

# WHAT MATTERS WHEN BUYING FRESH MEAT? A CROATIAN CASE STUDY <sup>1</sup>

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## ABSTRACT

In order to examine the importance of extrinsic attributes of fresh meat for Croatian consumers, a survey was conducted with 161 meat buyers. The study results showed that consumers perceived origin (or producer) as the most relevant extrinsic attribute followed by declarations, certificates and price. The way of production and animal welfare were the least important. Respondents' sociodemographic characteristics influence perceived importance of extrinsic meat attributes, with women and older consumers placing higher importance to the majority of examined attributes. Results of this research give insight to fresh meat producers and distributors into consumers behaviour and attitudes that could be used to define their future marketing strategies.

**Key words:** food / fresh meat / extrinsic attributes / consumer choice / Croatia

## 1 INTRODUCTION

Consumers' expectations regarding food become more and more demanding with increased importance of product quality (Bernués *et al.*, 2003; Bosmans *et al.*, 2005). However, there is no unique definition of food quality, and it varies considerably depending on who is making the definition (Bernués *et al.*, 2003; Bosmans *et al.*, 2005). For example, producers associate the quality of fresh meat with technical use-attributes or with external aspects of the animals while consumers are interested in broader set of products characteristics (Bosmans *et al.*, 2005).

In order to be able to evaluate the quality of fresh meat they buy, consumers look for quality indicators or quality cues e.g. information stimuli used to evaluate the performance of the product (Steenkamp, 1997, Hoffmann, 2000). These quality cues could be divided into intrinsic attributes referring to physical aspects of a product (such as colour, marbling, fat content, freshness) or extrinsic attributes which relate to the product but are not physically part of it (e.g. price, product origin,

way of production, animal welfare...) (Hoffmann, 2000; Bosmans *et al.*, 2005; Glitsch, 2000; Bernués *et al.*, 2003; Cerjak *et al.*, 2010).

Individual consumers perceive only some quality cues when evaluating quality of a product. These cues are related to product quality or product safety or both (Hoffmann, 2000). As mentioned in several papers, extrinsic meat cues tend to become increasingly important to consumers in Europe (Glitsch, 2000; Bosmans *et al.*, 2005).

The goal of this research was to examine the importance of extrinsic meat characteristic for Croatian consumers when buying fresh meat.

## 2 MATERIAL AND METHODS

Consumer survey, carried out in the period May-July 2011, was performed in two ways: firstly, a face-to-face survey was conducted with 80 fresh meat buyers in Zagreb and its surrounding in front of two supermarkets and two butcher shops. Every third buyer, willing

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**Table 1:** Sociodemographic characteristics of respondents

Sociodemographic characteristics		%
Gender	Male	47.0
	Female	53.0
Age (g)	18–29 years	39.8
	30–39 years	18.0
	40–49 years	28.6
	> 50 years	13.6
Education	High school	40.4
	University	59.6
Family monthly income	Low	3.7
	Medium	62.7
	Moderate	28.6
	High	5.0
Place of growing up	Urban	19.3
	Rural	80.7
Place of living	Urban	13.0
	Rural	87.0

to participate in the research, was questioned. The survey was organised in two working days, both in morning and afternoon hours in order to include different types of consumers. Secondly, on-line survey included 161 respondents in different parts of Croatia of which 80 were excluded from the research because they were not fresh meat buyers but only consumers. As a result, 161 respondents were included in the analyses.

The questionnaire included several groups of questions: purchasing behaviour, consumption behaviour,

importance of fresh meat attributes and trust in different places of meat purchase, and sociodemographic data.

Collected data were analysed by means of univariate (frequency and distribution) and bivariate statistics (chi-square test, ANOVA, LSD and Games-Howell GH).

### 3 RESULTS

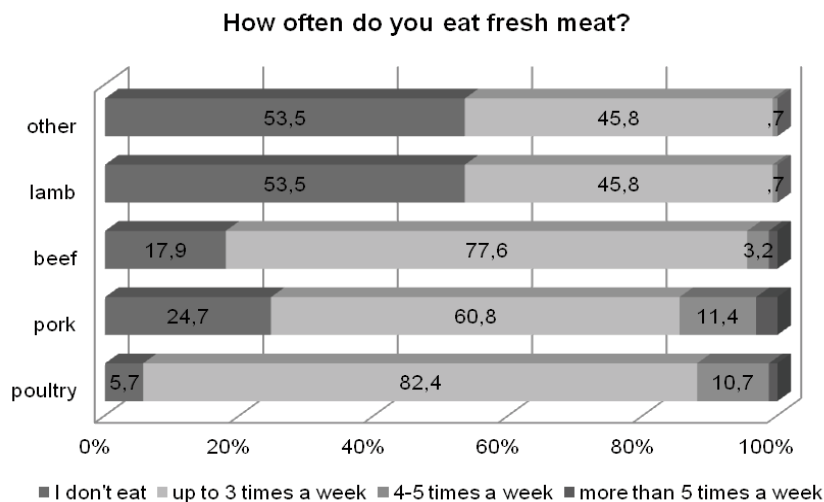
Sociodemographic characteristics of the respondents are presented in the Table 1.

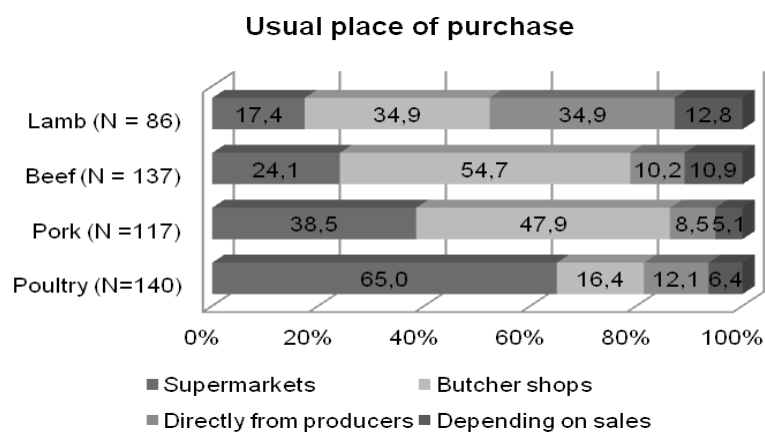
#### 3.1 MEAT CONSUMPTION BEHAVIOUR

Almost all respondents consume poultry (94.3%), while considerable share of respondents do not eat pork and beef (24.7% and 19.9% respectively). More than half of the respondents never eat lamb or other meats (e.g., rabbit or game meat, etc.). Pork and poultry are most often consumed meat types (Fig. 1).

A bit more than a third of respondents (37.3%) eat the same quantity of meat as they did five years ago. 29.8% of respondents eat more meat today compared to five years ago. Most of them increased their poultry consumption (83% of respondents that increased their meat consumption), and pork consumption (56%). One third of respondents (32.9%) decreased meat consumption in the last five years. The most important decline was noticed in pork consumption (85% of respondents that decreased meat consumption, decreased consumption of pork), and beef consumption (60%).

One third of the respondents would buy more fresh meat if it would be cheaper, half of them wouldn't buy

**Figure 1:** Frequency of consumption of different meats



**Figure 2:** Usual place of purchase of different meats

more even if it would be less expensive, while others are not sure how would they behave in such a case.

When asked about their future intentions regarding meat consumption, 58.4% of respondents believe they will eat the same quantity of meat in five years as they do now; 12% of them think they will eat less and 5% think to eat more than today. Others have no plans regarding future meat consumption.

### 3.2 MEAT BUYING BEHAVIOUR

The majority of respondent purchase poultry, usually in supermarkets. Pork and beef are mostly bought in butcher shops, while the lamb is usually purchased either in butcher shops or directly from producers. Significant share of beef and lamb buyers choose the place of purchase depending on sales (10.9% and 12.8% respectively) (Fig. 2).

**Table 2:** Importance of fresh meat attributes (1 – not important at all, 5 – very important)

	% of the respondents					Mean	St. dev.
	1	2	3	4	5		
Origin /producer	0.6	1.2	9.9	41.6	46.6	4.32	0.76
Clear declaration	0.6	3.1	9.3	38.5	48.4	4.31	0.82
Certificates /guarantees	2.5	3.7	15.5	44.1	34.2	4.04	0.93
Price	1.2	4.3	23.0	52.2	19.3	3.84	0.83
Way of production	5.6	13.7	25.5	34.2	21.1	3.52	1.14
Animal welfare	8.7	13.0	30.4	33.5	14.3	3.32	1.14

**Table 3:** Buyers' characteristic and importance of extrinsic meat characteristics

	Origin /producer	Clear declaration	Certificates / guarantees	Price	Way of production	Animal welfare
Gender	*	*	*	Ns	*	*
Age	+	+	+	Ns	Ns	*
Family income	Ns	Ns	Ns	*	Ns	Ns
Education	Ns	Ns	Ns	Ns	Ns	+
Place of living (urban/rural)	Ns	Ns	Ns	Ns	Ns	+
Place of growing up (urban/rural)	Ns	Ns	Ns	Ns	Ns	+
Frequency of meat consumption compared to 5 years ago	Ns	Ns	Ns	Ns	Ns	*
Intention regarding future meat consumption	Ns	Ns	Ns	Ns	Ns	*

ANOVA: \* P < 0.05; + P < 0.1; Ns P > 0.1

Even 77% of respondents always purchase meat from the same producer.

### 3.3 IMPORTANCE OF EXTRINSIC MEAT ATTRIBUTES

The most important attributes are meat origin (average evaluation amounts to 4.32 on a 5-point scale where 5 means very important) and clear declaration (4.31). Just one respondent claimed to prefer imported meat, while 88% prefer domestic meat. Others have no preferences regarding meat origin.

High percent of respondents consider certificates as well as price of meat as important or very important when choosing fresh meat (72.1% and 71.5% respectively). Even though there is intensive promotion of organic products and public discussion about animal welfare, respondents do not perceive the way of meat production or animal welfare as very important meat attributes (average evaluations are 3.52 and 3.32 respectively with high variations between answers).

### 3.4 INFLUENCE OF BUYERS' CHARACTERISTIC ON IMPORTANCE OF EXTRINSIC MEAT CHARACTERISTICS

Consumers characteristics influence the perceived importance of extrinsic meat attributes. Women consider as more important all examined extrinsic attributes, except price, compared to men. Consumers between 40 and 49 pay more attention to meat origin / producer, guarantees, and clear declarations compared to young consumers (up to 29 years). These consumers together with older consumers (50+) are more concerned about animal welfare compared to young consumers. Respondents considering to have low or medium family income are more concerned about meat price compared to respondents with high income.

Consumers grown up and living in cities are more concerned about animal welfare compared to those coming from rural areas. Frequency of current meat consumption compared to past consumption as well as future intentions regarding consumption influence only attitudes towards animal welfare. Namely, consumers who decreased meat consumption are more sensitive to animal welfare compared to those ones that continued to eat the same quantity of meat or even increased meat consumption. Similarly, consumers intended to decrease meat consumption in the future are more sensitive to animal welfare compared to other consumers.

### 3.5 TRUST IN DIFFERENT PLACES OF PURCHASE

Consumers trust more to meat bought in butcher shops and directly from producers than to meat sold in supermarkets.

Consumers coming from rural areas, compared to those from urban areas, are more trustful in meat bought directly from producers and less in meat sold in supermarkets and butchers shops ( $P < 0.05$ ).

Depending on their trust, consumers choose the usual place of purchase, e.g. those consumers having the highest trust in butchers' shops usually buy fresh meat in these distribution channels.

*Table 4: Trust in different purchase places*

	Mean <sup>ax</sup>	St. Dev.	P (ANOVA)
Supermarkets	3.24 <sup>a</sup>	0.97	
Butcher shops	3.61 <sup>b</sup>	0.89	0.000
Directly from producers	3.63 <sup>b</sup>	0.93	

<sup>ax</sup> 1 – do not trust at all ... 5 – trust completely; <sup>a,b</sup>  $P < 0.05$

## 4 CONCLUSION

The evaluation of meat quality plays a major role for consumers in determining meat purchases. Therefore, in order to keep or expand their market position, meat producers and distributors need to meet consumers' demands e.g. to consider quality attributes important to consumers and to communicate such information to them. In the case of Croatian meat buyers, the results of this research showed that poultry and pork are decisive in consumption, and that in recent years the majority of respondents maintained stable meat consumption behaviour which would not be changed even with reduced meat prices. About four-fifths of them are loyal costumers which are always buying meat from the same producers, with generally a higher degree of trust to meat purchased from butchers or directly from producers. Among extrinsic meat attributes, the most relevant were origin (or producer), declarations, certificates and price, while the way of production or animal welfare were the least important. However, the respondents' sociodemographic characteristics had influence on the perceived importance of extrinsic meat attributes, with women, and urban consumers as a possible target group to which the particular characteristics, such as animal welfare issues or organic production certificates could be better communicated in the Croatian market.

Results of this research give insight to fresh meat producers and distributors into consumers behaviour

and attitudes that could be used to define their future marketing strategies.

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