Abstract

This study presents the results of a survey conducted in the Province of Vojvodina, Serbia to investigate consumers’ attitudes towards goat milk and goat milk products. Furthermore, the factors affecting consumer perception and subjective norms with respect to purchase were examined. The quantitative random survey was conducted and the data were collected using a structured questionnaire. The findings from this study revealed significantly lower acceptance of goat milk and dairy products compared to bovine milk and dairy products. Of total 440 respondents, 24.2 % had never consumed goat milk with significant positive impact (p<0.05) of age on consumption was found. Among, respondents, mostly the young population (18-25 years) does not consume goat milk. The study identified the odour (42.3 %) and taste (22.5 %) as the main barriers for consuming goat milk. In regard to purchasing, more than half of interviewed respondents do not buy goat milk and dairy products (67 % and 70.5 %, respectively) while the rest respondents expressed very low purchasing frequency. Health benefits represent the most important reason for potential consuming goat milk and dairy products (66.5 %). On the other hand, the main motives for purchasing bovine milk and dairy products are taste and quality (55.5 %). In particular, the oldest surveyed population (40-55 years) seemed to be the most positive group toward goat milk and the most interested in the product’s nutritional value and its health impact. The main category of goat dairy products purchased among surveyed respondents was cheese. These findings suggest that for better positioning on the market and for producing price-competitive products goat milk and dairy products should be more clarified as either quality products or products with added value or as products with unique health benefits.

Key words: goat milk, goat dairy products, consumer attitudes, purchase behaviour
Introduction

Goats’ milk production is a dynamic and growing sector of Food industry that is fundamental to the wellbeing of hundreds of millions of people worldwide and represents an important part of the economy in many countries (Yangilar, 2013). The primary task of dairy goat farming is to produce marketable milk (Delgado-Pertínez et al., 2009). Furthermore, Park (2011) emphasized the importance of proper distribution and marketing channels, development of speciality-type goat products, and consumer education for the development of a sustainable and profitable dairy goat industry. This also implies that studying, and understanding consumer behaviour should be the major and most important tasks of marketers (Kurajdova and Táborecka-Petrovicova, 2015). Although the demand for goat milk products has been growing, they still have lower consumer acceptability than products derived from bovine milk (Costa et al., 2017). For the identification of different segments of the dairy market and their respective potentialities, it is equally important the knowledge of consumers’ food preferences and the evaluation of the product prototypes (Ribeiro et al., 2010). Several factors influence consumers’ choice but in recent years, factors such as the sociological, economic and nutritional value have the most significant impact on the food industry. As a result, new foods, such as products based on the goats’ milk are produced with the required health-related properties (Yangilar, 2013). Similar, Ribeiro and Ribeiro (2010) reported that without reasonable evidence of added value and well being for adding goat milk in human nutrition, it will be difficult to convince customers to buy it since it has a higher price than bovine milk. This was also confirmed with the results of the research done by Santos et al. (2005) where the main reason for consumers purchasing goat milk was health benefits and consumer behaviour was a strongly influenced by customer’s social and psychological factors, while their personal and sub-cultural factors possessed less impact. Moreover, Ozawa et al. (2006) concluded that goat milk should not be promoted merely as a beverage that is similar to bovine milk but must be positioned as a functional drink or healthy food in order to expand on the milk market. On the other hand, Guney and Ocak (2013) examined the acceptability of goat milk in Turkey where concluded that most of the respondents were unaware of the goat milk importance and noticed important differences in eating habits between consumers from low and high socio-economic status groups in all observed parameters. Further research showed that within the goat dairy products, consumers mostly prefer to consume goat cheese and that understanding consumer behaviours towards a certain product is crucial for effective marketing activities (Guney, 2019). The flavour attributes of goat milk and its acceptance by the consumers have been widely studied. Flavour plays a prominent role in the consumer choice of foodstuffs (Fox et al., 2004) but also attitudes and beliefs very often could represent a barrier for dairy consumption (Mahon and Haas, 2013). A possible problem of “goaty” rancid aroma in goat milk and products can pose a challenge to manufacturers and bring limitations for consumption (Park, 2006). Besides that, goat dairy products are very much linked to historical and cultural uniqueness right through the production, marketing and consumption chains (Boyazoglu and Morand-Fehr, 2001).

In South-Western Serbia, goat milk production has possessed a long tradition. Contrary, in the north part of the country-Province of Vojvodina, goat milk production has not an important role in the socio-economic and cultural structure from past to now and was less popular compared to the other livestock sectors (cattle, swine, and chicken husbandry). In spite of that, the dairy goat sector has increased significantly during the last two decades but it is also highlighted by frequent variations in the number of goats (Paskaš et al., 2019). This may be explained with the low profitability of dairy goat farms and as well as low commercial availability of goat milk and its products (Petrović et al., 2017).

Consumers’ survey of attitudes towards goat milk and goat dairy products on the territory of Vojvodina is very modest and almost non-existent. In this context, the survey was aimed at assessing attitudes and consumers’ acceptability towards goat milk and goat dairy products in the Province of Vojvodina. Furthermore, purchasing behaviours were investigated as well as the consumption structure of milk and dairy products were determined.
Material and methods

Sampling method

The study was conducted in the Province of Vojvodina, Serbia. The general characteristics of the consumers surveyed are shown in Table 1. The number of people surveyed was based on population distribution across the region and the survey included 440 people, of which 215 were females (48.9%) and 225 were males (51.1%). The total study sample was composed of a general population sample and recruited participants were 18 years or older (Table 1). Data were collected using a random sampling method. Respondents were interviewed through face to face questionnaire.

Questionnaire design

The consumer questionnaire used was designed for this study and consisted 30 questions that are a combination of open- and close-ended questions (single select multiple-choice questions). Closed questions were used for nominal data (e.g. dichotomous: “yes” or “no”, “male” or “female”, and polytomous: include quite complex lists of alternatives from which the respondent can choose e.g. “weekly” or “monthly” or “rarely”). Open questions allow respondents to express what they think in their own words and were used for complex questions that cannot be answered in a few simple categories but require more detail and discussion (McLeod, 2018). The questions in a survey can be divided into 5 parts:

1. A socio-demographic profile with basic information about gender, age, education, geographic location (e.g. rural/urban) and the average income of the respondents (Table 1);
2. The second part included questions about different aspects of bovine milk consumption as well as the questions of the respondents’ nutritional awareness of the importance of such products in their diet. Also, the frequency of milk purchasing was investigated.
3. The third part included questions regarding goat milk drinking experience, consumption behaviour, frequency of purchase, and sources of information.

| Table 1. Socio-demographic profile of surveyed population (n= 440) |
|-------------------------------------|----------------------|----------------|
| Parameters                          | Frequency (n)        | Percentage (%) |
| Gender                              |                      |                |
| Female                              | 215                  | 48.9           |
| Male                                | 225                  | 51.1           |
| Age (years)                         |                      |                |
| 18-25                               | 103                  | 23.4           |
| 26-39                               | 112                  | 25.5           |
| 40-54                               | 156                  | 35.4           |
| 55+                                 | 69                   | 15.7           |
| Education level                     |                      |                |
| Elementary and secondary            | 234                  | 53.2           |
| College graduate                    | 140                  | 31.8           |
| Postgraduate                        | 66                   | 15.0           |
| Residence                           |                      |                |
| Urban place (>100000 residents)     | 185                  | 42.0           |
| Cities (50001-100000 residents)     | 84                   | 19.1           |
| Towns (10000-50000 residents)       | 93                   | 21.2           |
| Villages (<10000 residents)         | 78                   | 17.7           |
| Monthly gross income (Serbian dinar)|                      |                |
| >75000                              | 67                   | 15.2           |
| 50001-75000                         | 105                  | 23.9           |
| 25000-50000                         | 167                  | 37.9           |
| <25000                              | 101                  | 22.0           |

Authors’ survey
4. The query of dairy products purchase included questions in regards to the frequency and type of the products purchased, as well as questions enabling an assessment of the respondents’ attitudes towards goat dairy products.

5. Investigation of cheese consumption contained questions focusing on attributes of motivations driving the consumption of cheese and respondents’ preference towards different cheese types.

Statistical analysis

To analyse survey data descriptive statistic methods were used. In order to demonstrate the dependencies between analysed demographic factors (age, gender, education, etc.) the obtained results were subjected to statistical analysis using Statistica 10.0 program and the chi-squared test for categorical data was performed. A p-value less than 0.05 was selected a priori for significance.

Results and discussion

Consumer behaviour towards of bovine milk and dairy products

In order to evaluate consumers’ behaviour, first, they were asked questions regarding motives of purchase bovine milk and dairy products. This study revealed that the most important reasons for selecting the product are taste and quality (55.5 %). Differences in beliefs were observed between female and male groups particularly in relation to the potential health benefits (21.9 % vs. 11.6 %, respectively). At the same time, male consumers showed a higher interest in the price of the product (18.7 % vs. 13 %, respectively). In addition, the respondents from rural parts were less prone to taste and quality and more for the price of milk and dairy products (46.2 % and 20.5 %, respectively).

The previous consumer studies showed similar results. Taste, followed by health benefits, design of packaging, and origin of the product, become the most important factor for consumer perception of dairy products (Bousbia et al., 2017). Confirming these results, Ngoulma (2016) reported that the French consumers are very concerned about their health and they, in particular, put emphasis on the quality of the products they consume. Similar, Lacroix, et al. (2016) noticed that consumers identified health and nutritional benefits as the main advantages of milk consumption.

Frequency of bovine milk purchase was another step in the process of identifying patterns among dairy product consumers. The results showed that more than half of participants predominantly purchase bovine milk several times per week (53.5 vs. 51.1 %, female and male, respectively). Regarding the place of purchase milk and dairy product the participants from the urban area mostly purchase bovine milk and dairy products from supermarkets. In contrast, participants from the rural area (population of less than 10000), purchase more at local stores. All other places of the purchase were less preferred for consumers. Additionally, a significant difference (p<0.05) between the residence area and place of purchase was established.

Consumer awareness and acceptability of goat milk

Information regarding consumers’ consumption of goat milk is shown in table 2. Data analysis shows that a total of 24.3 % of respondents had never consumed goat milk. The age significantly influences (p<0.05) consumers’ decisions to consume goat milk. From 107 respondents, who never tried goat milk, the highest percentage belongs to the age group of 18-25 years (32.7 %), followed by the age group of 26-39 (31.7 %).

Rani (2014) explained that the social value of the product and public opinion sometimes plays a more prominent role in the decision for a consumer at 25 than at 65 years. Moreover, questions attempting to assess consumer attitudes toward goat milk acceptance have been included in many surveys. Idamokoro et al. (2019) observed that age, gender, and educational level were the factors that influenced respondents’ willingness to consume goat milk. Another study done by Ozawa et al. (2008) showed the importance of social and cultural aspects in regards to the consumption and perception of goat milk and dairy products. Thus, that research showed that more than 70 % of Japanese people never consumed goat milk. Generally,
Attitudes tend to change over time and the attitudes as well as opinions that we possess affect our behaviour and our intentions. Also, in attitudes forming, people often rely on their pre-existing knowledge and opinions (Madichie, 2012). From the present study, a positive opinion towards goat milk was confirmed by 40.7% of respondents but at the same time, 39.1% of respondents had no opinion (Table 3).

Regarding Table 3, there is clear evidence that consumers in Vojvodina do not have strong preferences for goat milk. A total of 23.2% of consumers referred that product unavailability represents a problem in goat milk purchase. The respondents from age groups 40-54 and 55+, associate more goat milk with health and good nutrition (69.9% and 65.2%, respectively). On the other hand, 39.8% of the youngest respondents (18-25 years), answered that they are not informed about goat’s milk health benefits. However, the average proportion of those stated not to purchase goat milk is very high, 67%. A situation is worsened by the fact that 25.7% of respondents rarely purchase goat milk (Figure 1). These

| Parameters | Yes | No | Total | Chi-square (x²) |
|------------|-----|----|-------|-----------------|
| Gender     |     |    |       |                 |
| Female     | n   | %  |       |                 |
|            | 154 | 71.6 | 61 | 28.4 | 215 | 100.0 | 3.87 |
| Male       | n   | %  |       |                 |
|            | 179 | 79.6 | 46 | 20.4 | 225 | 100.0 |
| Age (years) |     |    |       |                 |
| 18-25      | n   | %  |       |                 |
|            | 68  | 66.0 | 35 | 34.0 | 103 | 100.0 | 14.24* |
| 26-39      | n   | %  |       |                 |
|            | 78  | 69.6 | 34 | 30.4 | 112 | 100.0 |       |
| 40-54      | n   | %  |       |                 |
|            | 129 | 82.7 | 27 | 17.3 | 156 | 100.0 |       |
| 55+        | n   | %  |       |                 |
|            | 58  | 84.1 | 11 | 15.9 | 69  | 100.0 |       |

* p<0.05 Authors’ survey

| TABLE 2. Consumption of goat milk |

| Parameters | Positive | Negative | No opinion | Total | Chi-square (x²) |
|------------|----------|----------|------------|-------|-----------------|
| n %        | 179      | 89       | 172        | 440   | 34.17*          |

| TABLE 3. Attitude, availability and awareness of health properties of goat milk |

| Attitudes about goat milk |
|---------------------------|
| Parameters | Positive | Negative | No opinion | Total | Chi-square (x²) |
| n %        | 179      | 89       | 172        | 440   | 34.17*          |

| Uncertainty about safety/ hygienic quality of goat milk |
|--------------------------------------------------------|
| Parameters | Yes | No | Occasionally | Total | Chi-square (x²) |
| n %        | 75  | 240 | 125 | 28.4 | 440 | 97.61* |

| Knowledge of the health properties of goat’s milk |
|--------------------------------------------------|
| Parameters | Yes | No | Slightly | Total | Chi-square (x²) |
| n %        | 247 | 87  | 106 | 24.1 | 440 | 104.19* |

| Availability of goat milk purchase |
|-----------------------------------|
| Parameters | Yes | No | Infrequently | Total | Chi-square (x²) |
| n %        | 223 | 102 | 115 | 26.1 | 440 | 60.17* |

* p<0.05 Authors’ survey
findings also established significant variations between age groups (p<0.05). Therefore, older populations purchase goat milk more frequently.

Table 4 shows barriers in consuming goat milk as well as factors that influence the purchase and consumption of goat’s milk. Consumers indicated odour (37.7 %) and taste (22.5 %) of goat milk as the most important factors that contribute to their non-consumption of goat milk. There was no significant difference between genders, but it was determined that females dislike more goat milk odour and generally considered goat milk as milk of less quality compared to males (42.3 % and 8.4 % vs. 33.3 % and 6.2 %, respectively).

Although, colour is usually one of the most important attributes of acceptability and quality of food products (Hutchings, 1999), that characteristic in this research is of the least importance. Our findings are also in contrary with research done by Wanjekteche et al. (2016) where the colour, taste and smell of goat milk products were highly acceptable to consumers in Kenya. The specific “goaty” rancid aroma is due to caproic, caprylic, and capric acids, which are present at high levels in goat milk fat and subject to release from fat globule membranes by lipases if improper milking and processing are practised (Park, 2011).

Regarding the barriers for consuming goat milk, a significant difference (p<0.05) were established between age groups. The youngest respondents (18-25 years) more frequently identified inappropriate odour as the main barrier in the consumption of milk (39.8 %). On the other hand, the main motives for consuming goat milk are a healthy purpose and nutritional value of it (Table 4).
TABLE 4. Factors affecting goat milk consumption and purchase behaviour

Main barriers for consuming goat milk

| Parameters                  | Taste | Odour | Thickness | Colour | Less quality | Natural dislike | No opinion | Total | Chi-square (x²) |
|-----------------------------|-------|-------|-----------|--------|--------------|----------------|------------|-------|-----------------|
| Female                      | n     | %     | n         | %      | n            | %              | n          | %    |
|                             | 46    | 21.4  | 91        | 42.3   | 10           | 4.7            | 4          | 1.9  | 18              | 8.4            | 11            | 5.1            | 35            | 16.2 | 215             | 100.0         | 6.61 |
| Male                        | n     | %     | n         | %      | n            | %              | n          | %    |
|                             | 53    | 23.6  | 75        | 33.3   | 18           | 8.0            | 6          | 2.7  | 14              | 6.2            | 14            | 6.2            | 45            | 20.0 | 225             | 100.0         | 100.0 |

Opinion about the taste of goat milk

| Parameters                  | Whole milk | Week, fatty | Similar to bovine’s milk | Sour | Sweet | "Goaty" rancid aroma | No opinion | Total | Chi-square (x²) |
|-----------------------------|------------|-------------|--------------------------|------|-------|----------------------|------------|-------|-----------------|
| Female                      | n          | %           | n                        | %    | n     | %                    | n          | %    |
|                             | 95         | 44.1        | 12                       | 5.6  | 14    | 6.5                  | 29         | 13.5 | 17              | 7.9            | 17            | 7.9            | 13            | 6.1            | 35            | 16.3 | 215             | 100.0         | 9.23 |
| Male                        | n          | %           | n                        | %    | n     | %                    | n          | %    |
|                             | 111        | 49.3        | 15                       | 6.7  | 18    | 8.1                  | 37         | 16.4 | 12              | 5.3            | 12            | 5.3            | 4             | 1.8            | 28            | 12.4 | 225             | 100.0         | 100.0 |

Potential reasons for consuming goat milk

| Parameters                  | Health benefits | Nutritional benefits | Taste and smell | Curiosity | Availability | Overall quality | No opinion | Total | Chi-square (x²) |
|-----------------------------|------------------|----------------------|-----------------|-----------|--------------|-----------------|------------|-------|-----------------|
| Female                      | n                | %                    | n               | %         | n            | %               | n          | %    |
|                             | 143              | 66.5                 | 29              | 13.6      | 3            | 1.4             | 17         | 7.9  | 3               | 1.4            | 10            | 4.6            | 10            | 4.6            | 215           | 100.0         | 9.06 |
| Male                        | n                | %                    | n               | %         | n            | %               | n          | %    |
|                             | 134              | 59.6                 | 34              | 15.1      | 8            | 3.6             | 21         | 9.3  | 1               | 0.4            | 21            | 9.3            | 21            | 9.3            | 6             | 2.7            | 225           | 100.0         | 100.0 |

Ribeiro and Ribeiro (2010) in their research noticed that the consumption of raw goat milk is considered to be very low among the general population, but there is a group of consumers who have very strong beliefs in the health benefits attributed to raw goat milk and subsequently choose this as their milk of choice. Park (2011) described raw goat milk as white, opaque liquid with a slightly sweet taste and no odour. Interestingly, this research revealed that 13.5 % of female and 16.4 % of the male described taste of goat milk as sour, and significantly lower percentage as sweet (7.9 % and 5.3 %, female and male, respectively) (Table 4).
Figure 2 shows the reasons that affect consumers’ purchase behaviour towards goat milk taking into account their socio-demographic characteristics. No significant difference was established according to gender, age, residence, and monthly gross income. For non-purchasing goat milk, respondents stated reasons in the range from not having a habit (38.4 %), taste and smell (28.3 %) to availability of the product (21.3 %). The lowest percent belong to consumers who had no opinion.

Consumption and purchase of dairy products

Figure 3 shows differences in frequency of bovine and goat dairy products purchasing. Majority of consumers’ primary purchase bovine dairy products (96.1 %) and most of them purchase it several times per week (54.6 %). On the contrary, of the 310 respondents, 73 % and 68 % female and male consumers, respectively, do not purchase goat dairy products.

According to Park (2011), two considerable barriers exist in the marketing of goat milk products: negative public perception of goaty flavour and seasonal milk production. Findings of Madichie (2012) pointed out that consumers’ purchasing decisions are complex and for increasing sales, it is not enough to influence consumer attitudes because consumers sometimes may have a positive attitude towards certain products but this will not lead to any change in their purchase behaviour. Purchase tasks which are low in complexity (e.g. purchasing dairy products) often become routine in nature for most consumers (Ferrell and Hartline, 2007). Therefore, motivating factors for consumption and purchasing milk and dairy product have been widely studied. Many studies confirmed that consumer perception of dairy products is influenced by many interrelated factors but healthiness and nutritional
benefits are the most important (Sajdakowska et al., 2018; Idamokoro et al., 2019; Rodrigues et al. 2017). Moreover, Guney (2019) determined that price, health, nutrition value, digestion convenience and availability are the most effective factors for goat milk and its products consumption and purchase behaviour.

Consumers possess a specific belief and attitude towards various products (Rani, 2014) and this study shows that consumers were the most positive towards goat cheese among goat dairy products (47.7 % of the respondents who consumed goat dairy products). Furthermore, the study revealed that goat cheese is more preferred in male compared to a female population. In particular, they preferred goat fresh or white brined cheese. It could be said that cheese is the most popular goat milk product globally (Ranadheera et al., 2019). Typical goat taste is considered as a quality component in certain goat cheese products (Ribeiro and Ribeiro, 2010) but Gomes et al. (2013) reported that intense flavour of goat milk sometimes restricts acceptance of its products. In regard to the consumption pattern of goats milk products, results from this study are in similarity with the findings of Guney (2019). At the same time, they are opposite to the survey done by Bousbia et al. (2017) where pasteurized milk and yoghurt were identified as the most purchased goat dairy products. Their results as well pointed out that purchasing was influenced by household income. The results also show that there is almost no consumption in regard to goat sour milk (Table 5). Goat’s milk fermented products are traditionally made locally in different countries in the Middle East and in other regions, and some are produced at an industrial scale (Tamime et al., 2011). A lot of studies indicate health benefits associated with goat milk dairy products but consumer unfamiliarity with goat milk has been identified as one of the major reasons for the lower acceptability of certain goat milk products compared to equivalent products made with bovine milk (Ranadheera et al., 2019). These findings also reveal that most of the respondents (64.8 %) had the opinion that price of products was average and acceptable, 29.1 % of respondents stated that the products were a bit costly and only 2.5 % of respondents said that were low-priced, including 3.6 % of respondents who did not have an opinion. This survey also elicited information regarding respondents’ different sources of information and knowledge (e.g. the internet, newspapers, television). It was found that respondents mainly received information about goat milk and dairy products through media: Internet (33 %), and television programs (25 %), followed by newspapers and magazines (11.4 %). Other sources of information as own research, information from other persons (relatives, friends), were of less importance. On the contrary, as the primary sources of information in research done by Guney and Ocak (2013) were television and personal investigation. The importance of information has been recognized in research done by Řvrum et al. (2012) where older consumers’ preference was highly affected by health information, especially towards healthy cheese.

**TABLE 5. Consumers preference for goat dairy products**

| Parameters | Not buying | Yoghurt | Sour cream | Sour milk | Whey | Cheese | Total | Chi-square (x2) |
|------------|------------|---------|------------|-----------|------|--------|-------|----------------|
| Female     | n          | %       |            |           |      |        |       |                |
|            | 157        | 73.0    | 13         | 9         | 3    | 9      | 24    | 100.0         |
| Male       | n          | %       |            |           |      |        |       |                |
|            | 153        | 68.0    | 10         | 8         | 1    | 15     | 38    | 100.0         |

Authors’ survey
Consumers’ preference towards cheese milk type

Table 6 reveals that 67.9% of respondents preferred bovine milk cheese while goat and sheep milk cheeses were significantly less popular. However, there is also a difference in goat and sheep milk cheese consumption between genders where males more preferred sheep and goat milk cheese compared to females. Furthermore, the oldest examined group (55+) compared with other age groups slightly more purchased goat and sheep cheeses (15.9% and 10.1%, respectively). Cheeses made from goat’s milk represent the traditional food of southern Europe. It is considered as part of its ethnological, gastronomic and cultural heritage and goat cheese purchasing in France and Spain increased between 2013 and 2017 (Ruiz Morales et al., 2019). In similarity, Ngoulma (2016) observed that French consumers possessed a higher preference and willingness to pay for dairy products derived from bovine milk and goat’s milk compared to sheep milk. On the other hand, goat milk in Greece and Portugal is mainly used in mixture with ewe milk while in France more than 95% of goat milk is used for the production of soft, lactic cheeses (Morgan et al., 2003).

**Table 6. Consumers’ preference towards cheese milk type**

| Parameters       | Bovine milk | Goat milk | Sheep milk | No difference | Total | Chi-square ($\chi^2$) |
|------------------|-------------|-----------|------------|---------------|-------|----------------------|
| **Gender**       |             |           |            |               |       |                      |
| Female           | n          | %        |            |               |       |                      |
|                  | 154        | 71.6     | 14         | 12            | 35    | 215                  | 4.96 |
|                  | 145        | 64.5     | 16         | 25            | 39    | 225                  | 100.0 |
| **Age (years)**  |             |           |            |               |       |                      |
| 18-25            | n          | %        |            |               |       |                      |
|                  | 69         | 67.0     | 10         | 3             | 21    | 103                  | 18.85 |
|                  | 79         | 70.5     | 8          | 9             | 16    | 112                  | 100.0 |
| 26-39            | n          | %        |            |               |       |                      |
|                  | 104        | 66.7     | 8          | 11            | 33    | 156                  | 100.0 |
| 40-54            | n          | %        |            |               |       |                      |
|                  | 61         | 72.6     | 5          | 4             | 14    | 84                   | 100.0 |
| 55+              | n          | %        |            |               |       |                      |
|                  | 47         | 68.1     | 11         | 7             | 4     | 69                   | 100.0 |
| **Residence**    |             |           |            |               |       |                      |
| <10000           | n          | %        |            |               |       |                      |
|                  | 57         | 73.1     | 4          | 6             | 11    | 78                   | 9.39 |
| 10000-50000      | n          | %        |            |               |       |                      |
|                  | 65         | 69.9     | 11         | 5             | 12    | 93                   | 100.0 |
| 50001-100000     | n          | %        |            |               |       |                      |
|                  | 61         | 72.6     | 5          | 4             | 14    | 84                   | 100.0 |
| >100000          | n          | %        |            |               |       |                      |
|                  | 116        | 62.7     | 17         | 15            | 37    | 185                  | 100.0 |

Authors’ survey
Conclusions

According to this survey, bovine milk and dairy products are preferable for consumers in the Province of Vojvodina. Investigation of consumers’ attitudes towards goat milk and dairy products showed that socio-demographic characteristics have not significantly influence consumers’ preferences. In particular, results revealed that lack of eating habits, as well as odour and taste of the product, are the reasons for non-purchase goat milk and dairy products for all investigated groups. Most respondents also stated that goats’ products are insufficiently available while the price had no significant impact. However, the current investigation found significant differences (p<0.05) in regards to the frequency of purchasing and age, with older generations more frequently purchase goat milk. The market of goat dairy products is underdeveloped and therefore, represents one of the main obstacles to an efficient level of goat production. Respondents recognised health and nutritional benefits as the main motives for consuming goat milk. Thus, they represent key elements in acceptance of goat milk and dairy products and were emerged in all groups. The consumption patterns of goat dairy products in the Vojvodina population showed that goat cheese was the most purchased products. For developing goat dairy production is very important to simultaneously develop not only primary production but invest in marketing and promotion of goat’s milk and dairy products. Moreover, paying attention to the promotion of goat products and appropriate nutrition recommendations could help in raising consumers’ awareness.

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Stav potrošača u Vojvodini prema kozjem mlijeku i proizvodima od kozjeg mlijeka

Sažetak

U radu su predstavljeni rezultati istraživanja provedenog u Pokrajini Vojvodina, Srbija, s ciljem da bi se ispitalo stav potrošača u odnosu na kozje mlijeko i proizvode od kozjeg mlijeka. Istodobno, ispitivanii su faktori koji utječu na percepciju potrošača i subjektivne norme u odnosu na kupovinu. Primijenjeno je kvantitativno istraživanje slučajnog uzorka i za tu svrhu je upotrijebljen strukturirani upitnik. Rezultati ovog istraživanja pokazali su značajno manje prihvaćanje kozjeg mlijeka i mliječnih proizvoda u usporedbi s kravljim mlijekom i mliječnim proizvodima. Od 440 ispitanika, 24,2 % nije konzumiralo kozje mlijeko i utvrđen je značajan pozitivan utjecaj (p<0,05) dobi na konzumaciju. Među ispitanicima, najvećim djelom mlada populacija (18-25 godina) ne konzumira kozje mlijeko. Istraživanjem je utvrđeno da su miris (42,3 %) i okus (22,5 %) glavne prepreke u konzumiranju kozjeg mlijeka. U odnosu na kupovinu, više od polovice anketiranih ne kupuje kozje mlijeko i mliječne proizvode (67 % i 70,5 %), dok su ostali ispitanici iskazali vrlo nisku učestalost kupovine. Zdravstvene prednosti predstavljaju najvažniji faktor potencijalnog konzumiranja kozjeg mlijeka i mliječnih proizvoda (66,5%). Glavni motivi za kupovinu kravljeg mlijeka i mliječnih proizvoda kod ispitanika predstavljaju okus i kvaliteta (55,5%). Posebno, najstarija populacija (40-55 godina) pokazuje najpozitivniji stav prema kozjem mlijeku i više...
su zainteresirani za njegovu nutritivnu vrijednost i zdravstveni učinak. Kožir sir i sirutka predstavljaju dva proizvoda koji su anketirani potrošači najzainteresiraniji. Dobiveni rezultati sugeriraju da bi se za bolje pozicioniranje na tržištu i za proizvodnju cjenovalno konkurentnih proizvoda, kože mlijeko i proizvode od kojeg mlijeka trebalo više isticati kao kvalitetne proizvode, proizvode s dodanom vrijednošću ili kao proizvode s jedinstvenim zdravstvenim prednostima.

Ključne riječi: kožje mlijeko, kožje mliječni proizvodi, stavovi potrošača, ponašanje kod kupovine

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