

MARKETING STUDY ON ROMANIAN CONSUMER PREFERENCES FOR COW MILK

Andreea Daniela GIUCĂ

Research Institute for Agriculture Economy and Rural Development Bucharest, 61 Marasti Boulevard, District 1, 011464, Bucharest, Romania, Phone:+40787700676, Fax:+40213136096, Mobile +40760235208, Emails: giuca.daniela@iceadr.ro

Corresponding author: giuca.daniela@iceadr.ro

Abstract

The main purpose of the paper is to analyze the preferences of Romanian consumers towards cow's milk, following the frequency of milk consumption, quantities consumed, brands and type of packaging preferred, the price they are willing to allocate per liter of milk, depending on: of residence, age and income. In this sense, a questionnaire was made on the Google Forms platform on a sample of 84 people, female and male, which was processed through the SPSS program, the results being interpreted analytically and presented in the form of graphs. Following the study, there was a declining trend in milk consumption among the population, fueled by new food styles, especially among young people and females, two categories influenced by new consumption trends. Among the respondents, a significant number of people consuming milk was noticed, in proportion of 90.5%, and 9.5% stating that they do not consume this product. The most important criterion underlying the decision to buy milk among respondents is the taste, followed by packaging and shelf life, thus finding a consumer behavior inclined to quality, to the detriment of the quantity of products purchased.

Key words: consumption, marketing, milk, Romania

INTRODUCTION

Food is a hotly debated topic in recent years, not only nationally but globally, its problem being more and more serious, due to the new modern lifestyle, which has emerged among the population.

Milk is one of the most complex food products, containing protein, vitamins and minerals, being one of the basic products found in the food pyramid.

Milk production is one of the most important sub-branches of agriculture in Romania, with a significant contribution on the economy [3, 4].

The Romanian milk and dairy market has made substantial progress in recent years. There are over 360 milk processing factories in the country, of which 120 with a high level of capacity, Romania having a great potential for milk production, thus becoming one of the main producers of certified dairy products in the European Union, after Germany, France, the United Kingdom, the Netherlands, Poland, Italy and Spain. However, Romania remains a net importer of dairy products [2, 5, 12].

In Romania, the largest players on the dairy market are represented by the companies: Albalact, Olympus and Covalact, the highest business growth in the last decade being recorded at Olympus, starting from over 30 million lei and reaching approximately 370 million lei. The dairy market in Romania is characterized as extremely competitive among companies operating in the milk processing industry [7, 11].

Current daily milk consumption does not meet the normal physiological requirement for the population's diet. At European level, the highest consumption of milk is recorded in Western countries, consumers in this area consider milk, a healthy nutritious product, being a rich source of calcium. In Romania, milk consumption is low compared to other countries in the European Union, thus occupying the penultimate place in the consumption of cow's milk packaged with a consumption of 32 ml of milk per person/day, followed by Bulgaria which records a consumption of 23 ml person/day, according to a study conducted by the research company Euromonitor [13].

In 2019, the average annual milk consumption in Romania was 66.28 liters, down from previous years. By area of residence, the average annual consumption in rural areas is higher than in urban areas, a possible cause of this discrepancy may be represented by the low incomes of the rural population compared to those in urban areas.

The purpose of this paper is to analyze and present the preferences of Romanian consumers towards cow's milk and how they perceive this product.

MATERIALS AND METHODS

The paper analyzes consumers' preferences for cow's milk in Romania. For the study, the survey method and the ranking of results were used, having as main tool the questionnaire. It consisted of a set of 14 questions, for the study the following questions from the questionnaire were selected:

- Do you consume milk?
- What is the frequency of milk consumption?
- What is the budget allocated for a liter of milk?
- What type of packaging do you prefer?
- What is the amount of milk consumed in a week?
- What brand of milk do you prefer?
- Where do you usually buy milk from?
- What is your favorite brand of milk?
- What is the criterion underlying the decision to buy milk?
- How do you rate the following statements about Zuzu milk? (total agreement, indifferent, total disagreement)
- What is your gender?
- What age category do you fall into? (under 18, 18-35 years, 36-50 years, over 50 years)
- What income category do you fall into? (under 1,000 lei, 1,000-2,000 lei, 2,001-3,000 lei, over 3,000 lei)
- What is the environment of residence? (urban, rural).

Two ways of researching consumer preferences were addressed, namely: qualitative research and quantitative research, starting from the objectives of research on consumer preferences for milk, followed by

assumptions, on the basis of which a questionnaire was conducted. The data collection process took place in November 2020 and included the following steps: posting the questionnaire on the Google Forms platform, distributing it on social networks, taking over the answers and centralizing them. The result obtained after completing the questionnaire by a sample of 84 people was processed using the SPSS program and interpreted, thus analyzing the behavior of the Romanian consumer towards milk. An analysis was made on the basis of the graphs made through the program, following which the trends in milk consumer behavior were presented, as well as the possible causes that led to these results.

RESULTS AND DISCUSSIONS

To carry out the marketing study on consumer preferences for milk, it was used a special questionnaire and a sample of 84 people, female and male who come from both urban and rural areas, from different social categories [6].

Analyzing the answers *according to the gender* of the respondents, it was noticed that the male population consumes 100% milk, while the female population consumes 84%, the remaining 16% do not consume. It was observed that the respondents who do not consume milk are female (Fig. 1).

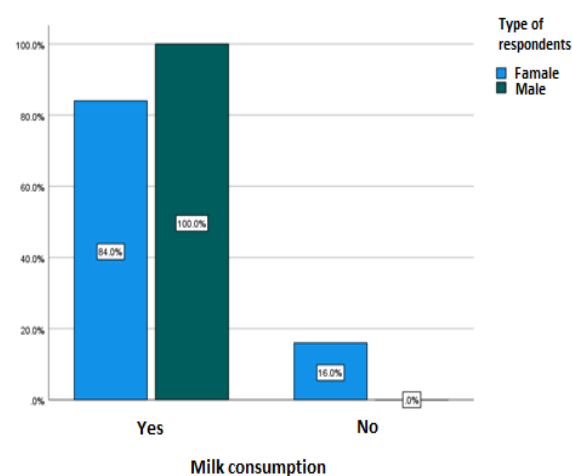


Fig. 1. Milk consumption by gender
Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

Recent years have seen a reduction in milk consumption and even its elimination, especially among women, the main reason being the trend towards a healthy and balanced lifestyle, with many people choosing to adopt a vegan diet, which completely excludes the consumption of milk, products of animal origin, such as milk. In the last two years, the vegan lifestyle has become increasingly popular among the European population, with an increase in the number of vegans and a decrease in cow's milk consumption.

Cow's milk is one of the foods on a downward trend in popularity, with the advent of milk alternatives, such as soy milk, almonds milk or coconut milk.

Population aging, urbanization and a growing middle class are the main factors determining

important changes in living conditions and consumption patterns [14, 15].

Following the analysis according to the environment of *residence of the respondents*, it was observed that in rural areas 42.9% of respondents consume milk 2-3 times a week, 28.6% 4-5 times a month, 14.3% do not consume, 9.5% consume daily, and 4.8% consume milk less than 2 times a month. Regarding the frequency of milk consumption in urban areas, it was noted that 33.3% consume 2-3 times a week, 23.8% consume daily, 23.8% consume 4-5 times a week, 14.3% consume less 2 times a month, 4.8% do not consume.

For both rural and urban areas, the highest frequency of responses was recorded as "2-3 times a week", which means that most respondents consume milk weekly (Fig.2).

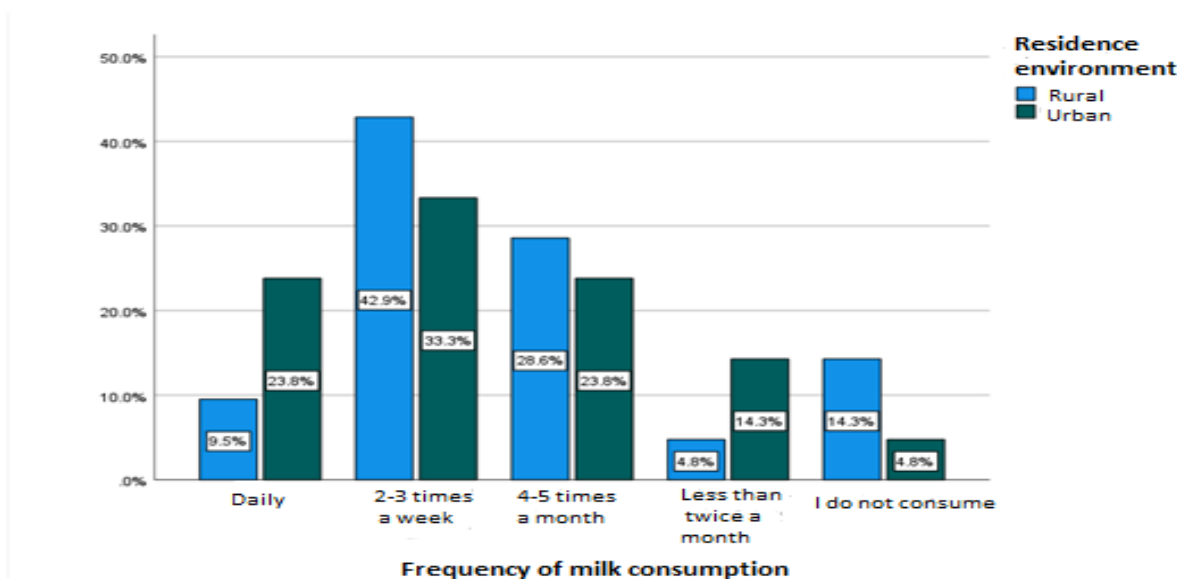


Fig. 2. Frequency of milk consumption depending on the environment of residence of the respondents
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

According to statistics, milk consumption per person in rural areas is significantly higher than in urban areas, as well as its frequency.

How much money consumers are willing to pay per one liter of milk? It was noted that those who are willing to pay more than 3 lei

per liter of milk are people living in urban areas.

People in rural areas are willing to pay 5 lei or less per liter of milk, the main factor influencing these discrepancies being the standard of living, which is lower in rural areas than in urban areas (Fig. 3).

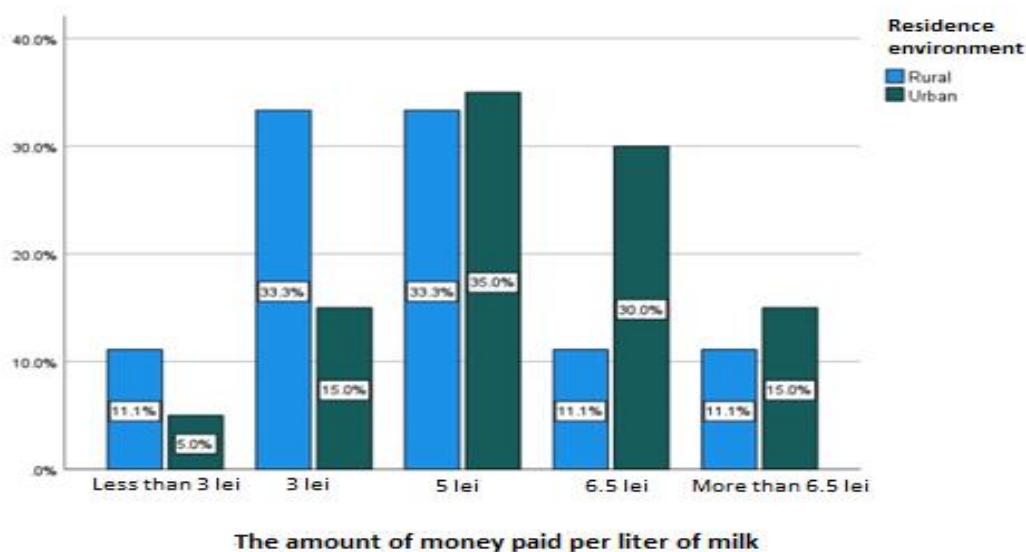


Fig. 3. The amount of money paid per liter of milk depending on the environment of residence of the respondents
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

Analyzing the answers of the surveyed respondents to the question, „*What type of packaging do they prefer?*”, it was observed that urban residents prefer milk packaged in

glass (50%) and cardboard (30%), while rural respondents mostly prefer milk packed in plastic (38.9%) and glass (33.3%) (Fig.4).

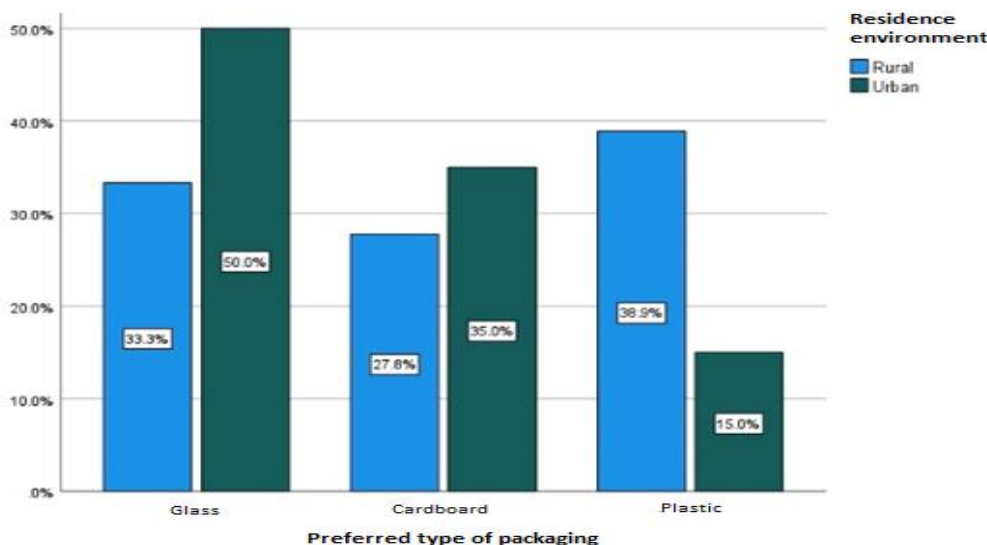


Fig. 4. The type of packaging preferred by consumers depending on the environment of residence
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

It is noteworthy the tendency of consumers to glass packaging, a material that can be recycled by melting without damaging its quality. Glass is an optimal material for health and taste, as it does not influence the aroma of milk and there is no chemical that could interact with the liquid, which can not be said about plastic, which in urban areas is the least preferred packaging for such of products.

How much milk is consumed per week?

Following the amount of milk consumed per week according to the age of the respondents, the following were observed: among the respondents under the age of 18, 50% consume between 0.5 and 1 liter, 31.2% consume between 1-3 liters per week and 18.8% do not consume. At the level of respondents aged between 8 and 35 years: 60.9% consume milk between 0.5 and 1 liter,

26.1% consume between 1 and 3 liters, and 8.7% do not consume. Regarding consumers aged between 36 and 50 years, 50% consume

milk in an amount between 0.5-1 liters, and the remaining 50% consume between 1-3 liters.

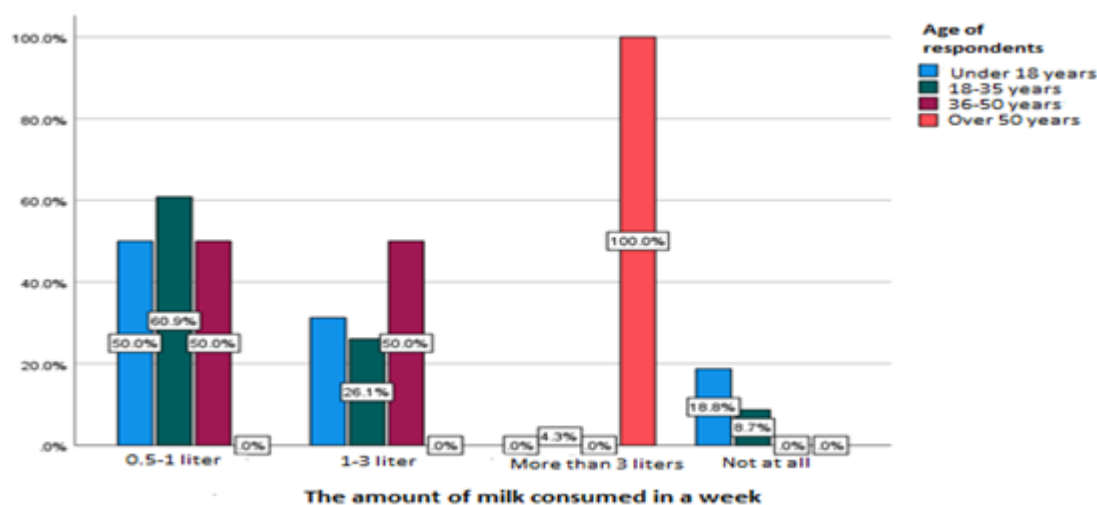


Fig. 5. The amount of milk consumed in a week depending on the age of the respondents
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

Only one respondent over 50 years old (100%) stated that he consumes milk in an amount greater than 3 liters per week. Of note is the trend of consumption in an amount between 0.5 and 1 liter per week for most age groups, which is a low milk consumption (Fig. 5).

Which is the place from where consumers prefer to buy milk, depending on their age?

Researching the respondents' preferences regarding the place where they buy milk

according to age, it was observed that the people who choose to buy milk from the supermarket are those who are part of the age category 36-50 years in proportion of 100%.

Consumers who buy milk from local producers are 100%, those over 50 years old, and those who choose to buy milk from small shops are represented in proportion of 9.1% by people aged between 18 and 35 for years. (Fig. 6).

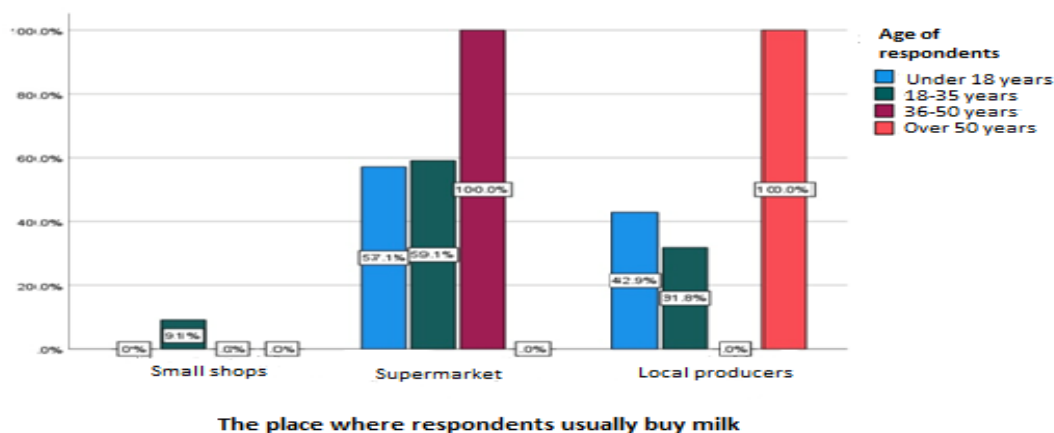


Fig. 6. The place where consumers are accustomed to buy milk according to age
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

How respondents' income influence the choice of the milk brand? Depending on the

income of the respondents, it was noted that: respondents with incomes below 1,000 lei

prefer in a proportion of 66.7% the Albalact brand, 16.7% Dairy with creme and 16.7% Olympus. Respondents whose income is between 1,000 and 2,000 lei in a proportion of 33.3% equally prefer the Albalact, Pilos and

Muller brands. Respondents with an income between 2,001 and 3,000 lei prefer in proportion of 53.8% the Albalact brand, 23.1% prefer Pilos, 15.4% Olympus and 7.7% Caimac Dairy.

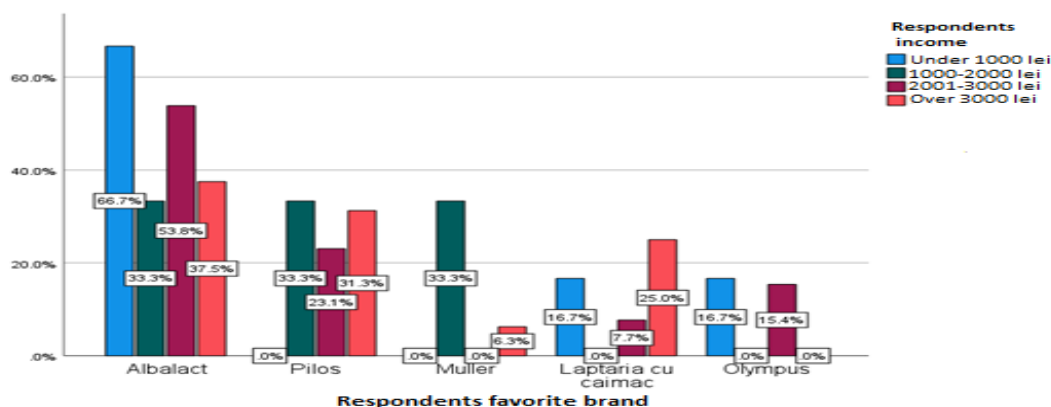


Fig. 7. Preferred brand depending on the income of the respondents

Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

Regarding the milk consumers with an income of over 3,000 lei, it is observed that in a proportion of 37.5% they prefer milk from the Albalact brand, 31.3% Pilos, 25% Dairy with caimac and the remaining 6.3% prefer Muller (Fig.7).

It should be noted that the Albalact brand is the most preferred milk brand among respondents for all income categories analyzed. The main reason why the Albalact brand is a favorite can be the fact that it has a monopoly on the dairy market and has a diversified portfolio of brands and products for all age categories and at affordable prices [9].

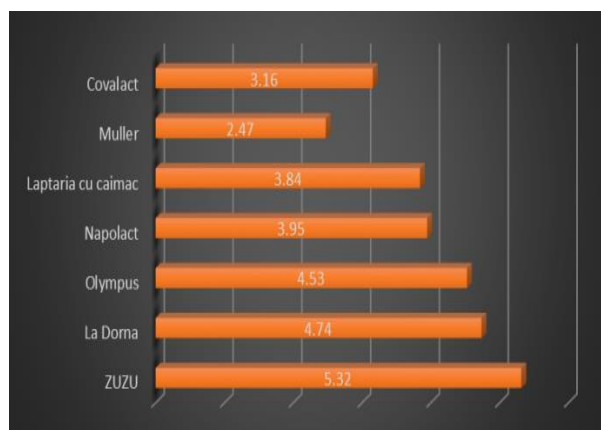


Fig. 8. Respondent's preferences regarding the milk brand

Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

The best ranked brand in the top of consumer preferences is Zuzu, a brand that belongs to the brand with the highest notoriety among respondents, namely Albalact, with a percentage of 5.32%, followed by La Dorna 4.74%, Olympus 4.53%, Napolact 3.95%, Caimac dairy 3.84%, Covalact 3.16% the last ranked being Muller, with a percentage of 2.47% (Fig. 8).

The number 1 consumer choice, Zuzu is one of the most favorite Romanian brands, remaining a leader on the dairy market for almost a decade.

Zuzu is the brand that brought to Romania the first and most used modern packaging for fresh milk - the Tetra Top cardboard box.

The innovation of 2006, but not only, led to an increase in milk consumption and made Zuzu the leader in the fresh milk market [1].

Given the market acceptability score, consumers appreciate the milk sold by the Zuzu brand as a product with a pleasant taste. As regards the packaging of the milk and the quality-price ratio, it is indifferent, these criteria not being among those taken into account in the decision to purchase the milk. (Fig.9).

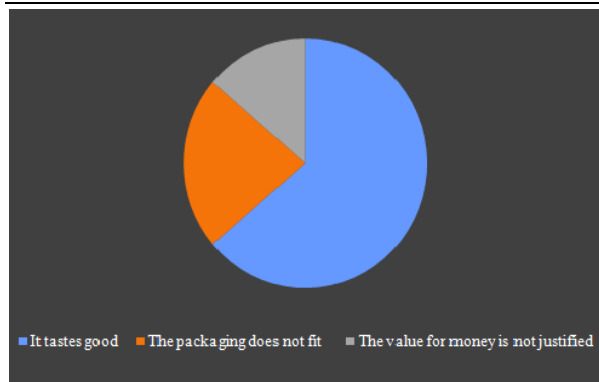


Fig. 9. Acceptability score of the Zuzu brand
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

It is worth noting the consumers' preference over the quality of the milk, which is distinguished by the taste of the products.

Which are the criteria taken into account for milk purchase? The most important criterion taken into account by consumers when they decide to buy milk is the taste, in percentage of 4.87%, followed by the term of validity and packaging (4.39%), criteria that are equal from this point of view. Brand (3.89%) and fat content (3.87%) are criteria that are also of almost equal importance for them, so that in the end the factor that least influences the purchase decision is the price (3.26%).

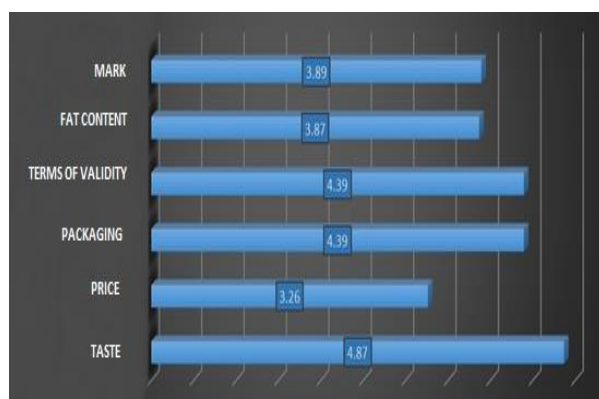


Fig. 10. Criteria in the purchase decision
 Source: data processed on the basis of the questionnaire - Study on consumer preferences for milk.

Thus, it turns out that a consumer chooses to buy milk according to taste, placing more emphasis on the quality of milk, which is determined by its composition, especially in the percentages of fat and protein, than on the price paid, which has a slight trend. growth influenced by increased production costs of farmers and processors (Fig. 10) [8, 10, 11].

CONCLUSIONS

In Romania, there has been a downward trend in milk consumption, with consumers becoming increasingly demanding in terms of quality and quantity of milk consumed. Of note is the trend of consumers towards a healthier and more balanced diet, choosing to adopt vegan diets, excluding from consumption animal products such as milk and replacing them with products of vegetable origin.

Following the study based on the questionnaire applied to a sample of 84 people, of which a share of 90.5% consume milk, and the remaining 9.5% do not consume, the following aspects were concluded by consumers' preferences for milk: most respondents (38, 1%) consume milk 2-3 times a week, 26.2% of them consume milk 4-5 times a month, 16.7% consume daily, 9.5% consume less than 2 times a week and 9.5% do not consume. Following the answers, there was a fairly high frequency of milk consumption. Regarding the amount of milk consumed in a week, in a majority proportion of 54.8% stated that they consume milk in an amount between 0.5 and 1 liter, the remaining 28.6% answered between 1 and 3 liters, 11.9 % answered that they do not consume and 4.8% consume more than 3 liters.

It was observed that brands (3.89%) represent one of the main criteria for choosing and buying milk, by taste (4.87%). It should be noted that at the level of the analyzed sample, the most preferred brand is Albalact, Zuzu milk being in the top of milk consumers' preferences. Albalact is the largest milk processing company in Romania, with a diverse range of products in its portfolio. Regarding the place where they prefer to buy milk, respondents said 57.9% that the chosen place is the supermarket, followed by local producers (36.8%) and small shops (5.3%). The supermarket is ranked in the top of consumers' preferences in terms of where to buy milk, being an accessible place that meets the quality and marketing standards of the European Union.

One of the criteria that had a minimal influence on the decision to buy milk for the respondents was the price, 34.2% said they are willing to allocate the amount of 5 lei per liter of milk, 23.7% allocate 3 lei, 21.1% are willing to spend 6.5 lei, 13.2% pay a price higher than 6.5, and 7.9% allocate a price lower than 3 lei.

REFERENCES

- [1]Albalact-the largest milk producer in Romania, 2020, RisCo, <https://www.risco.ro/suport/practici-in-afaceri/albalact-cel-mai-mare-producator-de-lactate-from-romania-2995>, Accessed on 07.01.2021.
- [2]Beciu, S., Chihaiia, A., 2010, Aspects regarding the dairy products chain in Romania, Seminar "Economics of the agri-food sector - achievements and perspectives", *Economie*. Vol. 25 (2):21-24.
- [3]Bercu, F., Micu, M.M., Pătrașcu, G., 2010, The importance of marketing in the marketing of milk and dairy products, Seminar "Economics of the agri-food sector - achievements and perspectives", *Economie*. Vol. 25 (2):24-27.
- [4]Grigoras, M.A., 2016, Trends in Romania's agricultural production, *Scientific Papers Series Management, Economic Engineering in Agriculture and rural development*, Vol. 16 (1):183-191.
- [5]Grigoras, M.A., 2017, Research on the trends in animal production in the last decade in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and rural development*, Vol. 17 (4):131-142.
- [6]Low milk consumption in Romania, 2015, European Parliament, https://www.europarl.europa.eu/doceo/document/E-8-2015-011352_EN.html, Accessed on 06.01.2021.
- [7]Panaete, M., 2017, How the milk market has changed in the last decade: three of the top ten players have grown their business at least four times, 2017, *Ziarul Financiar*, <https://www.zf.ro/companii/retail-agrobusiness/cum-sa-schimbati-piata-lactatelor-in-ultimul-deceniu-trei-dintre-primii-zece-jucatori-si-aumarit-de-at-least-four-times-business-16627553>, Accessed on 07.01.2020.
- [8]Panzaru, R.L., Medelete, D.M., 2018, The evolution of milk purchase price in Romania (2012-2016), *Scientific Papers-Series Management, Economic Engineering in Agriculture and rural development*, Vol. 18 (4):219-224.
- [9]Popescu, A., 2015, Research on the top Romanian trademarks in the milk and dairy products' market, *Scientific Papers Series Management, Economic Engineering in Agriculture and rural development*, Vol. 15(1):367-376.
- [10]Popescu, A., 2016, The milk market concentration and competition thresholds in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and rural development*, Vol. 16(2):247-251.
- [11]Popescu, A., 2017, Trends in milk market and milk crisis impact in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and rural development*, Vol.17(2):281-289.
- [12]Popescu, A., Stoian, E., Serban, V., 2019, The EU-28 milk sector trends in the period 2009-2018, *Scientific Papers-Series Management, Economic Engineering in Agriculture and rural development*, Vol. 19(4):249-263.
- [13]Questionnaire, Marketing study on consumer preferences for milk consumption, Google Forms, <https://docs.google.com/forms/d/e/1FAIpQLSfk39MjGp8nhbzkH1sFH4eDjMSJ5PhPDVFnAxBrpBMs20m>, Accessed on 23.11.2020.
- [14]Tetra Pak: trends in the world dairy market, 2010, Modern Buyer, <https://modernbuyer.ro/tetra-pak-tendinte-pe-piata-mondiala-a-lactatelor/>, Accessed on 06.01.2021.
- [15]Trends that may influence milk consumption according to the Tetra Pak Dairy Index study – INFOGRAPHIC, 2015, Retail-FMGG.ro, <https://www.retail-fmcc.ro/servicii/tendinte-care-pot-influenta-consumul-de-lapte-conform-studiului-tetra-pak-indexul-lactatelor-infographic.html>, Accessed on 06.01.2021.