Content is avaliable at SCOPUS

Meat Technology — Special Issue 64/2



UDK: 316.64:663/664(497.113) ID: 126582537 https://doi.org/10.18485/meattech.2023.64.2.92

www.meatcon.rs = www.journalmeattechnology.com

Original scientific paper

Consumer attitudes and preferences toward traditional meat products in the autonomous province of Vojvodina

Tatjana Peulić^{a*}, Predrag Ikonić^a, Jovana Delić^a, Bojana Kalenjuk Pivarski^c, Nikola Maravić^a, Aleksandar Marić^a and Aleksandra Novaković^b

^a University of Novi Sad, Institute of Food Technology, Bulevar cara Lazara 1, 21000 Novi Sad, Serbia

^b University of East Sarajevo, Faculty of Pedagogy, Semberski ratara, 76300 Bijeljina, Republic of Srpska, Bosnia and Herzegovina
^c University of Novi Sad, Department of Geography, Tourism and Hotel Management, Faculty of Sciences, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia

ARTICLE INFO

Keywords: Traditional food products Traditional meat products Traditional dry fermented sausages Sremski kulen Petrovská klobása Lemeški kulen

A B S T R A C T

The purposes of this survey were to identify consumer attitudes and preferences toward special groups of traditional food products and to identify the position of meat products among traditional food products. An online questionnaire surveyed 540 respondents in the autonomous province of Vojvodina, Serbia. The questionnaire was divided into two parts: 1) socio-demographic characteristics and 2) consumer attitudes and preferences toward traditional food products and the position of meat products within these foods. Traditional food products that were reported as mostly consumed in Vojvodina are meat and meat products (85.4%), milk and milk products (65.1%), honey (64.5%) and products from fruit and vegetables (53%). Dry fermented sausages are the most prevalent group among traditional meat products (57.3%), followed by dry cured meat products (23.6%) and bacon (9.9%). Five of sixteen selected meat products that are consumed in Vojvodina were registered as Geographical Indication (GI) labelled product in the Intellectual Property Office of the Republic of Serbia. All registered GI products belonged to the group of dry fermented sausages.

1. Introduction

Traditional food products are an integral part of a region's cultural heritage and identity. These products are often passed down through generations and are cherished for their unique and recognizable characteristics and quality (*European Commission*, 2007; *Trichopoulou*, 2007; *Ikonić*, 2021). In recent years, there has been a noticeable increase in consumer demands for traditional food products due to growing interest in authenticity and food origins, quality, nutritional value and health-consciousness, environmental sustainability, economic impact on local economies and culinary diversity (*Byrne*, 2013; *Feldmann*, 2015; *Donati*, 2021; *Kovács*, 2022).

The autonomous province of Vojvodina is a region located in the northern part of Serbia, famous for its diverse traditional food products and culinary heritage, reflecting a blend of different cultures from various ethnic groups that have inhabited this region throughout history. Traditional meat products play a significant role in Vojvodina's gastronomy (*Tasić*, 2015; *Ikonić* 2021; *Kalenjuk Pivarski*, 2022). Furthermore, meat products are important elements of

*Corresponding author: Tatjana Peulić, tatjana.peulic@fins.uns.ac.rs

Paper received August 3rd 2023. Paper accepted August 18th 2023. Published by Institute of Meat Hygiene and Technology — Belgrade, Serbia This is an open access article under CC BY licence (http://creativecommons.org/licences/by/4.0) diets worldwide, especially traditional meat products which are regarded as morehealthy than products from high-scale industrial processing.

The aims of this study were to identify consumer attitudes and preferences toward special groups of traditional food products and to identify the position of meat products among the traditional food products.

2. Materials and methods

In order to determine consumer attitudes and preferences, an online questionnaire was available from June 2022 to April 2023, to which responded a sample of 540 people currently living in Vojvodina.

2.1. Questionnaire

The questionnaire was divided into two parts: 1) socio-demographic characteristics (six questions) and 2) consumer attitudes and preferences toward traditional food products and the position of meat and meat products among these foods (two questions). In the first part, respondents answered questions about gender, age, place of living, employment, monthly income (\in) and members in households. Further on, in the second part, respondents who consume traditional food products reported the most commonly consumed groups of products in their households and stated the names of those products. The following types of questions were used in the questionnaire: open questions, closed questions and multiple-choice questions.

2.2. Statistical analyses

The data was processed using Microsoft Excel (Microsoft Corporation, Redmond, Washington, USA). Descriptive statistics were employed to emphasize the characteristics of the study sample.

3. Results

Socio-demographic data shows that 69.1% of the respondents were females, 85% lived in the city, 55.6% were between 25 and 45 years old, 70.4% were employed and 65.6% lived in households with three or more members.

Consumer attitudes and preferences toward special groups of traditional food products are presented in Figure 1. As can be seen from Figure 1, the traditional food products that were reported as being most commonly consumed in Vojvodina are meat and meat products (462 respondents, 85.4 %), milk and milk products (352 respondents, 65.1%) honey (349 respondents, 64.5%) and products from fruit and vegetables (287 respondents, 53%).

Consumption of specific meat product groups within total traditional food products and within traditional meat products is shown in Figure 2. As can be seen Figure 2, dry fermented sausage is the most prevalent group both among traditional meat products (57.3%) and traditional food products (22.8%) in terms of consumption in Vojvodina. The second largest group reported was dry cured meat products, which amounted to 23.6% of traditional meat



Figure 1. Consumer attitudes and preferences toward special groups of traditional food products





Figure 2. Consumption of specific meat product groups within traditional food products and within traditional meat products

products and to 9.4% of traditional food products. The third group in terms of consumption was bacon (9.9% of traditional meat products and 4.0% of traditional food products). Interestingly, this group comprises only one traditional product, which is dry bacon. In contrast, the group of dry fermented sausages included various varieties of *kulen* and sausages. Similarly, dry cured meat products offer con-





sumers a diverse selection of *pršuta*, ham, loin, and more. On the European Union market, a similar situation, where sausages and hams are the most commonly consumed traditional meat products, was also observed (*eAmbrosia*, *Talone et al.*, 2007).

Consumption of specific, named meat products within traditional food products and within traditional meat products is presented in Figure 3. The results showed the following products were the most prevalent, as reported by consumers: "Sremski kulen", "Petrovačka kobasica", domestic sausage, domestic bacon, pršuta, domestic kulen and dry cured meat products. Here, it should be emphasized that the products "Pirotska peglana kobasica" and "Sudžuk" are characteristic for the southern part of Serbia, being particularly well-known and produced in that region. As a result, they are not widely consumed in Vojvodina, both due to the lack of their habitual consumption and their limited availability on the market in this northern region.

Five of 16 products, presented in Figure 3, were registered as Geographical Indication (GI) labelled products in the Intellectual Property Office (of the Republic of Serbia) namely "Sremski kulen", "Petrovačka kobasica", "Lemeški kulen", "Sremska kobasica" and "Pirotska peglana kobasica". All registered products belong to the group of dry fermented sausages.

4. Discussion and conclusion

The purposes of this survey were to identify consumer attitudes and preferences toward special groups of traditional food products and to identify the position of meat products among traditional food products. Based on the survey analysis, traditional meat products were the most commonly consumed products among all groups of traditional food products, and dried fermented sausages were the most prevalent group within the traditional meat products. *Lazzaroni et al.* (2013) stated that over the past five years, in Italy, protected designation of origin and

protected geographical indication (PDO-PGI) products have accounted for approximately 15-20% of the total domestic purchases. Among these products, meat items constituted roughly 12%, while cheeses made up a more significant portion at around 32%. In their study, Conter et al. (2008) discovered that among various meat products, dry fermented sausages showed a positive consumption trend, and consumers demonstrated a greater willingness to pay higher prices for this specific type of product. Products protected in Serbia by the GI label, such as "Sremski kulen" and "Petrovačka kobasica", along with domestic sausages, domestic kulen, and pršuta, were the most commonly consumed traditional meat products among consumers in Vojvodina. Our findings suggest that a positive preference for high-quality food products is usually identified by consumers not based on commercial labels but by their name and then by the indication of origin labelling. Cerjak et al. (2008) in their study "What motivates consumers to buy traditional food products?" found that consumers perceive traditional food in a very positive way and that their most frequent associations with it are heritage, traditional recipes, health, support for local farmers, environmentally friendly production and sentimental hedonism (with perception of traditional food as a means to connect with childhood). Our results indicate that local brands were the most desirable for traditional meat products, and the GI label could be a potential tool for differentiating traditional meat products, especially for small and traditional farms.

Based on the results obtained in this study, it can be concluded that consumers' marked preference toward traditional food products, as well as traditional meat products and their specific sub-groups, could be useful for stakeholders, policymakers and certification bodies. Furthermore, in order to deeply understand consumers' attitudes and preferences toward traditional food products, their opinions about quality should be investigated in further research.

Disclosure statement: No potential conflict of interest was reported by the authors.

Funding: The research was funded by the Provincial Secretariat for Higher Education and Scientific Research (No. 142-451-3149/2022-03).

Acknowledgements: The authors wish to express their sincere gratitude to the Provincial Secretariat for Higher Education and Scientific Research (No. 142-451-3149/2022-03) and the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (Agreement no.: 451-03-47/2023-01/200222) for their financial support.

References

- Byrne, D. V., Wachrens, S. S. & O'Sullivan, M. G. (2013). Future development, innovation and promotion of European unique food: An interdisciplinary research framework perspective. *Journal of the Science of Food and Agriculture*, 93, 3414–3419.
- Cerjak, M., Haas, R., Brunner, F. & Tomić, M. (2014). What motivates consumers to buy traditional food products? Evidence from Croatia and Austria using word association and laddering interviews. *British Food Journal*, 116, 1726–1747.
- Conter, M., Zanardi, E., Ghidini, S., Pennisi, L., Vergara, A., Campanini, G. & Ianieri, A. (2008). Consumers' behaviour toward typical Italian dry sausages. *Food Control*, 19, 609–615.
- Donati, M., Wilkinson, A., Veneziani, M., Antonioli, F., Arfini, F., Bodini, A., Amilien, V., Csillag, P., Ferrer-Pérez, H., Gkatsikos, A., Gauvrit, L., Gil, C., Hòang, V., Steinnes, K. K., Lilavanichakul, A., Mattas, K., Napasintuwong, O., Nguyen, A., Nguyen, M., Papadopoulos, I., Ristic, B., Stojanovic, Z., Maksan, M.T., Torök, Ä., Tsakiridou, E. & Bellassen, V. (2021). Economic spill-over of food quality schemes on their territory. *Journal of Agricultural & Food Industrial Organization*, 19, 95–111.
- eAmbrosia the EU geographical indications register, (2021). Retrieved from https://ec.europa.eu/info/food-farming-fisheries/food-safety-and-quality/certification/quality-labels/geographical-indications-register/
- European Commission, (2007). European research on traditional food. Website. ftp://ftp.cordis.europa.eu/pub/fp7/ kbbe/docs/traditional-foods.pdf
- Feldmann, C. & Hamm, U. (2015). Consumers' perceptions and preferences for local food: a review. *Food Quality and Preference*, 40, 152–164.
- Ikonić, P., Peulić, T., Delić, J., Novaković, A., Dapcevic-Hadnadjev, T. & Škrobot, D. (2021). Quality standardization and certification of traditional food products. In IOP

Conference Series: Earth and Environmental Science, Proceedings of the 61st International Meat Industry Conference, Zlatibor, Serbia, 26–29 September 2021. IOP Publishing: Bristol, UK, 2021; Volume 854, p. 012035.

- Kalenjuk Pivarski, B., Šmugović, S., Tekić, D., Ivanović, V., Novaković, A., Tešanović, D., Banjac, M., Đerčan, B., Peulić, T., Mutavdžić, B., Lazarević, J. & Vukelić N. (2022). Characteristics of traditional food products as a segment of sustainable consumption in Vojvodina's hospitality industry. Sustainability, 14, 13553.
- Kovács, I., Balázsné Lendvai, M. & Beke, J. (2022). The importance of food attributes and motivational factors for purchasing local food products: Segmentation of young local food consumers in Hungary. *Sustainability*, 14, 3224.
- Lazzaroni, C., Iacurto, M., Vincenti, F. & Biagini, D. (2013). Consumer attitudes to food quality products of animal origin in Italy. In Consumer attitudes to food quality products: Emphasis on Southern Europe, 83–96.
- Talon, R., Lebert, I., Lebert, A., Leroy, S., Garriga, M., Aymerich, T., Drosinos, E. H., Zanardi, E., Ianieri A., Fraqueza, M. J., Patarata, L. & Laukova, A. (2007). Traditional dry fermented sausages produced in small-scale processing units in Mediterranean countries and Slovakia. 1: Microbial ecosystems of processing environments. *Meat Science*, 77, 570–579.
- Tasić T., Ikonić, P., Jokanović, M., Mandić, A., Tomovic, V., Šojić, B. & Škaljac, S. (2015). Content of vasoactive amines in Sremski kulen and Sremska kobasica traditional dry fermented sausages from Vojvodina, Proceedings of the 58th International Meat Industry Conference "Meat Safety and Quality: Where it goes?", Procedia Food Science 5, 2015, 282–284.
- Trichopoulou, A., Soukara, S. & Vasilopoulou, E. (2007). Traditional foods: A science and society perspective. *Trends* in Food Science & Technology, 18, 420–427