

PRELIMINARY COMMUNICATION

Opinion of Croatian consumers on traditional Dalmatian lamb in the process of obtaining a PDO label

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Abstract

The protection of Dalmatian lamb ("Dalmatinska janjetina") with a protected designation of origin label (PDO) is based on the specific quality of meat of Dalmatian pramenka lamb and the traditional lamb breeding method in the geographic area that coincides with the breeding area of Dalmatian pramenka (indigenous Croatian sheep breed). Under the name of "Dalmatinska janjetina", only the meat of lambs of Dalmatian pramenka, bred exclusively in Dalmatia, can be placed on the market. In the process of obtaining a PDO label, which has recently been completed at the Croatian national level and is currently in the process at the EU level, a survey among Croatian consumers (a sample of 1,034 consumers from all over Croatia) was conducted to determine the recognition of this product on the Croatian market, as well as consumer preferences considering similar products from other Croatian regions. The research has shown that Croatian consumers recognize Dalmatian lamb as a traditional, high-quality product. Thus, almost 75 % of the respondents recognize it as a particular type of lamb of better quality than others on the Croatian market. Almost 85 % of the respondents use lamb regardless of type in their diet, but more than 58 % always on special occasions (folk festivals and family celebrations), especially if prepared in the traditional way (lamb on a spit) by which Dalmatia as a region is recognized by more than 85 % of the respondents. The market reputation and connection with the geographic production area are why Croatian consumers rather buy Dalmatian lamb over others.

Keywords: Dalmatian lamb; "Dalmatinska janjetina"; PDO label; consumer opinion research

Introduction

Traditional food products have always had a remarkable reputation in the market, which has often been abused to the detriment of producers and consumers. Therefore, EU producers have initiated a special register that will prescribe such products' rules of production

and marketing. Today's EU Quality Policy, among other things, protects the names of certain products in order to promote their unique characteristics linked to their geographical origin and traditional knowledge. Therefore, various EU product registers have been established under

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the EU Quality Policy, including the European Commission's Quality products registers (eAmbrosia and Giview register), which protect the names of agricultural products and food, and various alcoholic beverages, registered and protected throughout the EU. Geographical indications establish intellectual property rights for certain products whose properties are linked explicitly to the area of production. With these geographical indications, including the protected designation of origin (PDO), the EU protects product names that originate in certain regions and have specific characteristics or a reputation associated with the area of production. Consumers today are faced with a large number of different labels on food products, which should make it easier for them to differentiate and help them choose. Product declarations often do not contain enough useful information, so additional labels, generally accepted in the market, make it easier for consumers to choose.

Over time, quality-labelled products have become a strategic factor in developing the European food system (EU strategy "from the field to the table" for a fair, healthy and environmentally friendly food system) and a strategic tool for differentiation. The success of the branded traditional products market can be explained by the fact that such products stand out as credible and original in a market full of various products (Beletti et al., 2007). The growth in demand for local and regional food is the answer to the question of consumer concern for food safety and quality and, at the same time, a sign of valuing the origin of food as a valuable sign of quality. Moreover, growing consumer interest in additional information about the properties of the food they buy, such as origin, sustainability, traceability and authenticity, has stimulated demand for local and regional food and specialties. The reputation of traditional, local and regional products is often abused in the market to the detriment of producers and consumers. Therefore, it is crucial to explain the clear link between territories (production areas) and specific product quality indicators (Króziak et al., 2012). From such thinking, protected quality labels (PDO, PGI, etc.) have emerged to protect the identity of products and traditional technologies, which are firmly rooted in a region and have specific and recognizable properties.

In June 1993, the European Union adopted Regulation No. 2081/92, which prescribes the criteria for obtaining quality labels: protected designation of origin (PDO) and protected geographical indication (PGI) of agricultural products and crops. These quality labels result from an initiative by EU producers to establish a system that will clearly prescribe the rules for the production and marketing of traditional products. In order for a product to meet the requirements for registration of these quality labels, manufacturers must argue the relationship of specific product quality properties with the geographical area of production or link the impact of a limited geographical area in which a combination of natural (climate, soil) and human factors) indisputably affect the formation of specific product quality properties (Hassan et al., 2011). Therefore, the main goal of the established registers is to define a harmonized set of rules relating to the production, promotion and protection of traditional agricultural and food products related to the specific area from which they originate, which ultimately results in improving the quality of the products themselves, contributing to the total value of the European food production (Gracia, 2006), but also the gastronomic culture of the EU. Manufacturers whose products go through the certification process with one quality label formally confirm their compliance with the socially responsible way of doing business. According to Bottonaki et al. (2006), in this way, producers within the agri-food sector avoid the risk of imitation by competitors but also justify the higher price of their products. Labels that guarantee the origin and remarkable quality of products and a controlled production system are certainly good arguments for making such products more appreciated by consumers. Additional success in promoting these products will undoubtedly depend on the implementation of marketing strategies based on the origin and authenticity of the product (place of production/purchase/consumption; specific product quality; mechanisms that communicate heritage).

Likoudis et al. (2015) state that the establishment of product labelling systems with protected quality labels such as PDO (Protected Designation of Origin) and PGI (Protected Geographical Indication) contributes to the

conservation of biodiversity in agriculture (given that production is often based on native varieties and breeds and traditional technologies), the economic wellbeing of the local population and the sustainable development of rural areas which also encourages consumers to choose just such products. Vital information when it comes to the type of lamb, which influences the choice of consumers, is also the data on the lamb breeding system. The meat of animals raised on natural pastures with information on geographical origin, even if it is a local product, is the key information based on which consumers decide (Caroprese et al., 2020).

All of this should have an impact on consumer buying behaviour, according to Van Ittersum et al. (2007), through two different dimensions. The first dimension is quality assurance, which represents consumers' belief in the label's ability to guarantee a higher level of quality. The second dimension is economic support, which includes consumers' beliefs about how such products can support the region's economy.

Traditional Dalmatian lamb ("Dalmatinska janjetina") in the process of registration a PDO label

The first systematic written data on cattle breeding in Dalmatia date from the end of the 18th century and the beginning of the 19th century, but there are numerous evidences that sheep breeding has long been a significant economic branch of Dalmatia. Namely, sheep breeding in Dalmatia is closely related to the very origin of the name Dalmatia. The Illyrian tribe *Dalmati* or *Delmati* are an ancient ethnic group that lived in today's Dalmatia and part of western Herzegovina from the 4th century B.C, between the rivers Krka and Neretva. Their name comes from the Illyrian word *dalma* or *delma*, meaning "sheep", which indisputably confirms their connection with the primary occupation - cattle breeding, or sheep breeding. The Roman province Dalmatia (today's Dalmatia) is named after them (Ozimec, 2009).

The protection of Dalmatian lamb by PDO label is based on the specific quality of Dalmatian pramenka lamb meat and the traditional breeding method in a defined geographical area. The characteristics of the Dalmatian pramenka, such as resistance and dexterity,

especially the tiny and pointed head and movable jaw and lips (Širić et al., 2009), confirm the millennial adaptation of this breed to the harsh conditions of Dalmatian karst that allow it to use hard-to-reach pastures on Dalmatian rock overgrown with macchia and shrubs, and survival on the most inaccessible and harshest terrains of very steep coastal slopes. In addition, Dalmatian pastures are considered to be typical sheep pastures whose floral composition is dominated by low herbaceous species mainly adjacent to the ground, probably formed due to selection of vegetation conditioned by millennial grazing, primarily sheep (Rogošić, 2000), so the impact was mutual.

The geographical area of Dalmatian pramenka breeding includes three different vegetation zones in the three different climate zone (the Mediterranean, sub-Mediterranean and continental climate), and a large number of different plant species (Ozimec, 2009), among which numerous plant species with low nutritional value and richness of aromatic and antioxidant compounds are significantly represented (Krvavica et al., 2015). According to the estimated number of different plant species (about 3,500), Dalmatia (the geographical area of production of Dalmatian lamb) is one of the wealthiest regions in Europe. Given that this number makes up over 7 % of endemic species, among which there is a large number of stenodemias of very narrow distribution, it can be said that the flora of the geographical area of production of Dalmatian lamb is vibrant and unique (Ozimec, 2009). Poor grazing also causes a slower growth of lambs, which have a less developed digestive system, so the meat yield in the carcass of Dalmatian lamb (yield) is higher than in continental lambs (Mioč et al., 2012). These vegetation characteristics have a decisive influence on the specific chemical composition of meat, especially the composition of fatty acids and volatile aroma compounds, of which terpenes are essential (metabolites of dicotyledonous plants significantly present in the floral composition of Dalmatian pastures, many of which belong to endemic Dalmatian species), which are directly from food unchanged incorporate into animal tissues, and are considered potential direct plant markers in the scientific literature (Krvavica et al., 2015). These chemical ingredients are

ultimately responsible for creating the specific aroma and taste of Dalmatian lamb recognizable by consumers.

Furthermore, as the farming area of Dalmatian pramenka is scarce for most of the year, sheep and lambs travel long distances daily in search of food, which affects the quality of Dalmatian lamb, which, therefore, compared to other types of lamb, contains less fat and has some darker light pink colour to pink colour (Mioč et al., 2012). Therefore, the recognizable, specific mild and pleasant aroma and taste of Dalmatian lamb are the results of breed characteristics and traditional way of raising sheep and lambs but above all the specifics of the geographical area of breeding Dalmatian pramenka.

Geographical area of Dalmatian lamb production

The geographical area of Dalmatian lamb production coincides with the breeding of indigenous Dalmatian pramenka sheep. Accordingly, the geographical area of production of Dalmatian lamb is defined in the specification of the Dalmatian lamb, which includes the administrative area of Novalja town and the parts of the coastal Velebit slope of Karlobag municipality in the Lika-Senj County; area of Zadar County except the area of the Gračac town and the entire areas of Šibenik-Knin County, Split-Dalmatia County and Dubrovnik-Neretva County. Since this is a registration of the PDO label, the specification also prescribes the area of feed production. So, at least 80 % of animal feed (pasture, meadow hay, alfalfa hay) is produced in the defined geographical area of animal husbandry and production of Dalmatian lamb, and 20 % of hay can come from the area of Lika and Gorski kotar.

Specific properties of Dalmatian lamb

The age and body weight of lambs at slaughter, and the method of carcass processing, are primarily the result of sheep tradition, production purposes and consumer habits. Therefore, the carcasses of Dalmatian pramenka lambs are always placed on the market with head, kidneys and kidney fat, with or without testicles, and edible offal, and given the weight of the warm carcass with the head (8 - 14 kg) belong to the category of light lambs, where the yield of the warm carcass is not less than 45 %.

Slaughter yield is significantly higher than lambs raised in other parts of Croatia, mainly due to poor nutrition and slower growth of Dalmatian pramenka lambs, whose share of digestive organs is consequently lower. The carcass is slight to moderately covered with white adipose tissue, welldeveloped musculature and excellent conformation, while the muscle tissue is light pink to pink colour (Krvavica et al., 2013). Especially valued Dalmatian lamb produced on the islands, coast and karst areas of the Dalmatian hinterland is characterized by a delicate muscle structure without pronounced marbling, white subcutaneous and internal fat deposits (Cvrtić et al., 2007). Compared to some other types of lamb (e.g. Pag), the meat of Dalmatian lamb contains significantly less fat (Vnučec, 2011) and consumers recognize and especially appreciate Dalmatian lamb primarily because of the delicate structure of muscle tissue and the specific very mild and pleasant aroma and taste (Krvavica et al., 2015). The aroma profile of Dalmatian lamb contains a significantly higher number of different volatile chemical compounds than the aroma profiles of other types of lamb, and the significantly higher number and total share of terpenes concerning lamb in the continental parts of Croatia and Bosnia and Herzegovina (Krvavica et al., 2016).

Material and methods

In obtaining the protected designation of origin (PDO), which was completed at the Croatian national level and is currently in the process at the EU level, a survey was conducted among Croatian consumers to determine the recognition of Dalmatian lamb on the Croatian market and consumer preferences concerning similar products from other Croatian regions. For this paper, the research was conducted on a sample of 1,034 respondents throughout the Republic of Croatia. The snowball method was used for sampling, while the empirical research was conducted through an online questionnaire created using the Google Docs form. An email (with link to the survey) was sent to the administrations of several large state and public institutions whose employees work throughout Croatia, with a request for their employees to complete the survey. Participation in the research was

Table 1 Socio-demographic characteristics of the respondents**Tablica 1.** Socio-demografske odlike ispitanika

Socio-economic variables Socio-ekonomski pokazatelji	Characteristics Odlike	Frequency Učestalost	%
Gender Spol	Man/Muški	424	41,3
	Female/Ženski	603	58,7
Age Dob	15-25	27	2,7
	26-35	217	21,3
	36-45	321	31,5
	46-55	294	28,8
	56-65	155	15,2
	65 and more	6	0,6
Level of education Razina obrazovanja	no school/bez škole	1	0,1
	primary school/osnovna škola	3	0,3
	secondary school/srednja škola	142	14
	high school or college/visoko obrazovanje	870	85,6
Household income (€) Mjesečna primanja (€)	to 400	17	1,7
	401 - 800	93	9,2
	801 do 1.200	278	27,5
	od 1.201 do 1.600	262	26
	more than 1.600	360	35,6

completely anonymous and voluntary. Results were performed and presented using the Tools (Data Analysis) software package.

The survey was conducted in the period from June 23, 2018, to September 20, 2018. The survey questionnaire consisted of 15 questions, which were divided into several groups. Questions were asked about lamb consumption, knowledge of Dalmatian lamb, how to buy, consume and prepare Dalmatian lamb and the perception of the quality of Dalmatian lamb. At the end of the questionnaire were four questions (12-15) related to the sociodemographic characteristics of the respondents, such as gender, age, level of education and total household income (last month). The questionnaire was created based on a review of previous research and is also the primary source of data on the opinion of Croatian consumers about the traditional Dalmatian lamb in the process of obtaining the PDO label. The structure of the answers is shown using the method of graphical representation.

Sample characteristic

The sociodemographic variables used in this study include gender, age, education level, and household income (Table 1). Of the 1,034

respondents included in the survey, the majority were female (58.7 %). The most represented age group in the total sample is the group from 36 to 45 years, which makes up 31.5 %, while the age groups from 15 to 25 years and 65 and older have the lowest number of respondents, 3.5 %. The most significant number of respondents are people with a high school level or college level (86 %), and 14 % of respondents have completed high school. Out of a total of 1,034 respondents who participated in the questionnaire, it was found that the most significant number, i.e. more than 1/3 of respondents, earn a monthly household income of more than € 1,600 and are represented by 36 % in the sample, while the smallest number of respondents earn a monthly household income, below € 400 (2 %).

Results and discussion

Lamb consumption in general and consumption of Dalmatian lamb

To the question of the use of lamb in their diet, out of 1,029 respondents, 870 respondents (86 %) answered in the affirmative, while 159 respondents (16 %) answered that they do not use it in the diet at all (Fig.1).

Question 1: Do you use lamb in your diet?
Pitanje 1: Koristite li janjetinu u prehrani?
1,029 answers / odgovora

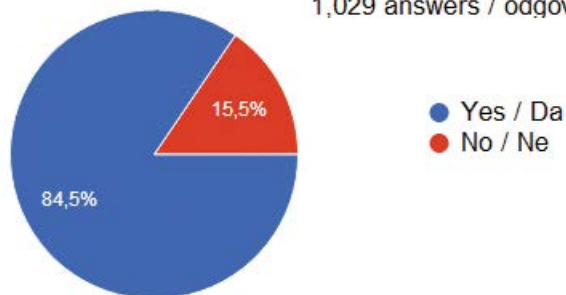


Figure 1 Use of lamb in the diet
Slika 1. Korištenje janjetine u prehrani

Question 2: How often do you consume lamb?
Pitanje 2: Koliko često konzumirate janjetinu?
906 answers / odgovora

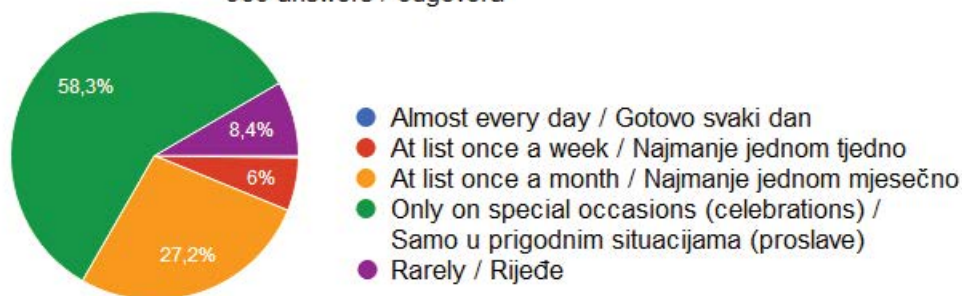


Figure 2 Frequency of use of lamb (during the year)
Slika 2. Učestalost konzumiranja janjetine tijekom godine

When asked how often they consume lamb during the year (Fig 2), 528 respondents (58.3 %) state that they consume lamb only on appropriate occasions (such as celebrations), 246 respondents (27.2 %) consume lamb at least once a month, consume it once a week, 6 %, i.e. 54 respondents, and every day 2 respondents (0.2 %). A high percentage of respondents (58.3 %) consume lamb only on special occasions (celebrations). This result is not unusual, given that it is almost impossible to imagine any celebration in Dalmatia without roast lamb prepared on a spit.

When asked if they have ever consumed Dalmatian lamb, a total of 891 respondents answered, of which 704 or 79.01 % gave an affirmative answer, which is 58.02 % (517 respondents) more than the number of respondents who have never consumed Dalmatian lamb (Fig. 3).

When asked how long they have been consuming Dalmatian lamb, out of a total of 668 respondents who completed the questionnaire,

429 respondents (64.2 %) have consumed Dalmatian lamb since always, while only 14, 15 and 16 respondents have started consuming it in the last 3 years (2.1 %), 2 years (2.25 %), and 1 year (2.4 %), respectively (Fig. 4).

A total of 688 respondents answered the question of preferences for the method of preparation of "Dalmatian lamb", of which the largest number of respondents, 300 of them, prefer Dalmatian lamb prepared traditionally on a spit (43.6 %), and more than a third of respondents, 223 (32.4 %), considers every dish prepared with Dalmatian lamb excellent (Fig. 5).

Recognition and quality perception of Dalmatian lamb

A total of 959 respondents answered the question of knowing Dalmatian lamb as a special type of lamb. Dalmatian lamb as a particular type of lamb is known to most respondents, if we see that as many as 718 respondents (75 %) answered

Question 4: Did you ever consumed Dalmatian lamb?
 Pitanje 4: Jeste li ikada konzumirali dalmatinsku janjetinu?
 891 answers / odgovora

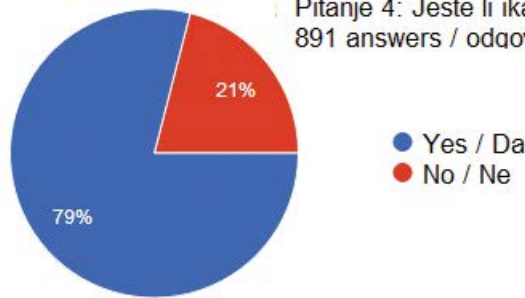


Figure 3 Consumption of Dalmatian lamb
Slika 3. Konzumacija dalmatinske janjetine

Question 5: How long have you been consuming Dalmatian lamb?
 Pitanje 5: Koliko dugo konzumirate dalmatinsku janjetinu?
 668 answers / odgovora

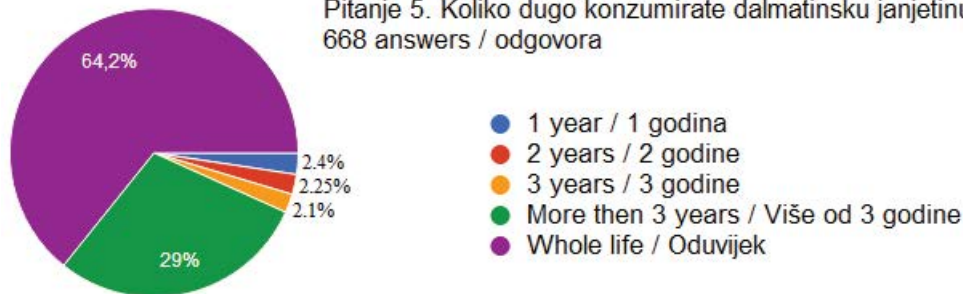


Figure 4 Length of consumption of Dalmatian lamb
Slika 4. Duljina konzumacije dalmatinske janjetine

Question 7: Which Dalmatian lamb dish do you prefer?
 Pitanje 7: Koji način pripreme dalmatinske janjetine preferirate?
 688 answers / odgovora

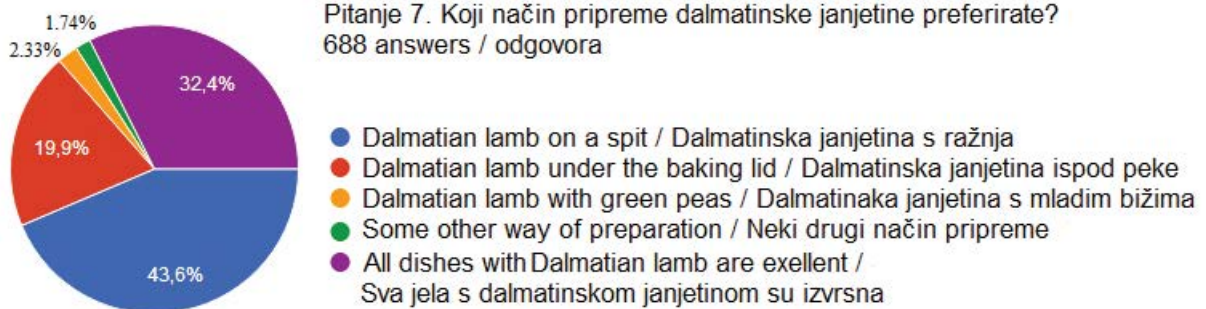


Figure 5 Consumers preferences regarding the dishes of Dalmatian lamb
Slika 5. Preferencije potrošača o načinu pripreme dalmatinske janjetine

positively to the question, which is 50 % (477 respondents) more than the number of respondents who do not know Dalmatian lamb (as a particular) type of lamb (Fig. 6.).

When asked whether they recognize Dalmatia as a region known for the traditional

way of preparing lamb on the spit (which is traditionally served during celebrations), a total of 840 respondents answered, of which 717 respondents (85.4 %) recognize Dalmatia as a region known for the traditional way of preparing lamb, which is for 594 respondents (70.1 %) more than the

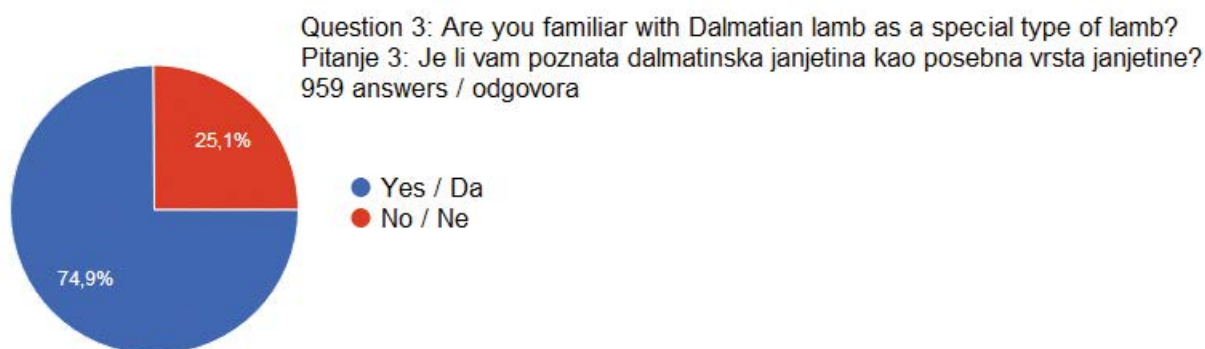


Figure 6 Recognition of Dalmatian lamb
Slika 6. Prepoznatljivost dalmatinske janjetine

number of respondents who answered negatively to this question (Fig. 7.). The fact that the name of Dalmatia comes from the old Illyrian word for sheep, *dalma* or *delma*, speaks enough about the connection of the region of Dalmatia with the production and preparation of lamb meat. Actually, specific preparation of Dalmatian lamb by grilling the whole carcass on a spit was described in the 18th century by an Italian travel writer Alberto Fortis (1774), who wrote a book about his journey through Dalmatia and mentioning grilled lamb on a spit as a way of preparing lamb specific to Dalmatia. Moreover, the esteemed Croatian archaeologist Zdenko Brusić claims based on archaeological excavations in Dalmatia that Dalmatian's oldest recipe and culinary "brand" is more than 8,000 years old (Brusić, 2016).

When asked about the perception of the quality of Dalmatian lamb (taste, aroma, softness), and the distinction between Dalmatian lamb and lamb from other parts of Croatia, 683

respondents answered, of which 418 respondents (61.2 %) believe that Dalmatian lamb in quality (taste, aroma, softness) it differs from lamb from other parts of Croatia. However, 175 respondents (26 %) believe that Dalmatian lamb differs in quality only concerning lamb from the continental parts of Croatia. Only a small part of the respondents, 90 of them (13.2 %), believe that lamb from all parts of Croatia is of equal quality (Fig. 8.).

When asked which properties of Dalmatian lamb determine its quality, a total of 676 respondents answered, of which almost 538 respondents (80 %) believe that the quality of Dalmatian lamb is determined mainly by a mild odour without a pronounced odour (per sheep), softness and solubility in chewing (Fig. 9.). The perception of the respondents regarding the quality attributes of Dalmatian lamb primarily relate to recent research on volatile chemical compounds of roast lamb from different geographical areas, which link the mild aroma of Dalmatian lamb (as well

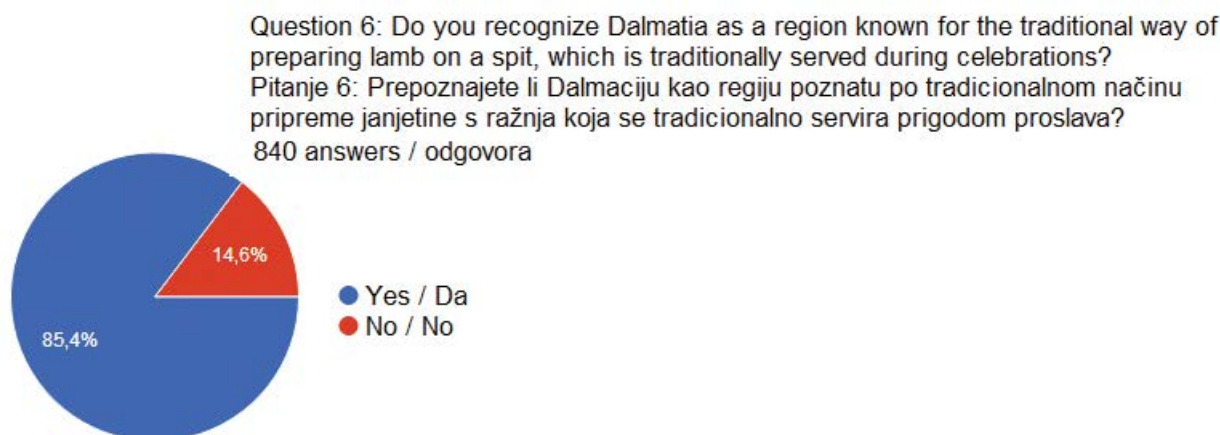


Figure 7 Recognition of Dalmatia as a region known for lamb on the spit
Slika 7. Prepoznatljivost Dalmacije kao regije poznate po janjetini s ražnja

Question 8: Do you think that Dalmatian lamb is different in quality (taste, aroma, softness) in compare to lamb from other parts of Croatia?

Pitanje 8: Smatrate li da se dalmatinska janjetina po kvaliteti (okus, aroma, mekoća) razlikuje od janjetine iz drugih područja Hrvatske?

683 answers / odgovora

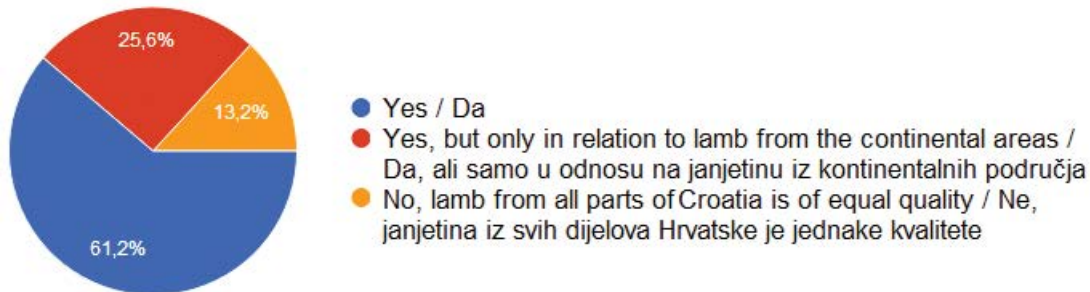


Figure 8 Quality perception of Dalmatian lamb compared to lamb from other parts of Croatia
Slika 8. Percepcija kvalitete dalmatinske janjetine u odnosu na janjetinu iz drugih dijelova Hrvatske

Question 9: In your opinion, which properties of Dalmatian lamb determine its quality the most?

Pitanje 9: Koja svojstva dalmatinske janjetine smatrate da najviše određuju njenu kvalitetu?

676 answers / odgovora

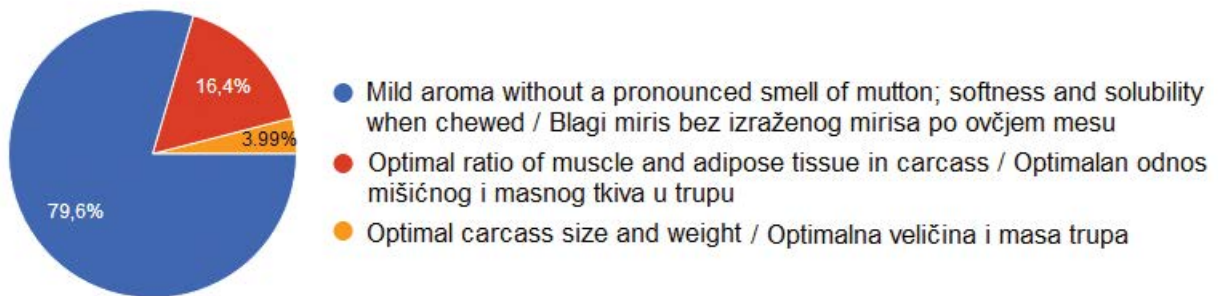


Figure 9 Quality properties of Dalmatian lamb
Slika 9. Kvalitativna svojstva dalmatinske janjetine

as lamb from the Croatian islands) to the specific botanical composition of pastures (Krvavica et al., 2015; 2015a; 2015b; 2016; 2016a; 2020). Even Pliny (23 to 79 A.D) especially praised lamb and kid from the island of Brač raised on "perfect" pastures, which is why the meat has a unique taste (Defilippis, 2001).

Purchasing and consumption of Dalmatian lamb

The question of the method of purchase was answered by a total of 679 respondents, from whose answers it can be concluded that the respondents (246 of them) most often buy Dalmatian lamb directly from local breeders (36.2 %), which is 206 more (30.3 %) compared to those who buy it in a supermarket or local butchers (5.9 %; 40 respondents). Furthermore, 125 respondents (18.4 %) come to Dalmatian lamb restau-

rants (Fig. 10.). The results show that consumers believe the most if they buy lamb directly from local breeders and consume it according to local customs (on folk festivals and celebrations). Similarly, recent research confirms that consumers considered lamb meat as a local and typical food that connects with high quality attributes, not only because of breeding method and area but also because of shorter transport and good welfare (Caroprese et al., 2020).

When asked about the most common reason for buying Dalmatian lamb, out of a total of 686 respondents, 246 (35.9 %) choose Dalmatian lamb for purchase for traditional reasons, 216 (31.5 %) for quality, and 144 respondents (21 %) because it is considered "healthier" than other types of lamb (Fig. 11).

According to Bredahl (2001), one of the important factors in consumers' purchasing deci-

Question 10: Where do you buy (consume) Dalmatian lamb most often?
Pitanje 10: Gdje najčešće kupujete (konzumirate) dalmatinsku janjetinu?
679 answers / odgovora

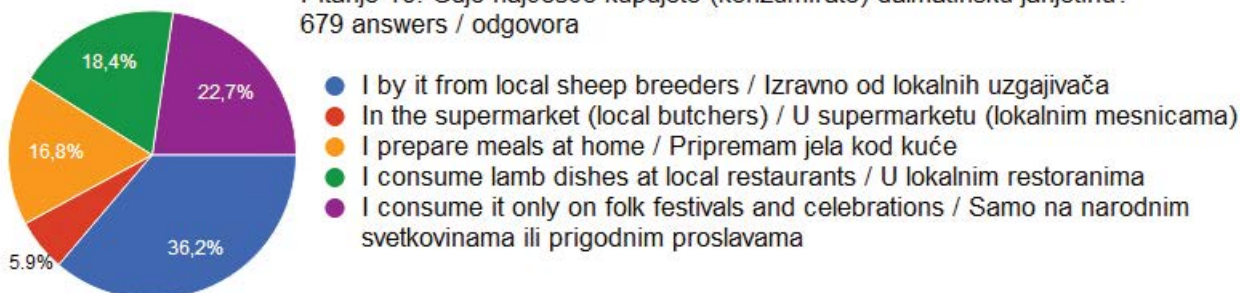


Figure 10 Purchase and consumption of Dalmatian lamb
Slika 10. Kupovina i konzumacija dalmatinske janjetine

Question 11: If I have a choice when buying lamb, I prefer to choose Dalmatian lamb because of:
Pitanje 11: Ukoliko imam mogućnost izbora, pri kupovini janjetine radije biram dalmatinsku janjetinu zbog:
686 answers / odgovora

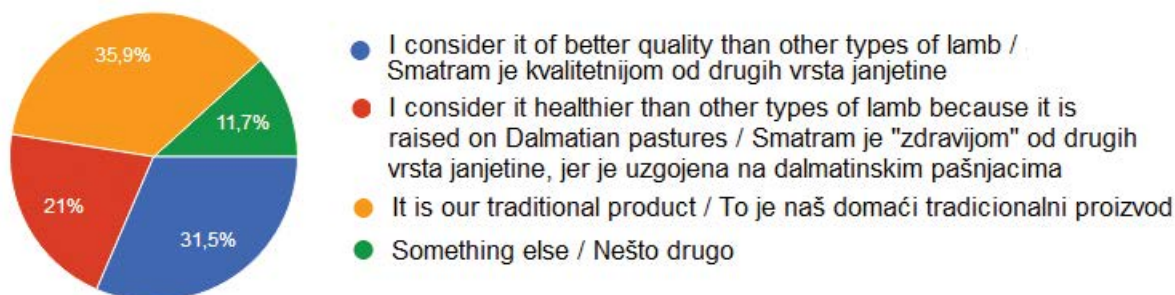


Figure 11 The reasons of purchasing Dalmatian lamb
Slika 11. Razlozi kupovine dalmatinske janjetine

sion is trust what is closely linked to product safety and its nutritional and health characteristics. Respondents' answers to this question (Fig. 11.) confirm the above claims. Namely, almost 57 % believe in the quality of traditional products and consider Dalmatian lamb healthier because it is raised on Dalmatian pastures.

Recent research shows that meat from animals grazing in the natural pasture and labelled with information about high welfare standards is preferred by consumers (Caroprese et al., 2020). Especially the geographical origin of food is recently considered one of the leading information influencing the consumers' acceptance (Hersleth et al., 2012). According to Napolitano et al. (2007), consumers are attracted by labelling information about quality attributes of lamb meat connected to animal grazing in a natural pasture and welfare and feeding system.

Conclusive remarks

Products with a PDO label are considered top products, primarily because they are based on tradition and provide information on the geographical origin of the products. The study aimed to examine the opinion of Croatian consumers about the traditional Dalmatian lamb in the process of obtaining the PDO label. Although the existence and growing interest in research in this area is evident, the lack of research in some aspects is emphasised. The data obtained from this research can better understand the way consumers perceive the value of food products with the PDO label, emphasising Dalmatian lamb. Market saturation, as well as frequent issues related to food products, are one of the important drivers of the need for better quality food products and original products due to their unique qualities, which stem from a strong connection with the territory they come from, can become

products of particular interest. The reputation of the name Dalmatian lamb and the connection of the product with the geographical area of production is also shown by the results of the conducted survey of the Dalmatian lamb market. Based on the answers of the respondents, it can be concluded that they recognise Dalmatian lamb as a traditional and high quality domestic product, and believe that it is better than other types of lamb on the market and gladly consume it most often during public holidays and family celebrations, especially if prepared traditionally by grilling on a spit. More than 85 % of respondents recognise Dalmatia as a region known for its traditional way of preparing lamb during celebrations (grilled lamb). Croatian consumers buy Dalmatian lamb because of its reputation on the market and the connection of the term with the geographical area.

Recommendations for future research

Further research in this area will undoubtedly be needed, given the lack of research and the need to understand Dalmatian lamb with the PDO label and greater consumer awareness under the influence of rapid changes in the food industry. In order to better define and understand the market for these products, it is necessary, in future research, to analyse consumers and their characteristics, preferences and behaviour. For future research, therefore, it is important to identify the most important attributes that consumers use to assess these factors of intention to buy Dalmatian lamb to understand the perception of PDO lamb consumers based on the obtained data and thus help market segmentation. Demand for this product can thus be increased by "conquering" existing non-consumers and increasing consumption by current consumers.

Products with a PDO label are considered top products, primarily because they are based on tradition and provide information on the geographical origin of the products. The aim of the study was to examine the opinion of Croatian consumers about the traditional Dalmatian lamb in the process of obtaining the PDO label. Although the existence and growing interest in research in this area is evident, the lack of research in some aspects is emphasized. The data obtained from this research can be used to better understand the way consumers perceive the value of food products with the PDO label, with an emphasis on Dalmatian lamb. Market saturation, as well as frequent issues related to food products, are one of the important drivers of the need for better quality food products, and original products due to their special qualities, which stem from a strong connection with the territory they come from, can become products of special interest. The reputation of the name Dalmatian lamb and the connection of the product with the geographical area of production are also shown by the results of the conducted survey of the Dalmatian lamb market. Based on the answers of the respondents, it can be concluded that they recognize Dalmatian lamb as a traditional and high quality domestic product, and believe that it is better than other types of lamb on the market and gladly consume it most often during public holidays and family celebrations, especially if prepared in the traditional way by grilling on a spit. More than 85 % of respondents recognize Dalmatia as a region known for its traditional way of preparing lamb during celebrations (lamb on a spit). Croatian consumers buy Dalmatian lamb because of its reputation on the market and the connection of the term with the geographical area of production.

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Mišljenje hrvatskih potrošača o tradicionalnoj Dalmatinskoj janjetini u procesu dobivanja ZOI oznake

Sažetak

Zaštita "Dalmatinske janjetine" zaštićenom oznakom izvornosti (ZOI) temelji se na specifičnoj kvaliteti mesa i tradicionalnom načinu uzgoja janjadi dalmatinske pramenke na geografskom području koje se poklapa s uzgojnim područjem izvorne hrvatske pasmine ovaca, Dalmatinske pramenke. Pod nazivom "Dalmatinska janjetina" na tržište se može staviti samo meso janjadi dalmatinske pramenke, uzgojene isključivo u Dalmaciji. U zakonskom postupku registracije zaštićene oznake ZOI, koji je nedavno završen na hrvatskoj nacionalnoj razini, a trenutno je u tijeku postupak na razini EU-a, provedeno je istraživanje među hrvatskim potrošačima na uzorku od 1.034 potrošača s područja čitave Hrvatske, kako bi se utvrdila prepoznatljivost ovog proizvoda na hrvatskom tržištu, kao i preferencije potrošača s obzirom na slične proizvode iz drugih hrvatskih regija. Istraživanje je pokazalo da hrvatski potrošači prepoznaju „Dalmatinsku janjetinu“ kao tradicionalni, visokokvalitetni proizvod. Gotovo 75 % ispitanika "Dalmatinsku janjetinu" prepoznaje kao posebnu vrstu janjetine kvalitetniju od ostalih vrsta janjetine na hrvatskom tržištu. Gotovo 85 % ispitanika koristi janjetinu u prehrani, ali više od 58 % samo u posebnim prilikama (narodne svetkovine i obiteljska slavlja), osobito ako se priprema pečenjem na ražnju. Navedeni tradicionalni način pripreme janjetine pečenjem na ražnju više od 85 % ispitanika povezuje s Dalmacijom kao regijom. Ugled na tržištu i povezanost s geografskim područjem proizvodnje (Dalmacija) razlozi su zbog kojih hrvatski potrošači radije kupuju dalmatinsku janjetinu nego druge vrste janjetine.

Ključne riječi: Dalmatinska janjetina, ZOI oznaka, istraživanje mišljenja potrošača

Meinung der kroatischen verbraucher über das traditionelle Dalmatinische lamm im verfahren zur erteilung des herkunftsschutzzeichens (ZOI)

Zusammenfassung

Der Schutz von „Dalmatinischem Lamm“ mit dem Herkunftsschutzzeichen (kroat. Abk. ZOI) beruht auf der spezifischen Fleischqualität und der traditionellen Art der Zucht von Lämmern des dalmatinischen Schafs Pramenka auf dem geographischen Gebiet, das mit dem Zuchtgebiet der originellen kroatischen Schafsrasse, Dalmatinischer Pramenka, überlappt. Unter der Bezeichnung „Dalmatinisches Lamm“ kann man lediglich das Lammfleisch der Dalmatinischen Schafsrasse Pramenka auf den Markt bringen, die ausschließlich in Dalmatien gezüchtet wurde. Im gesetzlichen Verfahren zur Registrierung des Herkunftsschutzzeichens (ZOI), das auf der kroatischen Nationalebene vor kurzem abgeschlossen wurde, wobei das Verfahren zurzeit auf der EU-Ebene anhängig ist, wurde eine Forschung unter den kroatischen Herstellern an einem Muster von 1.034 Verbrauchern aus ganz Kroatien durchgeführt, um die Erkennbarkeit dieses Produkts auf dem kroatischen Markt sowie die Präferenzen der Verbraucher unter Berücksichtigung ähnlicher Produkte aus anderen kroatischen Gebieten festzustellen. Diese Forschung ergab, dass die kroatischen Verbraucher das „Dalmatinische Lamm“ als traditionelles, qualitativ hochwertiges Produkt erkennen. Beinahe 75 % der Befragten erkennen das „Dalmatinische Lamm“ als eine besondere Art von Lamm, die im Vergleich zu den anderen auf dem kroatischen Markt vorhandenen Arten von Lamm weitaus qualitativ hochwertiger ist. Beinahe 85 % der Befragten nutzt das Lammfleisch in der Ernährung, aber mehr als 58 % nutzt es lediglich zu besonderen Zwecken (bei Volksfesten und Familienfeiern), insbesondere, wenn man es als ein ganzes Lamm am Spieß nutzt. Die soeben erwähnte traditionelle Art der Zubereitung von Lamm durch Braten des ganzen Lamms am Spieß verbindet mehr als 85 % der Befragten mit Dalmatien als Gebiet. Das Marktimage und die Verbindung mit dem geographischen Gebiet der Lammzucht (Dalmatien) stellen Gründe dar, wegen derer die kroatischen Verbraucher lieber dalmatinisches Lammfleisch als andere Arten von Lamm bevorzugen.

Schlüsselwörter: Dalmatinisches Lamm, Herkunftsschutzzeichen (ZOI), Forschung der Verbrauchermeinung

La opinión de consumidores croatas sobre la carne de cordero de Dalmacia tradicional en el proceso de obtener la Denominación de Origen Protegida (DOP)

Resumen

La protección de la carne de cordero de Dalmacia con la Denominación de Origen Protegida (DOP) está basada en la calidad específica de la carne y la forma tradicional de criar corderos de la raza pramenka de Dalmacia en una zona geográfica que coincide con la zona de cría de la raza ovina originaria de Croacia: pramenka de Dalmacia. Bajo el nombre de carne de cordero de Dalmacia, sólo se puede comercializar la carne de cordero de pramenka de Dalmacia, criado exclusivamente en Dalmacia. En el proceso de solicitud de la marca protegida DOP, completado recientemente a nivel nacional croata y que actualmente está en proceso a nivel de la UE, fue realizada la encuesta de opinión de los consumidores croatas sobre una muestra de 1034 consumidores de toda Croacia, para determinar si este producto está reconocible en el mercado croata, así como las preferencias de los consumidores con respecto a productos similares de otras regiones croatas. La investigación mostró que los consumidores croatas reconocen la carne de cordero de Dalmacia como un producto tradicional de alta calidad. Casi el 75 % de los encuestados reconoce la carne de cordero de Dalmacia como un tipo especial de carne de cordero de mejor calidad que otros tipos de cordero en el mercado croata. Casi el 85 % de los encuestados usa la carne de cordero en su dieta, pero más del 58 % solo en ocasiones especiales (festivos folclóricos y celebraciones familiares), especialmente si se prepara a la parrilla. Más del 85 % de los encuestados asocian esta forma tradicional de preparar la carne de cordero con asado a la parrilla con Dalmacia como región. La reputación en el mercado y la conexión con la zona geográfica de producción (Dalmacia) son las razones por las que los consumidores croatas prefieren comprar la carne de cordero de Dalmacia que otros tipos de carne de cordero.

Palabras claves: carne de cordero de Dalmacia, Denominación de Origen Protegida (DOP), encuesta de opinión del consumidor

Opinione dei consumatori croati circa la tradizionale carne d'agnello Dalmata nel processo di ottenimento del marchio DOP

Riassunto

La tutela della carne d'agnello dalmata ("Dalmatinska janjetina") con il marchio DOP (denominazione di origine protetta) si basa sulla specifica qualità della carne e sulle modalità dell'allevamento tradizionale degli agnelli di razza pramenka dalmata sull'area geografica che coincide con la regione d'allevamento della razza ovina autoctona croata della pramenka dalmata. Con la denominazione di "Dalmatinska janjetina", cioè, può essere commercializzata sul mercato soltanto la carne degli agnelli di razza pramenka dalmata allevati esclusivamente in Dalmazia. In seno alla procedura legislativa di registrazione del marchio protetto DOP, recentemente conclusosi in Croazia a livello nazionale, e che è attualmente in corso a livello dell'UE, è stato condotto un sondaggio d'opinione tra i consumatori croati su un campione di 1.034 soggetti originari di ogni parte della Croazia, al fine di accertare la riconoscibilità di questo prodotto sul mercato domestico, oltre alle preferenze dei consumatori rispetto a prodotti simili provenienti da altre regioni croate. Il sondaggio ha evidenziato che i consumatori croati riconoscono la carne d'agnello dalmata ("Dalmatinska janjetina") come prodotto tradizionale e di gran qualità. Quasi il 75 % degli intervistati ha riconosciuto la "Dalmatinska janjetina" come un particolare tipo di carne d'agnello, migliore dal punto di vista qualitativo rispetto agli altri tipi di carne d'agnello presenti sul mercato croato. Quasi l'85 % degli intervistati fa uso della carne d'agnello nella propria alimentazione, ma poco più del 58 % soltanto in speciali occasioni (festività nazionali e celebrazioni in ambiente familiare), in particolare se arrostita allo spiedo. Questa tradizionale tecnica di cottura allo spiedo è associata da oltre l'85 % degli intervistati alla Dalmazia come entità regionale. L'immagine sul mercato ed il collegamento con l'area geografica di produzione (Dalmazia) sono le ragioni per cui i consumatori croati acquistano più volentieri la carne d'agnello originaria della Dalmazia rispetto a ogni altro tipo di carne d'agnello.

Parole chiave: carne d'agnello dalmata, "Dalmatinska janjetina", marchio DOP, sondaggio d'opinione dei consumatori