

## RESEARCH REGARDING YOUNGER CONSUMERS ATTITUDE, IN RELATION WITH SHEEP MEAT CONSUMPTION

Mirela CĂRĂTUȘ STANCIU

”Lucian Blaga” University of Sibiu, Faculty of Agricultural Sciences, Food Industry and Environmental Protection, 5-7 Ion Ratiu Street, 550003, Sibiu, Romania, Phone: +40269211338, Fax:+40213182888, Mobile:+40744472790, Email: mirela\_stanciu2008@yahoo.com

*Corresponding author:* mirela\_stanciu2008@yahoo.com

### Abstract

*The paper is based on the study of various reports and different type of articles regarding the EU sheep meat production and sheep meat's quality. In order to determine the Romanian consumers' perception regarding the quality of sheep meat, a questionnaire was prepared which was completed during April-June 2020 by 118 students from Sibiu and Bucharest. Sheep meat is consumed throughout the year in the families of the young people investigated (27.9). It is purchased mainly fresh (85.6%) and comes from their own farm or from other farmers (77.2%). The most well-known and consumed sheep meat preparations are lamb steak (75.4%) and pastrami (67.8). Sheep is cooked at home, in the family (85%). The young generation believes that the most effective way to promote the consumption of sheep meat is the advertising made from person to person. The data on the composition of sheep meat are generally known. The biggest influence on the consumption of sheep meat had on the respondents their family (74.6%). Promoting the consumption of sheep meat among young people contributes to the development of the sheep sector in particular and to sustainable rural development in general.*

**Key words:** sheep meat, quality, consumers, behaviour, consumption, local market

### INTRODUCTION

The number of sheep in the U.E. 28 was 86.8 million heads in 2017, the largest growing countries being the United Kingdom (23.3 million heads), Greece (16 million heads) and Romania (10 million heads) [6].

In the period 2005-2014, almost all EU Member States recorded decreases in sheep herds, between 3 and 38%, except for Romania (+ 25%) and Greece (+ 4%) [7].

Various studies and statistics on meat consumption / capita show that the countries with the highest meat consumption per capita in 2019 were: USA (100.87 kg), Israel (89.99 kg), Australia (89.62 kg), Argentina (88.25 kg), Chile (81.33 kg), Brazil (78.85 kg), Canada (79.19 kg) [11]. The level of meat consumption of different types per capita is influenced by the production price, population income, cultural norms, religion, environmental protection norms and concern for health [18]. Worldwide, the highest consumption of sheep meat per capita was recorded in 2019 in Australia (6.18 kg), Turkey (4.26 kg), New Zealand (3.6 kg) and

China (3.24 kg). A study published by FAO shows that the average global consumption of sheep meat / capita in 2015 was 2.1 kg, expecting its increase by 2030 to 2.4 kg [1, 16]. A study published in 2012 showed that EU countries with a consumption of more than 2 kg of sheep meat / capita in 2008 were Greece (11.1 kg), Great Britain (6.1 kg), Ireland (4.9 kg), Bulgaria (4.6 kg), Spain (3.8 kg), France (3.6 kg), Portugal (2.9 kg), Romania (2.3 kg) [10]. For Romania, the justification for the low consumption of sheep meat can be attributed to consumption habits and the relatively high price compared to poultry or pork. The distribution of consumption by types of meat worldwide in 2018 was as follows: pork, 40.1%, chicken, 33.3%, beef 21.4%, sheep and goat, 5.2% [15, 19].

In Romania there were in 2016 a number of 3,422,040 small farms, of which 25% were exclusively vegetable farms, and 71% (2,430,100) owned between 0-5 LSU (LSU = Livestock units. A LSU is equivalent to a dairy cow. The number of animals (heads) is converted into LSU using a set of coefficients

reflecting the feed requirements of the different animal categories.) The classification of agricultural farms in Romania according to UAA shows that in 2016, there were a number of 3,140,770 (91.8%) who owned less than 5 ha (UAA = Utilized agricultural area) [5]. The local taste, specific to gastronomic tourism is depend on different food genetic resources. Extensive sheep farming can make a major contribution to sustainable rural development [3, 17, 20].

Changes that may occur in consumer preferences for a particular type of meat or for switching to vegetarian or vegan diets, as well as concerns about the impact of animal husbandry on the environment may lead to major changes in meat consumption. Consumers are increasingly concerned about the treatments provided during animal husbandry, slaughtering and meat processing [12]. The study published in 2012 by Meulen, van der H. et al. shows that in the U.E. the number of sheep meat consumers under the age of 35 is also low and that the potential level of sheep meat consumption is influenced by factors such as the age profile of consumers, consumers' perception of the price of sheep meat compared to other types of meat [10]. There are differences in preferences for sheep meat consumption between the main regions of the country: higher requirements in the south-eastern part of the country where there are Greek and Turkish influences and in the centre of the country, an area with a tradition of sheep farming [8, 21]. The application of different promotion and advertising techniques can significantly influence the eating and buying behaviour of sheep meat [2, 4, 13, 14].

The main purpose of the paper is to know, how the younger consumers of Sibiu and Bucharest perceive the market of sheep meat and their habits regarding the purchase and consumption of this kind of meat.

## **MATERIALS AND METHODS**

The paper is based on the study of various reports and different type of articles regarding the EU sheep meat production and meat quality.

To know the habits of young consumers regarding the purchase and consumption of sheep meat, a sociological survey was carried out, using as a working instrument a questionnaire, structured in four parts: 1. data on respondents; 2. data on the consumption of sheep meat in the family (number of persons in the family, number of persons consuming sheep meat in the family, frequency of consumption of sheep meat, form in which it is purchased and preferred commercial category, place of purchase, the person who is responsible for purchasing the sheep meat, the characteristics of the meat underlying the purchasing decision); 3. data on the consumption of sheep meat dishes (most often eaten, home-cooked sheep meat dishes, place of consumption of dishes made from sheep meat, person in the family which cooking this type of meat, knowledge of the benefits of sheep meat on human health); 4. data on the promotion of sheep meat consumption (the most important sources of information on sheep meat, the perception of the usefulness of the forms of promotion).

The demographic data regarding the respondents: sex, age, domicile, last graduated school, labour market status, field of activity, number of family members and income/family. After the elaboration of the questionnaire it was distributed online, and it was completed by 118 respondents (students) during the period April-June 2020. The data were systematized, statistically processed and interpreted.

## **RESULTS AND DISCUSSIONS**

Few studies have been conducted at both international level and in Romania regarding the consumption of sheep meat.

### **Data on consumption preferences**

Sheep meat is consumed by 92% of the respondents. People who do not eat mutton say they do not like its taste.

The young people investigated stated that they most often eat sheep meat on the occasion of the Easter holidays (55 people, respectively, 46.6%). However, it is observed that 10.1% of young people usually eat sheep meat at least

once a week, while 17.8% consume this type of meat 1-2 times during a month.

A significant share of respondents (45.7%) usually eat both lamb and meat from adult sheep, while 30.5% of respondents consume only lamb.

#### **Habits related to sheep meat purchase**

There are differences in the form in which sheepmeat is purchased. Thus, 32 people (27.1%) say they buy live animals, while 78 people (66%) buy carcass or carcass parts. Only 8 people (6.8%) prefer to buy sheep meat products.

Sheep comes from their own household in the case of 21 people (17.8%) or is bought directly from farmers by the families of 70 of the respondents (59.4%). Other places to buy this type of meat are agri-food markets (11%), hypermarkets (8.5%) or producers' shops (3.4%).

Almost 75% of those surveyed (73.8%) are willing to pay between 21 and 30 lei for a kilogram of sheep meat, while 26.2% believe that this type of meat should be paid less than 20 lei/kg.

In a study published in 2017 by Iliușiu E. et al. the main reasons for the decision to purchase sheepmeat are listed: taste, freshness, color, commercial appearance and shelf life [9].

In the present case, in order to find out which is the most important element taken into account when purchasing sheepmeat, the respondents chose: the shelf life (63.6%), the appearance and consistency of the meat (53.4%), the smell (59.3%) and meat color (42.4%). It follows that young people attach great importance to the shelf life as well as to the commercial aspect of the meat.

Sheep meat is bought fresh by 85.6% of respondents, while refrigerated or frozen meat is purchased by 5%. However, approx. 9.4% of those surveyed usually buy both types of meat.

The person in the family responsible for purchasing the sheep meat is most often the husband / father (for 60.2% of respondents), while this type of meat is purchased by the wife / mother in less than 25% of the families (21,2 %).

#### **Data on sheepmeat dishes consumption**

The most known and consumed in the family sheep dishes are: steak (75.4%), pastrami (67.8%), lamb tripe (63.6%), stew (52.5%), soup of lamb (50.8%), sausages (49.2%), grilled mutton (46.6%), kebab (32.2%) and shaorma (31.4%). Other dishes of this type of meat are very little known and consumed.

Among the sheep dishes that are bought in stores or eaten in restaurants, the respondents mentioned: sausages, pastrami, kebab, lamb on a whim.

Approx. 85% of respondents said that this type of meat is cooked and eaten at home, the most common dishes cooked in the family being lamb soup and steak.

In general, sheep meat is cooked in the family by both spouses (65.9% of cases), only by the wife (19.5%) or only by the husband (11%).

#### **Consumer knowledge about the composition of sheepmeat and its health benefits**

The answers provided by the respondents allow us to state that data on the composition of sheep meat are generally known.

Thus, 83.9% of respondents know that this type of meat has a high content of iron and zinc. Also, 75.4% of people know that this type of meat contains carnitine, responsible for energy production, and 68.6% admit the high content of Omega3 fatty acid. Based on the knowledge about the composition of sheep meat, 54.2% of respondents say that it is an easily digestible meat, and 45.7% that it is a natural aphrodisiac.

#### **Data on the promotion of sheep meat consumption**

The biggest influence on the consumption of sheep meat had on the respondents: family (74.6%), relatives and friends (52.5%), participation in traditional fairs (37.3%), participation in gastronomic events (32.2%).

It is noted that the most important means of promoting the consumption of sheep meat belongs to the family. This aspect is also confirmed by the fact that 64.4% of the respondents stated that they have knowledge related to sheep meat in the family. Information about sheep meat also comes from farmers (12.7%) or relatives / friends (7.6%). It should be noted that 15.7% of those

surveyed mentioned other sources of information.

In the view of those surveyed, the most important forms of promotion of sheep meat are very widely perceived. Thus, the advertising made from person to person is of the greatest importance or very important for 49.15% of the respondents. Online promotion is of medium or high importance in the case of 47.45% of respondents. The organization of specific meals to the sheepfold is perceived as having an average importance by 45.8% of respondents. Participation with a stand in profile fairs may have the greatest or greatest importance in promoting the consumption of sheep meat in the case of 45.8% of those surveyed. Culinary demonstrations may have the greatest or greatest importance in the view of 44.9% of respondents. At the same time, it is noted that 56.7% of respondents consider the distribution of leaflets and brochures is inefficient. On-farm product tasting can significantly contribute to the promotion of sheep meat consumption (48.3%), while organized tastings in public places are perceived as being of great importance only by 31.36% of those surveyed. A share of 47.45% of the respondents' state that the advertising in the media have a low efficiency, and 49.15% state that the documentary films fail to stimulate the consumption of sheep meat. Approx. 45% of those surveyed believe that events dedicated to the promotion of sheep species can have a high impact on the promotion of sheep meat consumption.

At the same time, 44.06% of those surveyed believe that specific tourist boarding houses can make a significant contribution to promoting the consumption of sheep meat.

The main characteristics of the studied sample are: 80.5% are young people, under the age of 30; the domicile of the respondents is in equal proportions both in the urban and in the rural environment; the families of the respondents consist of 3-5 people in the case of 77% of them; the average monthly income of the family is less than 6,000 lei (57.4%); the respondents have at least a high school diploma (62.7%) being currently students or master students of an agricultural faculty; In

73% of families there is at least one person who consumes sheep meat (Table 1).

Table 1. Demographic profile of respondents

Variable	Operational variable	Respondents distribution, number (%)
Sex	Male	57 (48,3)
	Female	61 (51,7)
Age	<20	28 (23,7)
	21-30	67 (56,8)
	31-40	9 (7,6)
	41-50	10 (8,5)
	51-60	4 (3,4)
Net income/month/ Family	2001-4000 lei	38 (31,9)
	4001-6000 lei	30 (25,5)
	>6000 lei	50 (42,6)
Number of persons in the family	2	18 (15,3)
	3-4	68 (57,6)
	5	23 (19,5)
	>5	9 (7,6)
Domicile	Urban	59 (50)
	Rural	59 (50)
Education level	High school	74 (62,7)
	University degree	34 (28,8)
	Post graduated	10 (7,6)
Number of people in the household who eat sheep meat	1	24 (20,4)
	2	31 (26,3)
	3	31 (26,3)
	4	18 (15,3)
	5	11 (9,3)
	6	1 (0,8)
	7	2 (1,7)

Source: Survey Data (2020).

## CONCLUSIONS

In Romania, consumers prefer to buy mutton in carcass form directly from the farmers they know or from local markets, benefiting from lower prices. There is also an accentuated seasonality of the demand for mutton on the occasion of the Easter holidays and the autumn period.

In general, a growing segment of the young population is willing to pay an additional price for good quality meat.

Sheep meat is consumed throughout the year in the families of the young people investigated (27.9). It is purchased mainly fresh (85.6%) and comes from their own farm or from other farmers (77.2%).

The most well-known and consumed sheep meat preparations are lamb steak (75.4%) and pastrami (67.8). Sheep is cooked at home, in the family (85%). The young generation believes that the most effective way to

promote the consumption of sheep meat is the advertising made from person to person..

The data on the composition of sheep meat are generally known. The biggest influence on the consumption of sheep meat had on the respondents their family (74.6%), which also have the most important means of promoting the consumption of sheep meat.

The promotion of the consumption of sheep meat must be done in close connection with the activity on the farms. It is necessary to organize gastronomic events specifically for young people, attended by farmers, nutritionists, chefs, focusing on the beneficial effects of consumption on human health and environmental protection.

The organization of gastronomic events with specific, especially in areas with a tradition in sheep breeding, which promotes the consumption of sheep meat, contributes to the creation of a culinary culture.

Promoting the health benefits of eating sheep meat will determine the association of sheep meat with its quality and various nutritional benefits.

The future of the sheep sector depends on its ability to respond to the seasonal needs of sheep meat, improving the cooperative spirit along the supply chain and encouraging the certification of specialized niche products, registered as local, traditional or PDO and PGI products.

Promoting the consumption of sheep meat among young people contributes to the development of the sheep sector in particular and to sustainable rural development in general.

## REFERENCES

- [1] Bruinsma, J., 2003, World agriculture: towards 2015/2030. An FAO perspective, <http://www.fao.org/3/y4252e/y4252e05b.htm>, Accessed on 10 August 2020.
- [2] Buzamat, G., Pet, E., Grigoriu, E., 2009, Marketing Researches Regarding Meat Consumer's Behaviour in the Western Part of Country, *Bulletin UASVM Horticulture*, 66(2), p. 80-83.
- [3] Cărătuș Stanciu, M., 2018, Analysis of the behavior and motivation of consumers towards short food supply chains, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 18(4), 73-78.
- [4] Cătoi, I., Teodorescu, N., 2004. *Comportamentul consumatorului (Consumer's behavior)*, 2n Ed., Uranus Publishing House, Bucharest.
- [5] European Commission, 2020, Statistical Factsheet, Romania, [https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/agri-statistical-factsheet-ro\\_en.pdf](https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/agri-statistical-factsheet-ro_en.pdf), Accessed on 10 August 2020.
- [6] Eurostat, 2019, Statistics Explained, Livestock population, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Livestock\\_population,\\_2017\\_\(million\\_heads\).png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Livestock_population,_2017_(million_heads).png), Accessed on 12 August 2020.
- [7] Eurostat, 2019, Meat production statistics. Statistics Explained, <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/28947.pdf>, Accessed on 10 August 2020.
- [8] Grodea, M., 2018, The sheep and goat farming sector in Romania – a new development perspective, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 18(3), 151-157.
- [9] Iliușiu, E., Rău, V., Găvojdian, D., Ilișiu, C.V., Pădeanu, I., 2017, Preliminary Results Regarding Organic Sheep Meat Consumption in Romania, *Scientific Papers: Animal Science and Biotechnologies*, 50 (1), pp. 243-248.
- [10] Meulen, van der H., Prins, H., Poppe, K.J., 2012, Support for Farmers' Cooperatives; Sector Report Sheep. Wageningen: Wageningen UR.
- [11] OECD, 2020, Meat consumption (indicator). doi: 10.1787/fa290fd0-en, Accessed on 10 August 2020.
- [12] OECD-FAO Agricultural Outlook 2019-2028, [http://www.fao.org/3/CA4076EN/CA4076EN\\_Chapter\\_6\\_Meat.pdf](http://www.fao.org/3/CA4076EN/CA4076EN_Chapter_6_Meat.pdf), Accessed on 10 August 2020.
- [13] Pîrvuțoiu, I., Popescu Agatha, 2013, Considerations on Trends in the Romanian Sheep and Goat Meat Market, 1990-2010, *Scientific Papers: Animal Science and Biotechnologies*, 46 (2):412-417.
- [14] Popescu Agatha, 2013, Research on consumer behaviour on Bucharest meat market, *Scientific papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 13(1), 301-308.
- [15] Pork Checkoff, 2019, World per capita pork consumption, <https://www.pork.org/facts/stats/u-s-pork-exports/world-per-capita-pork-consumption/>, Accessed on 10 August 2020.
- [16] Ritchie, H., Roser, M., 2019, Meat and dairy products, <https://ourworldindata.org/meat-production>, Accessed on 10 August 2020.
- [17] Sava Sand, C., Antofie, M. M., 2019, The conservation of plant genetic resources for food and agriculture: consumers' perspectives analysis in Sibiu agri-food markets, *Scientific papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 19(3), 499-506.
- [18] Soare, E., 2016, Study on sheep and goat meat market in Romania, *Scientific papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 16(1), 505-510.

[19]Sourcek, M., Turcinkova, J., 2015, Factors for Choosing a Point of Purchase of Meat Products. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 63(2): 639–646.

[20]Stanciu Mirela, 2013, The attitude and motivation of buyers of traditional/local/bio products in the context of agrotourism, in Sibiu county, Romania, *Scientific papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 13(4), 273-277.

[21]Voinea, L., Vrânceanu, D. M., Filip, A., Popescu, D.V., Negrea, T.M., Dina, R., 2019, Research on Food Behaviour in Romania from the Perspective of Supporting Healthy Eating Habits, *Sustainability*, 11, 5255; doi:10.3390/su11195255, Accessed on 10 August 2020.