphere and personnel, when shopping in supermarkets (Nevin & Suzan Seren, 2010; Turley & Milliman, 2000; Nguyen et al., 2015). These elements significantly influence their perceived value and purchasing decisions regarding food products (Chaudhuri & Ligas, 2009; Nguyen et al., 2015). For this reason, in this research, the focus is precisely on the consumer behavior.

Material and methods

Survey research includes systematic sampling, preparation of questionnaires, data collection and application of statistical analysis techniques, in order to obtain information that describes aspects of the market. In addition to the needs of market analysis, survey research has numerous other applications, the most important of which are scientific and social research (Vest, 1999). Also, this method is often used to examine consumer preferences and the influence of socio-economic characteristics on the investigated phenomena. A personal survey was chosen for this research, considering the advantage it has over other types of surveys, and this advantage is that the interviewer, in case the respondent needs help filling out the survey, can clarify any ambiguities on the spot. In addition, this type of survey creates a higher degree of trust, and the risk of receiving inadequate answers is significantly lower, and thus the research is more credible. For the needs of the survey process, a survey questionnaire was developed, intended for consumers of dairy products. Most of the questions were open-ended, while some were closed-ended. The questions related to the respondents' attitudes were measured by a five-level Likert attitude scale. The impact of socioeconomic characteristics of customers on specific questions was monitored using the Pearson-Chi-Square Test.

Results and discussion

The majority of respondents in the sample are employed or retired, which means that they have their own income. As for income, the largest percentage of respondents in the sample, namely 37.1%, have monthly incomes in the amount of 500 to 1,000 KM, which is in line with the average salary in Bosnia and Herzegovina, which according to the data of the BiH Statistics Agency, in 2017 amounted to 851 KM.

The time and place of consumption are very important because they actually serve as guidelines for how the product will be designed and how we will promote it, that is, what information should be available. When asked for which meal they most often consume dairy products, the largest percentage of respondents (72.6%) stated that they do so for breakfast. There were 11.3% of respondents who consume dairy products as part of lunch, and 8.9% of those who consume dairy products as a snack. The smallest percentage of 7.3% of respondents consume dairy products as part of dinner, which is shown in fig 1. The stated results are in accordance with the expectations and research of Matić (2008), where it was stated that dairy products are most often consumed as part of breakfast, 75%, then as part of dinner 16.9% and lunch 8.1%.

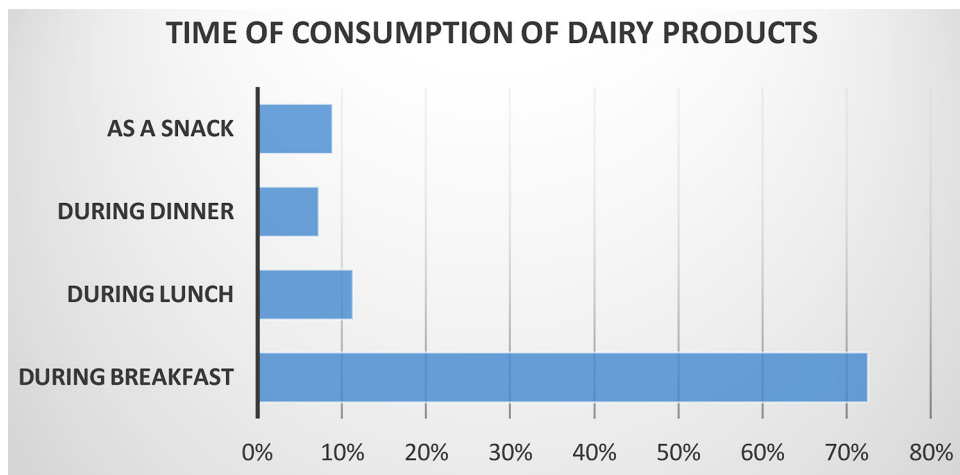


Fig 1. Time of consumption of dairy products

Milk and dairy products are rich in a variety of essential nutrients (Kardas et al., 2016). The largest percentage of respondents, 68.1%, consumes dairy products daily. A significantly smaller percentage of respondents, 19.0%, consumes the mentioned products 3-4 times a week, and 10.5% of those who do so 1-2 times a week. A negligible percentage of respondents, 1.2%, consumes dairy products on a monthly basis (fig 2).

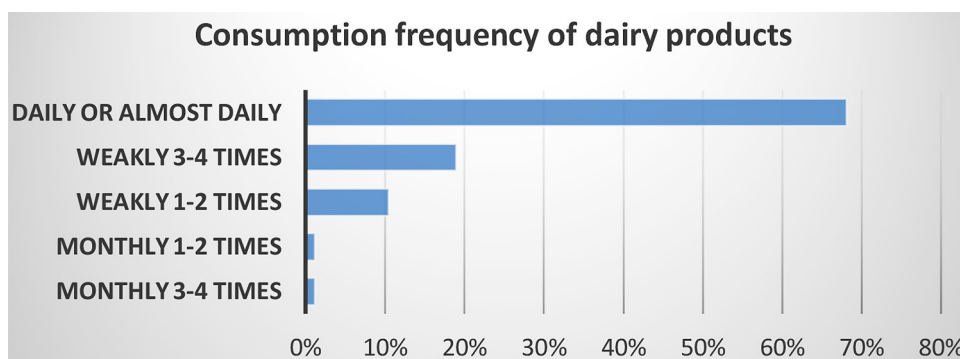


Fig 2. Consumption frequency of dairy products

Much marketing centers on understanding how people, particularly consumer, make decision (Blackwell et al. 2006). Depending on the type of product, consumers express different preferences regarding the place of purchase of food products (Gutkowska & Ozimek, 2005). It is precisely for this reason that it is necessary to monitor all these changes and adjust the companies' marketing programs to them, because product availability is one of the most important characteristics that shape consumer satisfaction, that is, their perception of quality. Simple and constant availability based on the principle of "at the right time at the right place" is an additional service offered by the manufacturer through

adequate realization of the product on the market. That is why it is very important to know where and how often and who buys dairy products. With regard to the place of purchase, the largest percentage of respondents, 58.7%, most often buy dairy products in the nearest store, while 28.9% of those who shop for dairy products in a shopping center. A significantly smaller percentage of respondents, 7.6%, buy the mentioned products directly from farmers, as well as at the market, which is 4.4% of respondents, as shown in fig 3. The above results are in line with the expectations given the increasingly fast pace of life, which does not leave room for the consumer to devote enough time and attention to product selection. For this reason, the largest percentage of consumers decide to buy dairy products in the nearest store. The foregoing open up the possibility for some new forms of supply, such as retail delivery and the provision of some additional services to customers that would certainly enable them to have easier access to the desired products.

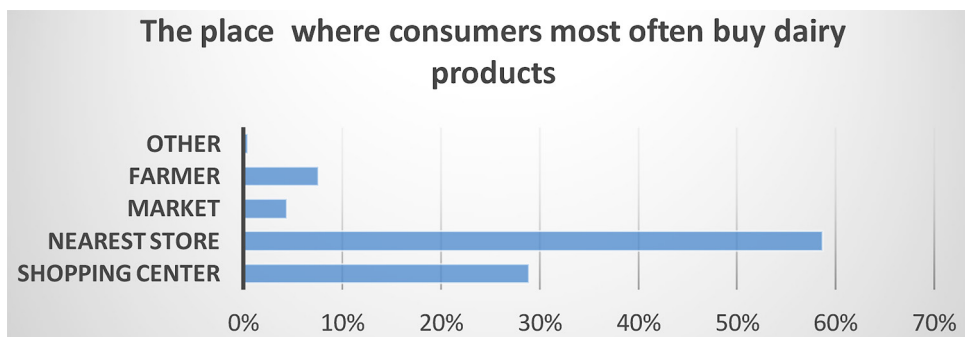


Fig 3. The place where consumers most often buy dairy products

Knowing how consumers get information about a product is extremely important, because the modern era is characterized by strong computerization and the great influence of various media, i.e. promotion, on almost every individual, group, and society as a whole. Due to the development of ecological awareness and the awareness of the importance of a healthy diet, consumers pay more and more attention to food-related information and become more and more involved in making purchasing decisions (Markovina et al. 2004). In today's market conditions, which are characterized by the presence of a large number of the same or similar products, very acceptable substitutes and strong competition, companies are faced with the challenges of finding answers to the questions of how to choose the best way to communicate with consumers and get them to use their products or services. Therefore, it is extremely important to know which media channels consumers use and consider credible (Vranešević et al., 2004).

The results of the consumer survey indicate that the largest percentage of respondents, 41.2%, are not informed at all about dairy products. A significant number of respondents, 30.4%, get information about dairy products by reading the labels on the product itself. 14.4% of respondents get information about the mentioned products through advertisements on TV, 8.0% of them through promotional materials, while the percentage of respondents who get information about dairy products through advertisements on the Internet is significantly lower, and 1.6% of those who are informed through advertisements on the radio, which is presented in fig 4.

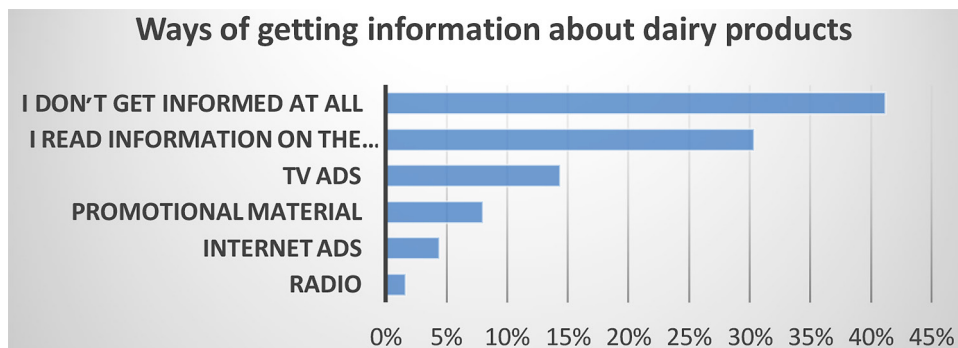


Fig 4. Ways of getting information about dairy products

Broadly speaking, loyalty can be shown by consumers towards brands, services, stores, product categories and activities (Dowling et al., 2003). Customer loyalty can be observed in three ways. It can be based on beliefs or affection towards the brand, it can be manifested as an emotional connection with the brand or it can be seen simply as regular purchases of a particular brand (Dowling et al., 2003). The most accepted model for evaluating the level of loyalty is based on monitoring the combined effects of attitude and behavior, and was developed by Dick & Basu, (1994). The mentioned authors point out that loyalty is the result of the interaction between the relative attitude of the customer towards a certain brand and their repeated purchases of that brand. In this research, the degree of attachment to the brand was evaluated based on the answer to the question: “What do you do when you can’t find the desired dairy product?”.

Based on the data shown in fig 5, it can be seen that in the given situation, 72.0% of the respondents would buy a similar product from another manufacturer, which indicates that the respondents are not sufficiently loyal to a particular brand. A significant percentage 22.8% of respondents would look for the desired brand in another store, and 4.0% of respondents would abandon the purchase if they could not find the desired product. This is a clear signal to companies involved in the processing of dairy products that their customers are not sufficiently satisfied with the products, and that they easily decide to buy a similar product from another manufacturer. This is certainly a clear sign that they should take some measures that would go in the direction of offering products with added value that would best meet the needs of consumers, thus making them loyal.

Regarding the question of consumer loyalty, it was necessary to know the gender and education of the respondents who belong to these three groups. The first group of consumers who, in a situation where they cannot find the desired dairy product in the store, buy a similar product from another manufacturer, then a group of those who go to another store in such a situation, and finally a group of consumers who, when they find themselves in the mentioned situation, give up the purchase. The profile of respondents who belong to the first group, that is, those who buy a similar product from another manufacturer, is made up in the largest percentage of women with a secondary vocational education. The second group of respondents who, in such a situation, go to another store, are also mostly women with secondary education, while the third group of respondents who, if they do not find the desired dairy product, give up shopping, are equally women and men with secondary education. Although these three groups differ, it is important to emphasize that this difference is not statistically significant, but the differences should be kept in mind. All of the above is shown in tables 1 and 2.



Fig 5. Consumer loyalty towards the brand of dairy products

Table 1. Customer loyalty and gender of respondents

		What do you do when you can't find the dairy product you're looking for?						Total	
		I give up shopping		I'm going to another store		I am buying a similar another product from manufacturer			
		n	%	n	%	n	%	n	%
Sex	Male	5	50.0%	27	47.4%	72	40.0%	104	42.1%
	Female	5	50.0%	30	52.6%	108	60.0%	143	57.9%
	Total	10	100%	57	100%	180	100%	247	100%

Pearson Chi-Square Test =1.231, df=2, p<0.540

Table 2. Customer loyalty and respondents' education

		What do you do when you can't find the dairy product you're looking for?						Total	
		I give up shopping		I'm going to another store		I am buying a similar another product from manufacturer			
		n	%	n	%	n	%	n	%
Education	Primary school	0	0.0%	3	5.3%	19	10.6%	22	8.9%
	Secondary school	8	80.0%	41	71.9%	121	67.2%	170	68.8%
	University	2	20.0%	13	22.8%	40	22.2%	55	22.3%
	Total	10	100%	57	100%	180	100%	247	100%

Pearson Chi-Square Test =2.649, df=4, p<0.618

New ways of eating emphasize the health of consumers and meeting the needs of consumers of different categories (Gregurek, 2000). Sophisticated consumers are increasingly demanding and are able to choose products that suit them and that, according to their opinion and information, have a positive impact on their health, digestion, slim line, and correspond with ethical and other values that are important to them. It is precisely for this reason that the dairy industry is continuously developing in the direction of satisfying consumer demands (Park, 2018). In the food products market, there is a noticeable fragmentation of consumer needs and a clear trend towards diversification in consumer expectations for specific food products (Nowicki & Sikora, 2012). The dairy industry, which is aware of the importance of the wishes and needs of consumers, presents milk and dairy products less and less as milk and more and more as medicine. Also, it is important to emphasize that consumers' perceptions of a product can significantly influence their attitudes, judgments and choices (Alba & Hutchinson, 1987). Consumers today seek food products that offer high quality and has strong branding, detailed labeling and variety of quality attributes to meet their needs (Ishida, Law & Aita, 2003; Boniface & Umberger, 2012). As consumers have more education, they increasingly focus on health associated with their food choices and diet (Quah & Tan, 2010; Boniface & Umberger, 2012). Both verbal and non-verbal elements can communicate health-related messages and motivate consumers to choose safe and healthy food options (Grunert, 2002, Steenkamp and Baumgartner, 1998, Tudoran et al., 2009, Vidigal et al., 2011, Carillo et al., 2014). While health benefit information can influence acceptance, its impact largely depends on the consumers existing knowledge and beliefs (Verbeke, 2005, Baixauli et al., 2008, Carillo et al., 2014). Because of all the above, in this research, the respondents were asked a question related to their preferences for products that are enriched with some additives or without certain ingredients that could affect their health. These preferences indicate the level of sophistication of manufacturers and the willingness to accept innovations.

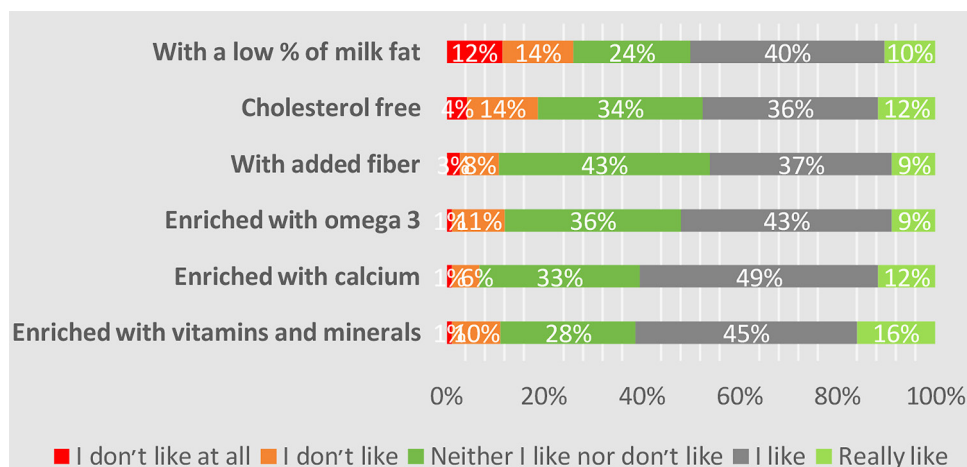


Fig 6. Consumer preferences for different dairy products

In the conducted survey, the largest percentage of respondents, 61.2%, pointed out that they really like and like dairy products that are enriched with vitamins and minerals. The mentioned products are not preferred by 11.2% of respondents, while 27.6% of those who neither like nor dislike such products. When it comes to calcium-enriched products, 60.4% of the respondents pointed out that they really like and like the mentioned products, while

6.8% of the respondents stated that they do not like and do not like these products at all. A significant percentage of respondents (33.0%) pointed out that they are indifferent to products enriched with calcium. Products enriched with Omega 3 are preferred by 52.0% of respondents, while 12.0% of respondents pointed out that they do not like and do not like the mentioned products at all. A significant percentage of respondents (36.0%) pointed out that they neither like nor dislike these products. When it comes to dairy products with added fiber, 46.0% of respondents in the sample stated that they like and like the mentioned products very much, and a small percentage of respondents of 11.0% stated that they do not like the mentioned products at all and they don't like it. A significant percentage of respondents of 43.0% is indifferent when it comes to these products. Cholesterol-free products are preferred by 48.0% of respondents, compared to 18.0% of those who do not like and do not like such products at all. Quite a large percentage of 34.0% of respondents have no attitude towards these products. And finally, half of the respondents (50.0%) like and like products with a low percentage of milk fat, while 26.0% of those who do not like and do not like such products at all. Also, the percentage of respondents, 24.0% of them, who neither like nor dislike products with a low percentage of milk fat is significant (fig 6).

Conclusion

Knowing what consumers value in a product is very complex and caused by different consumer behavior. Consumer behavior research is extremely important for companies, because only in this way can they find out what consumers value and what their preferences are, and offer products on the market that will satisfy consumers in the best possible way, that is, products that customers will return to again and again. The ability to accurately describe overall consumer behavior presents a clear incentive for competitive, market-oriented firms to target differentiated market segments, thereby meeting the needs and desires of quality-conscious consumers (Krystallis & Ness, 2005). On the basis of everything presented, it can be concluded that the respondents show a preference for innovative products and that there is a large space that the actors of the value chain of dairy products should use in terms of adding value to the products.

References

- Alba JW, Hutchinson JW 1987: Dimensions of Consumer Expertise. *Journal of Consumer Research* 13 (4): 411-454.
- Badar H, Ariyawardana A, Collins R 2015: Capturing Consumer Preferences for Value Chain Improvements in the Mango Industry of Pakistan. *International Food and Agribusiness Management Review* 18 (3): 131-148.
- Band G, Shah NV, 2013: Customer is the King... A Microscopic View into Selection of Tea Brand in Nagpur & Wardha. *Annamalai International Journal of Business Studies & Research* 5: 56 – 67.
- Blackwell RD, Miniard PW, Engel JF 2006: *Consumer Behavior*. Thomson South Western, Mason, OH.
- Boniface B, Umberger JW 2012: Factors influencing Malaysian consumers' consumption of dairy products. Contributed paper prepared for presentation at the 56th AARES annual conference, Fremantle, Western Australia.
- Carrillo E, Fiszman S, Lahteenmaki L, Varela P, 2014: Consumers' perception of symbols and health claims as health-related label messages. A cross-cultural study", *Food Research International*, doi: 10.1016/j.foodres.2014.04.028.
- Dick AS, Basu K 1994: Customer Loyalty: Toward an Integrated Conceptual Framework. *Journal of the Academy of Marketing Science* 22 (2): 99-113.
- Dowling GR, Uncles MD, Hammond K 2003: Customer loyalty and customer loyalty programs. *Journal of Consumer marketing* 20 (4): 294-316.
- Garcia C, Fearne A, Wood L 2010: The role of involvement in the attention paid by supermarket shoppers to organic products, *Journal of Innovation Economics & Management* 5: 127-144.
- Gregurek Lj 2000: Učinak mliječnih proizvoda na zdravlje potrošača. *Mljekarstvo* 5 (3): 249-254.
- Grunert KG, Brunso K, Bisp S 1993: Food-related life style: Development of a cross-culturally valid instrument for market surveillance, MAPP working paper No 12, University of Aarhus, Aarhus, Denmark.
- Jaafar N S, Lalp PE, Naba MM 2012: Consumers' perception, attitudes and purchase intention towards private label food products in Malaysia. *Asian Journal of Business and Management Sciences* 2 (8): 73-90.

- Kardas M, Grochowska-Niedworok E, Calyniuk B, Kolasa I, Grajek M, Bielaszka A, Kiciak A, Muc-Wierzgon M 2016: Consumption of milk and milk products in the population of the Upper Silesian agglomeration inhabitants. *Food and nutrition research* 60: 1-6.
- Kesić T, Piri-Rajh S 2009: Longitudinalno istraživanje stila života hrvatskih potrošača prehrambenih proizvoda. *Tržište* 21 (2): 149-166.
- Kotler P 2008: *Principles of Marketing*. Pearson Education, Harlow, UK.
- Kotler P and Keller K 2014: *Marketing Management*. 15th Edition, Prentice Hall, Saddle River.
- Krystallis A, Ness M 2005: Consumer Preferences for Quality Foods from a South European Perspective: A Conjoint Analysis Implementation on Greek Olive Oil. *International Food and Agribusiness Management Review* 8 (2): 62-91.
- Markovina J, Kovačić D, Radman M 2004: Consumer involvement in buying decisions – the example of three food products in Croatia. *Journal Central European Agriculture* 5 (3): 151-159.
- Nguyen NA, Phan TH, Vu PA 2015: The Impact of Marketing Mix Elements on Food Buying Behavior: A Study of Supermarket Consumers in Vietnam. *International Journal of Business and Management* 10 (10): 206-215.
- Nowicki P, Sikora T 2012: Consumer Behaviour at the food market. Conference paper, 18th IGWT Symposium, Rome, Italy.
https://www.researchgate.net/publication/258889655_CONSUMER_BEHAVIOUR_AT_THE_FOOD_MARKET
- Ozimek I and Kakowska-Biemans S 2011: Determinants of Polish consumers food choices and their implication for the national food industry. *British Food Journal* 113(1): 138-154.
- Shiffman L, Kanuk L 2004: *Ponašanje potrošača*. Mate, Zagreb, Hrvatska.
- Solomon MR, Bamossy GJ, Askegaard S, Hogg MK 2016: *Consumer Behaviour – A European Perspective*. Pearson Education Limited 2016.
- Vest K 2004: *Istraživanja tržišta*. Clio, Beograd, Srbija.
- Vranešević T, Vignoli C, Vrontis D 2004: *Upravljanje strateškim marketingom*. Accent, Zagreb, Hrvatska.