

RESEARCH ARTICLE

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Albanian Consumer Perceptions and Preferences for Goatkid Meat with Focus on Food Safety

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Abstract

Livestock is the most important agrifood sector in Albania and meat is one of the main elements of consumers' food basket. There is a strong tradition of production and consumption of small ruminant (including goatkid) meat consumption in Albania – level of goatkid meat consumption is much higher compared to European pattern. The purpose of this paper is to address food safety perception of Albanian consumers for the goatkid meat. Primary data were obtained from a field survey which was conducted among 250 Albanian consumers in Tirana. The method used to explore consumer preferences consists of descriptive statistical analysis. Results show that the majority of the respondents prefer to purchase the goatkid meat from an unknown butcher with a veterinary certification/stamp rather than from a known butcher without veterinarian stamp, however the perceptions vary according to education level. Stronger food safety enforcement and trust is important to promote local production.

Keywords: Consumer preferences; goatkid meat; food safety perceptions.

1. Introduction

1.1. Context

Livestock farming in Albania represents an important local economic activity with a very long tradition. The availability of pastoral natural resources (especially in rural mountainous areas) have directly impacted and contributed to the performance of small ruminant, which are grown and fed mostly in pastures, while cattle typically grow in stable in Albania.

Since the transition to the system of market economy, meat production and consumption in Albania has expanded (especially during the 1990s and 2000s) particularly for small ruminant meat. The increased meat production due to agriculture privatization, increased incomes and investments towards farming, stimulated meat consumption, which now is one of the main food items of the Albanian household consumption basket [8]. The estimated yearly per capita consumption of sheep and goat meat accounted 15.32 kg for Albanian consumers in 2013 (latest reported figures by FAOSTAT [3]), which is seven times higher compared to the average per capita consumption of European countries and the world (Figure 1).

As above mentioned, both production and consumption of meat and meat products in Albania has been increasing. The same situation is recorded also at a global level - world meat consumption has been increasing in the last years and is expected to increase further [12], and on the other hand there are changes in consumer preferences towards different attributes of meat products. Attributes or the particular characteristic of a chosen meat product will affect a consumer's purchase decision.

In Albania but also worldwide, consumer concerns about food safety are important driver of consumer decisions. One major question is “what health risks or safety risks do consumers face because of the products that this sector brings to the table?”.

There is an underlined concern among Albanian consumers about livestock (meat and dairy) products regarding food safety standards. Several studies highlight such concerns [2], [5], [10], [13]. As Albanian consumers are at risk by the products that this sector brings to the table, there is a substantial need that agrifood value chain develops towards meeting food quality and safety standards. Studies on meat consumption in developed and developing countries are indicating that factors which determine these

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(Accepted for publication March 20, 2020)

ISSN: 2218-2020, © Agricultural University of Tirana

developments aren't only the changing prices and household incomes but other factors. To explore these factors or "requirements" it's useful to analyze behavioral patterns and prospects of meat consumption. Given that, usually it is stressed that efforts (private and public) to meet consumer requirements must be based on detailed information

about consumer concerns, preferences and safety perceptions. On the other side, the implications of these kind of analyses for food policy and industry practices are significant, highlighting serious challenges in ensuring authenticity (which is origin) and preserving reputation within complex local meat supply chains.

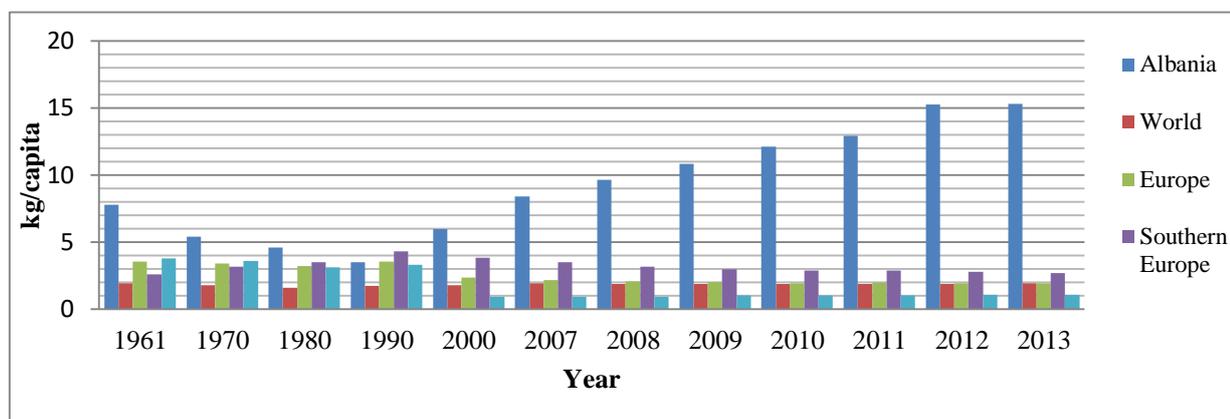


Figure 1. Sheep and goat meat supply quantity (kg/capita/yr) in Albania, Europe and World for the period 1961-2013. Source: FAOSTAT Database (2019)

Taking into consideration that small ruminants are an important source of income for the Albanian rural households, especially for mountainous rural areas, the support for the development of this sector is important from an economic and rural development point of view. In this context, understanding consumer preferences over food safety attributes, in the case of goatkid meat, is essential for both consumers and producers.

This paper is organized as follows: the second section presents a literature review on the topic, while the third section describes the statistical analysis applied in the study. The fourth section discusses the main research findings; whereas concluding remarks are provided in the last section.

1.2. Literature Review

Consumer preference has been studied through different theories and in different fields (psychology, sociology, anthropology) but the traditional one (early studies) is based on the economic theory, on the notion that individuals act rationally to maximize their benefits in the purchase of goods and services.

While consumer preferences towards meat consumption have been explored for many years in research empirical studies in different countries, there is limited research in the case of Albania. Recently this topic is attracting enormous attention because of

environmental, nutrition, public health, security and safety issues in the global food industry.

Similarly, in Albania this issue is experiencing constantly growing attention for the same reasons. Different studies have highlighted the problems with the national food safety control system. The main challenges include legislation, infrastructure, institutional capacity, control and enforcement which from the other side create real and perceived safety risks for consumers. Concerns about safety have been documented from different studies and for different food products in Albania. Several studies have identified consumer concerns about meat safety, which reflect the serious problems that characterize food safety enforcement system in Albania [4], [5], [10], [13].

Consumer concerns towards food safety are important for all levels in the supply chain such as food producers and retailers, but also for public authorities and health educators. The increased interest in this issue has been reflected in discussions about how food safety should be defined and how consumers perceive food safety and choose food. The correlation between food safety and consumer acceptance has been especially fundamentally elaborated in North America and Europe [11]. Comparison between developed and developing countries of studies conducted on this topic suggests that this issue in developing countries may not

be of as much interest as in developed ones. This reduced interest towards food safety may be due to a lack of consumer education and training, and a low consumer impact on food safety.

Consumer concerns towards food safety can be differentiated based on factors influencing the safety and health problems related to a specific product. The literature suggest that these factors range from ethical, health, environmental, chemical, to the regulatory factors (legislation). An important factor considered when purchasing meat products is certification (government inspection/stamp) of meat and meat products. Several studies have included this attribute as an indicator for consumer behaviors and preferences for meat purchase [1], [6], [7]. In Albania, studies that have analysed this indicator in the context of meat sector are [1] in 2011 and [13] in 2015. Both these studies agree with the fact that Albanian consumers rarely check the veterinarian stamp on products they purchase, which from the other side indicates that Albanian consumers doubt the reliability of the government/public inspections. In contrary of this finding which is accurate in developing countries context, consumers in the developed countries (EU and other) state that the government meat safety regulations and controls are adequate and trustworthy, both from the national government as from the EU [9].

2. Material and Methods

2.1. Questionnaire

A structured survey was designed with the aim of investigating consumers’ food safety concerns for goatkid meat. The structured survey was constructed in five sections. First section consisted of socio-demographic questions about the respondent (consumer) while the second one included general purchasing habits of food products (in our case meat). Questions on attitudes, purchasing and consumption habits for goat kid meat products were included in the third section. As for the fourth section, it included questions on food safety concerns. The last section of the questionnaire consisted of data on monthly incomes and spending of the family’s respondent.

2.2. The sample

The survey was conducted among 250 Albanian consumers in Tirana. The following table (Table 1) shows a summary of socio-demographic profile of the analyzed sample. The whole sample included individuals who were personally involved in purchasing food products. Regarding gender, half of the respondents in the survey were women, meanwhile in terms of age there is a variation of age groups with a rough distribution. With regard to the employment status, this indicator was categorized into several options. From the table below it is showed that the vast majority of respondents were employed, about 45 percent of them. As for the education indicator, it is clear that the majority of respondents belonged to higher education (about 46 percent).

Table 1. Socio-demographic characteristics of the sample

Age			Gender			Education			Employment		
Age	n	%	Gender	n	%	Education	n	%	Employment	n	%
<30	51	20.4	Male	126	50.4	Primary school	29	11.6	Unemployed	57	23
30-40	56	22.4	Female	124	49.6	Secondary sch.	106	42.4	Student	17	6.8
40-50	53	21.2	Total	250	100	University	115	46	Self-employed	40	16
50-60	60	24				Total	250	100	Employed	113	45
60<	30	12							Retiree	23	9.2
Total	250	100							Total	250	100

2.3. Statistical analysis

The analysis of collected data was divided into two phases. In the first phase is used the method of descriptive analysis where the main questions of the survey are depicted while in the second part the chosen indicators are elaborated through cross-tabulation with the main demographic indices.

An attribute that will be discussed is the preference of consumers regarding type of butchers (with/without veterinarian stamp), which in a second phase will be

cross-tabulated with four main demographic indicators which are gender, age, education and income level.

To explore the preference on these attribute consumers were asked to choose between two alternatives: “do you prefer to buy meat from a butcher you know but without the veterinarian stamp” or “from a butcher you don’t know with the veterinarian stamp”.

Also consumers had to choose between different governmental/non-governmental certification bodies they trust (safety and quality assurances) through a polar question. Both these questions together make an

important attribute (certification) because of the problems that Albania is facing with food safety enforcements and regulations.

Consumer perception of the safety of goatkid meat started from the assumption that the patterns of food consumption are constantly changing and that these changes are due both to socio-economic and cultural trends and to the specific lifestyles of consumer groups. The paper aimed at identifying profiles of goatkid meat consumers according to their orientation towards perceived confidentiality on (goatkid meat) safety according to their socio-economic characteristics (gender, incomes, age and education level).

3. Results and Discussion

Interviewed consumers were asked on how they perceive the goatkid meat that they purchase. About

80% of the respondents answered that they are confident and very confident about the safety of goatkid meat that they buy and consume (Figure 2).

Because “knowing the butcher” and “veterinarian stamp” are two of the main potential sources of consumers’ checks on meat safety, interviewees were deliberately asked to choose between two available options: 1. buying meat from a butcher you know without veterinarian stamp, and 2. buying meat from any butcher (whom you do not know) with a veterinarian stamp. Results show that the majority of the respondents prefer to purchase goatkid meat from an unknown butcher who has a veterinary certification/stamp (about 61% of the sample) - the percentage of the consumers who would prefer to buy the goatkid meat form a butcher without the veterinarian stamp is still pointed/of value (about 39% of the sample) (Figure 3).

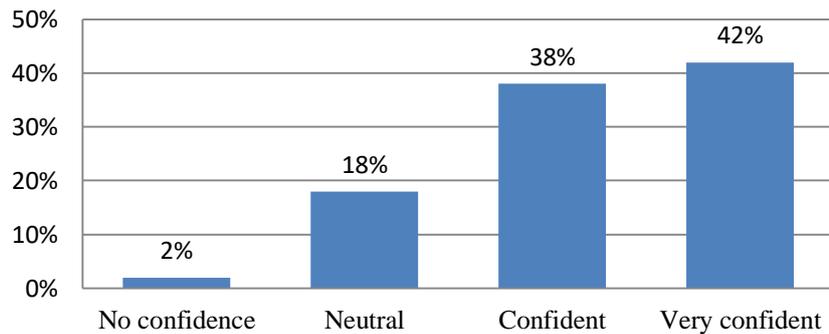


Figure 2. Consumers perceived food safety (level of confidence)

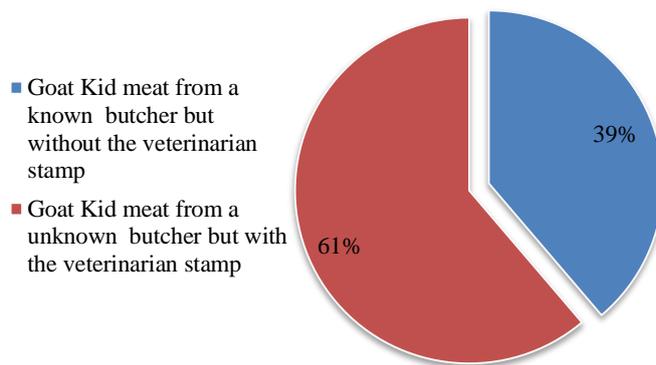


Figure 3. The consumer preferences for goat kid meat by types of butchers

The analysis based on the cross tabulation on type of butcher and education levels shows that the higher the education levels the higher the preferences for the unknown butcher with the veterinarian stamp (Table 2). Thus, more educated consumers trust more the

veterinarian stamp (public food safety system) than the retailer.

In terms of cross-tabulation between type of butcher with age categories, income categories and gender respectively the outputs indicate that there are no significant associations between these indicators with

the indicator of type of butcher- as the Chi square significance value for each case was bigger than 0.05. Consumers were also asked about the institutions that they trust to guarantee food safety and quality. The certifying bodies as shown in the table below can be grouped in governmental and non-governmental. Non-governmental quality and safety assurance includes certification by a farmer or farmer association and certification by an independent local institution and

foreign bodies. The governmental quality/safety assurance includes certification by the National Food Authority (NFA) and certification by the Ministry of Agriculture and Rural Development (MARD). Results show that Albanian consumers trust only the national veterinarian stamp or veterinary certificate (57% of the respondents). Meantime certification from bodies like MARD and NFA are not a trusted source of guarantee (81% and 71% respectively) (refer to Table 3 below).

Table 2. Type of butcher and education categories cross-tabulation

Type of Butcher		Education level			Total
		Primary	Secondary	Tertiary	
Known butcher without the veterinarian stamp	Count	13	49	35	97
	% within Type	13.4%	50.5%	36.1%	100.0%
	% within Education	44.8%	46.2%	30.4%	38.8%
Unknown butcher with the veterinarian stamp	Count	16	57	80	153
	% within Type	10.5%	37.3%	52.3%	100.0%
	% within Education	55.2%	53.8%	69.6%	61.2%
Total	Count	29	106	115	250
	% within Type	11.6%	42.4%	46.0%	100.0%
	% within Education	100.0%	100.0%	100.0%	100.0%

$\chi^2(2)=6.295$ $p<0.05$ Note: There is a significant association between the type of butcher and the education level.

Table 3. Answers for the question “What safety and quality assurances do consumers trust?”

Options	Certification from a foreign institution		Certification by an independent local institution		Certification by the NFA		Certification by MARD		Veterinarian stamp or veterinary certificate		Certification by a farmer or farmer association	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	85	34%	64	26%	72	29%	48	19%	143	57%	82	33%
No	165	66%	186	74%	178	71%	202	81%	107	43%	168	67%
Total	250	100%	250	100%	250	100%	250	100%	250	100%	250	100%

4. Conclusions

Results show that the majority of the respondents prefer to purchase the goatkid meat in an unknown butcher with a veterinary certification/stamp (about 61% of the sample), perceiving this way, the veterinary certification as one of the factors that affect directly meat safety (in this case goatkid meat). Another study highlights that consumers in Albania are less exposed to information regarding food safety and therefore are less aware of hazards and risk in their food choices [13]. Under these conditions we argue that the percentage of the consumers who would prefer to buy the goatkid meat from a butcher without the veterinarian stamp is still significant.

However, this finding marks another crucial conclusion. When compared to a study carried out in 2011, among urban Albanian consumers, where most consumers (more than 2/3) stated that they rely more

on the butcher than on the veterinarian stamp, the finding from this study show a significant improvement in the trust in the veterinarian system/stamp as compared to personal trust in the butcher [5].

The finding suggests that there are no significant associations between type of butcher in one side and age, income categories and gender respectively on the other side. While concerning education level, there is a significant association between the level of education and which type of butcher the consumer prefers: the higher the education levels the higher the preferences for the unknown butcher with the veterinarian stamp/certification.

5. Acknowledgements

Special thanks to Dr. Drini Imami for providing support and comments for this research work.

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