

## FACTORS AFFECTING GAME MEAT CONSUMPTION AMONG HUNGARIAN UNIVERSITY STUDENTS

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**Abstract:** An essay was carried out among the students of University of Szeged (Hungary) about their game meat consumption habits. Data were collected (n=227) by questionnaire and processed by PASW Statistics 18. Most of the students ate already game meat occasionally (all those who have hunter in the family eat at least in every month and more species). The most frequently consumed game meat is the wild boar meat. The most popular species are wild boar, roe deer and pheasant. 90% of the students considers game meat as healthy food. Only few people reject game meat, and the main causes are: emotional reasons, never tasted it, vegetarian lifestyle, fear of zoonotic diseases. By the opinion of the answerers the game meats are expensive meats.

**Keywords:** game meat, meat consumption, marketing, Hungary

### INTRODUCTION

In the last decades the Hungarian domestic consumption of meats was decreased and its structure has changed due to several reasons e.g. declination in standard of living, growth in consumer prices, the spread of healthy lifestyle (PÉNZES, 2002).

The available game meat is directly related to the number of animals shot in each year. In Hungary, the quantity of hunted game species was more than 10 thousand tons in 2012, and wild boar and red deer represented around 80% of that amount. BLEIER et al. (2013) expect the same proportions in the future.

The consumption of game meats in Hungary is less than 1kg/capita/year. Hunters and their families eat game meat frequently, but most of the people are not familiar with it (GFK, 2003). (The Central Statistical Office uses the COICOP system of the European Union for the collection of data and calculates the average consumption value of main food categories for the statistical regions (ABONYINÉ PALOTÁS – KOMAREK, 2004).)

The quality of the product has a great influence on consumption. Product-oriented quality, process-oriented quality and quality control can also be said to constitute objective quality. User-oriented quality can be said to constitute subjective quality, since it can be measured only at the end-user, and can differ for the same product between users. User-oriented quality can also be influenced by factors that are not characteristics of the product itself, such as the purchase situation, type of retail outlet, price, brand, etc. Much of the discussion on quality in the food industry is concerned with product and process-oriented quality and quality control, while the consumer evaluates and pays for subjectively perceived quality. The amount a consumer is willing to pay for a product depends on this subjectively perceived quality, which is related to, but not the same as, objective quality. Improvements in objective quality, which have no effect on consumers' perceived quality will have no commercial effect, and hence no positive effect on the producer's competitive situation (BRUNSDØ et al., 2002).

Generally not only the individuals' economic and socio-cultural status determines the nutritional habits, but also the other way round: food consumption could be used to predict social and economic status as well as key values and value judgements. Value judgements as reflected in nutrition are analysed at the level of the consumers' general value systems, values influencing consumption habits, and the motives for selecting

particular products. The importance of the traditional cooking habits is decreasing step by step on weekdays, and eating became satisfaction of requirements without formalities for a part of consumers. At the same time they are looking for the traditional styles of nourishment as sources of experiences. The classification of consumers can be done by several different ways. One part of the people would like to have special meals and eating out (gourmet), while the semi-finished or ready-made products (e.g. fast-food) are preferred by others. The health-conscious groups are seeking for fresh and natural (organic) foodstuff as guarantee of health or trust in high-tech based products (HORVÁTH et al., 2005).

In the rural area, meat and meat products are the foods most demanded: they are eaten twice or three times a week. In the urban area, meat and meat products consumption occurs four times a week. In the urban area, meat and meat products consumption occurs four times a week, but there are also people that do not eat any meat at all for various reasons (health, fashion, etc.). No matter the area of origin – rural or urban – meat and meat products are considered basic foods by most respondents (PETROMAN et al., 2013).

GONZÁLEZ-REDONDOA et al. (2010) found that among the students who went hunting, the proportion that currently consumed rabbit meat (including wild rabbit) and the proportion of those who had on some occasion consumed rabbit meat were significantly higher than the proportions of those who did not go hunting.

The aim of our research is to map the consumer requests, attitudes and preferences concerning the game meat market. The goal of the recent study was to optimize the questionnaire and the research methods by the experiences of the first 250 interviews.

## **MATERIALS AND METHOD**

Recent study is a part of a wide spread survey on game meat consumption pattern of Hungarian younger generation. The survey was carried out by on-line and paper based questionnaire as well. During the survey students (regular and part time as well) of University of Szeged who attend to agricultural engineer and wildlife management study programs were asked (n=227) about their practice eating and shopping of game meats.

The questionnaire contained mostly closed questions, in some cases also free contextual answers could also be given. The questions were focused on the following areas:

- personal information about respondent people,
- opinion about game meat consumption (consumption habits, causes of preference or rejection), the frequency was scaled with intervals;
- opinion about different game meats (preference of species: mallard duck, pheasant, hare, roe deer, wild boar, mouflon, fallow deer, red deer; opinion value of delight,
- places of buying.

The collected data were submitted to statistical analysis by using PASW Statistics 18 software package. Results were expressed as proportions and frequency distributions of the analyzed sample.

**RESULTS AND DISCUSSION**

The number of answers could be less than 227, because in some cases the answer was missing, or could be more due to those questions where multiple answers were possible.

As observed in the gender distribution of the target group, there were more women than man (122 vs. 105). The hunters are over represented (*Table 1.*) in the survey (0.5% of the Hungarian inhabitants has only hunting licence) due to the professional background of the students.

42.3% of the consumers used to eat game meat less frequently than once in a year only from special occasions (family events, parties). Only 3.5% of the interviewees eat venison every week, and of course all of them are hunter. It seems that male student eat game meat more frequently.

**Table 1.**

**Consumption pattern of the target group (capita)**

Consumption Trait	pattern Answer	Gender		Total
		male	female	
Eating	Ate already	118	95	213
	Never tasted	1	8	9
Hunting	Hunter	42	7	49
	Non-hunter	78	96	174
Frequency of consumption	Once a week	6	2	8
	Once a month	36	7	43
	Once in 3 months	19	13	32
	Once in half year	9	15	24
	Once a year	6	7	13
	Less frequently	44	52	96
Places of buying	Hypermarket	3	4	7
	Meat shop/butcher	14	14	28
	Friends/acquaintances	69	64	133
	Directly from hunter	69	33	102
Preference of species	Mallard duck	3	1	4
	Pheasant	18	23	41
	Hare	3	4	7
	Wild boar	63	43	106
	Roe deer	30	37	67
	Mouflon	2	2	4
	Fallow deer	3	1	4
Perception of high price	Red deer	8	3	11
	Mallard duck	4	1	5
	Pheasant	4	4	8
	Hare	1	3	4
	Wild boar	4	6	10
	Roe deer	25	13	38
	Mouflon	25	29	54
Fallow deer	34	26	60	
	Red deer	33	32	65

Only a few interviewees refuse the consumption of game meats. The most frequent reasons of rejection are:

- Vegetarian lifestyle. They could not be convinced for eating meat at all.
- Emotional reasons.
- Some students do not know game meat, have not tasted yet. Maybe they will like it if they can taste meals from game meat.
- Some young people don't know where to buy/get game meat. These products and their availability should be promoted more frequently and effectively.
- Only one student afraid of the possible zoonotic diseases. The hygienic status of game meats is satisfactory in Hungary because of the system of veterinary rules and inspections.

44.9% of the consumers get/buy the game meat directly from those who are authorized for hunting. The biggest part of students (58.6%) does not buy but gets the meat from friends and/or acquaintances. Only 3.3% of the people are looking for venison in hypermarkets. The main reason is that the supermarket chains usually offer not fresh or pre-cooled meat, but deep frozen products which less favoured by the consumers.

The most popular species are the big games of the South Great Plain Region: wild boar and roe deer. The third in the rank is the pheasant. The types of meat (the preferred species) were chosen by most of the consumers on the price, quality and appearance.

The perception of meat prices generally was high with great differences. (The Hungarian consumers are very sensitive on prices.) We asked the students about their imagination on price-value rate and the value of delight of the different meats. The prices of the small games and the wild boar are seem acceptable for the consumers, but they evaluate the meat of mouflon, roe deer, fallow deer and red deer too expensive.

## CONCLUSIONS

Game meats are usually described as healthy and natural food and their consumption has a good effect on human nutrition and physiology. During the interviews all the consumers described the game meat healthy and natural sources of protein and minerals, but the answers during the interviews about ingredients (protein, fat and mineral content) of the meats were confused, and the number of inadequate responds demonstrated insufficient information on this field. Probably the publication of scientific data on characteristics of the frequently consumed meats, e.g. wild boar meat (BODNÁRNÉ SKOBRÁK AT AL., 2008) could improve the situation.

Most of the people among the interviewees ate already or used to eat game animals. Almost all hunter men ate every species, but most of the people choose only one, which is their favourite, easy to get and/or relatively cheap. Almost all of the pheasants and hares were coming directly from hunters or their families and friends as fresh meat in skin to the table of consumers. The distribution of the preferred game species was coming from the characteristic of the region. The frequency of consumption among young people could be raised with a more realistic pricing and better promotion.

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