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Consumption habits of “Free range chicken” in Hungary

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Abstract: Poultry is highly ranked in the World meat production and consumption (it accounted for 32% in 2007), and, in the past 20 years it was growing with an annual rate of 3–6%, higher than in case of any other meat-types. This tendency is also valid for Hungary: poultry has the largest share (29.8 kg/person/year, 47%) in the domestic meat consumption since 2000, which is among the EU top (KSH, 2007).

As the result of the animal health and nutrition scandals, the EU animal welfare and quality requirements and the advancements in health-consciousness the Master-Good group launched the production, processing and trade of free-range poultry under the brand “Free-range chicken”. The new products had good consumer responses, because at present 1.5% of the processed chicken in Hungary (25 tons/week) is under this brand. As it regards the future of this product, we can expect the decrease of the current 1.5 times higher production price over broiler chicken, due to the increasing energy, labour and other cost items, thus the increase of the domestic consumption by 25–30% per annum can be foreseen. Besides the growth in domestic demand, increasing foreign consumer demand can also be expected because of the space requirement of the production. Summarising the above mentioned: „Free-range chicken” can be one of the most successful products of the Hungarian poultry industry.

In order to realise the prognosis mentioned above, it is inevitable to learn the consumer attitudes towards the brand. A primary market research programme supported by the Master Good group has been launched to study the main features of the domestic chicken meat consumption – including the „Free-range chicken” as highlighted brand. The primary aim of the research was the complete assessment and evaluation of the Hungarian chicken consumption habits and the identification of the possible take-off points.

The research undertaken resulted basic information concerning the internal structure of the Hungarian poultry consumption (including that of the „Free-range chicken”), the potential consumer groups and their requirements, provided information on the consumers’ knowledge of the products and identified the elements of the consumers’ judgements. This will serve as basis for a marketing communication programme to increase the domestic „Free-range chicken” consumption.

Key words: poultry consumption, health-conscious nutrition, food pyramid, “Free-range chicken” questionnaire survey, consumer attitudes.

1. INTRODUCTION

The poultry meat consumption in Hungary was continuously increasing since the 1970’s. It overtook the pork since 2000, and at present is the most popular meat type (Figure 1). The share of poultry from the total meat consumption is around 45–48% which is also remarkable in international context, since it is only around 25% at EU average (EU-25). However it is also a notable phenomenon that import products accounted for 10% at early 2000, while this was doubled by 2008 (21%).

Share of chicken in the internal structure of poultry consumption is determinant, and accounts for about 70% (16,9 kg/person/year in 2008). The remaining is dominated by turkey (average 7 kg/person/year), the water-fowl and other species are consumed at decreasing quantities in the past years. This is especially so in case of the gees.

At present the shrinking size of households is a tendency among urban consumers, thus there is a continuously growing need for smaller package and oven-ready products. Price and especially “special” price is the key factor during weekday

shoppings, this was summarised by an employee at a leading hypermarket as: “the price sells the product”. Factors such as freshness, quality, origin, etc. is ranked only below this.

Increase in the demand for products of higher processing level and added value (i.e. convenience food, such as “party food” products) is tendency identified for urban consumers, as well.

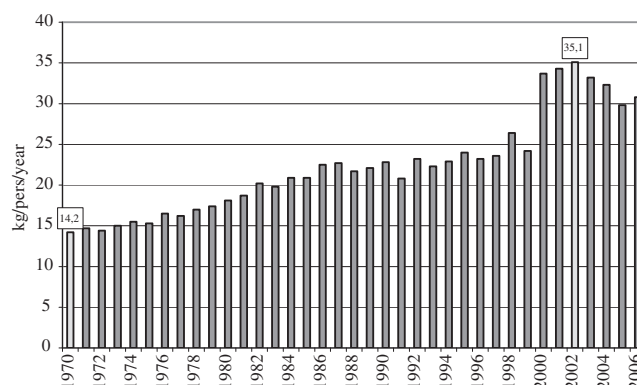


Figure 1. Trends in the per capita poultry meat consumption (1970–2006)
Source: KSH, 2009; Balogh, 2008.

It is also important to draw the attention to the tendency observed at the urban citizens with higher living standard: that is the decreasing consumption of red meat parallel with the increase in that of poultry and fish. The major cause of the decrease is the drop in pork consumption, and it is also a tendency that there is a growing number domestic meat products traditionally made of pork where poultry meat is used as replacement.

If the dietetics literature is reviewed, one can observe the appreciation of poultry consumption is almost all cases. Most food pyramids (Figure 2.) recommend the consumption few times weekly. Despite the recommendations, the domestic population does not follow the health guidelines, and the major problem is the lacking health-consciousness. The consumers are not aware the factors influencing their health, so the authentic communication is a key element in this field (Fülöp N. – Szakály Z. 2008).



Figure 2. Food pyramid
Source: www.erinvenier.blogspot.com;

Multinational companies are dominating the retail market in chicken meat trade, and their share is continuously increasing with the parallel decrease in the significance of smaller butcher's or poultry retail shops. These multinational retail chains are those setting the price-level, and their strategy for attracting consumers is exclusively focusing on decreasing prices. As the result of this the domestic suppliers (vendors) are more and more defenceless, and the overall quality of the poultry products are often fall prey to this price competition. The key element of the productivity of the whole poultry business is the status of the "price war" between the retail chains and processing suppliers (vendors). This trade situation is also causing a certain lack in product development in the processing sector, which paradoxically comes with a need for product development, but this is not by all means serving the improvement of food quality and safety.

2. Objectives of the research

Overall objective of the research was the consumers' assessment of chicken meat, and especially „Free-range chicken”. The following special objectives were identified:

- ? In case of consumers' assessment of conventional chicken meat:
 1. Assessment of consumption frequency;
 2. Learning the consumers' opinion on the most reliable (safe) sources and locations for obtaining fresh chicken meat and processed products;
 3. Assessment of the purchasing and consumption attitudes, as well as the price consciousness for chicken meat.
- ? In case of free range chicken, especially for the brand „Free-range chicken”:
 1. Survey of the consumers knowledge of the product;
 2. Assessment of their price acceptance, purchasing and consumption attitudes
 3. Learning the consumers' opinion on product promotion and their requirements for the present and planned products.

Because the whole study can not be presented within the frames of this article, we are focusing on the main results of the survey of consumers' opinion on „Free-range chicken” products.

3. Materials and Methods

A primary market research programme – supported by the Master Good group and the University of Debrecen, Faculty of Agricultural Economics and Rural Development – has been launched to study the main features of the domestic conventional and free-range chicken meat consumption using standardised questionnaires and quantitative methods. The survey was preceded by a test-survey in order to finalise the adequate questioning method, questions, respond options and the correct sequence of questions.

During the questionnaire survey the surveyed population was those poultry consumers – including chicken – which were selected by question 1 (“How often do you eat chicken or chicken products?”); those responded “never” were excluded from the survey. The expectation for questionnaires were: at least 1000 valuable responses including cities significant for chicken sales (Budapest, Debrecen, Nyíregyháza, Szeged, Győr, Székesfehérvár). Budapest and the other cities were represented in the responses nearly 50% and 10%, respectively. The over-representation of Budapest is caused by the fact, that app. 60% of the poultry is sold there, moreover 40% of the spending power is also situated here.

The survey was undertaken during May 2008 by interviewers in domestic hypermarkets (Interspar, Spar, Cora, Tesco, Kaiser's). There were 1011 questionnaires suitable for assessment, during which descriptive (average, variance, maximum, minimum and distribution) and non-parametric statistics (Pearson Chi² test, Mann-Whitney U- test, Kruskal-

Wallis test) were made. Significance was calculated at $p=5\%$ confidence level.

The responders were grouped by several categories for the significance-analyses. This was done by segmenting questions raised at the end of the interviews (gender, marital status, health-consciousness, chicken products purchased personally or not, education, type of present occupation, age, income category).

4. Results and Discussion

4.1. Characteristics of the domestic chicken consumption

The first question was asking the consumption frequency of chicken meat or chicken meat products (“How often do you eat chicken or chicken products?”). The majority of the interviewed had chicken or chicken products several times a week (52.6%) or weekly (34.9%). Insignificant amount (7.4%) were monthly or occasional (5%) consumers. The number of responders in the category “never” was insignificant and excluded from the survey.

Assessing the results from health-consciousness point of view – how often the respondents take into consideration the additives in the product – it is concluded, that the more conscious the consumer, the more chicken or chicken products are eaten (Pearson χ^2 test, $p=0,001$; Cramer V coefficient = 0,109)

Additional question in this group was asking the responders to rank the meat products by consumption frequency (Table 1).

Table 1 Average ranking of meat types by consumption frequency

Meat type	N	Average	Variance
1. chicken	1 011	6,34	1,22
2. pork	1 011	4,86	1,75
3. turkey	1 011	4,85	1,65
4. fish	1 011	3,78	1,67
5. beef	1 011	3,23	1,70
6. duck	1 011	2,21	1,48
7. mutton	1 011	1,83	1,35

Question No 2 of the questionnaire: „How significant is the chicken in your diet-, please rank the following meat types in decreasing order, according to the frequency of consumption! (7 – most often consumed; 1 – least often consumed)”

Table 1 is representing well that chicken is the mostly consumed meat type, so it is in the first place in the preference system of the respondents. Please note, that this result corresponds with the meat consumption statistics of HCSO (Hungarian Central Statistical Office – KSH).

4.2. Knowledge and consumption of „Free-range chicken” brand products

The first question within this group was asking if the respondents know the products under the brand „Free-range chicken”. More than half of the respondents (58.5%) replied

positively, and 41.5% replied that he/she never heard of it. Those doing the regular shopping knew the product group better i.e. women (63.7% of them replied positively in contrary to 49.3% of men), those of having family with elder children (73.7%) and the elderly, especially those 50–64 years of age. At the same time only 40.1% of the 15–14 years age group knew the products in question.

The responses of the health-conscious were also markedly distinguishable – the more health-conscious was someone the more he/she was aware of the „Free-range chicken” brand. This was also connected to the grouping by education, in which 45.2% and 68,5% of those with elementary or higher education knew the brand, respectively. It is inevitable that health-consciousness increases with the level of qualification.

The question asking the consumption frequency of those knowing the brand „Free-range chicken” was also within this group (Table 2)

Table 2. Consumption frequency of “Farm chicken” brand products

Frequency category	Responses (person)	Distribution (%)
Occasionally (monthly) consumed	246	41,6
Never tried	182	30,8
Tried once	130	22,0
I eat only this	33	5,6
Total	591	100,0

Most of them (41.6%) have the products under „Free-range chicken” brand occasionally (monthly) but the rate of those who never tried was also high (30.8). Another 22% of the respondents tried once and 5.6% are eating these products exclusively.

The majority of the respondents aged 15–24 years have never tried the products under this brand, and the most frequent consumers are those 25–34 years age group.

Fragmenting the respondents by marital status we concluded the majority is category of occasional consumption (except for those living with their parents, where 56% have never tried none of the products). This is especially significant for those with family and raising small child(ren) (66.7% are having these products occasionally).

Connected to the previous question, the respondents were asked to indicate the reason for not trying the products (more reasons could be marked) (Table 3).

Table 3. Reasons for not trying the products of the brand

Frequency category	Responses (number)	Distribution (%)
Never heard of	354	56,6
Too expensive	102	16,3
Not easy to obtain	54	8,6
Not interested	50	8,0
Not believing in it	32	5,1
Other	33	5,3
Total	625	100,0

Most of the respondents (56.6%) explained their behaviour – i.e. that they never tried the products under this brand – with the fact that they have never heard of them before. Many (16.3%) selected the reason “too expensive”. The remaining reasons were indicated only occasionally (Table 3)

There was an optional “other reasons”, where the respondents mentioned: that they have own grown chicken or they obtain poultry meat from the country (N=33).

4.3. Consumer attitudes towards the products under the „Free-range chicken” brand

There were statements formulated within this group of questions and the respondents were asked to agree or disagree using a scale 1–5 (1-totally disagree, 5-fully agree).

The first statement was: “I am purchasing „Free-range chicken” because it embraces all the features of a chicken grown at village houses”. The responses (agreements) on a scale 1–5 had the average of 3.82 (variance 1.2) which corresponds the category “somewhat agrees”.

According to the health-consciousness of the respondents it could be concluded that the more health-conscious the respondent is, the more he/she agreed with this statement. The significant differences in the result of the fragmentation by age group was determined by the group 15-24 (this group was evaluating this statement the lowest – avg. 3.54). Fragmentation by location of the interviews also came with significant differences. In general the respondents agreed the statement the least in Debrecen (3.45) and the most in Székesfehérvár (4.08) (Figure 3)

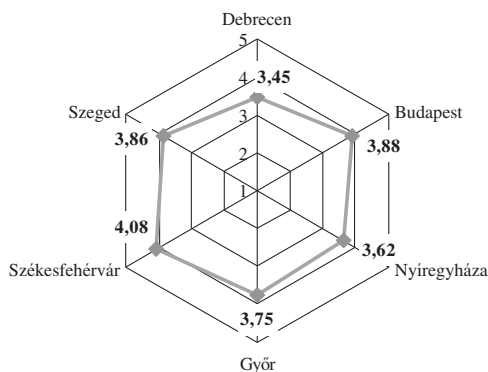


Figure 3. Average values representing the agreement of the respondents fragmented by cities (N=1011)

(“I am purchasing “”because it embraces all the features of a chicken grown at village houses”)

The next statement was: “I am purchasing/would purchase „Free-range chicken” because I surely know that it was raised outdoors under humane circumstances”. The average of the selected values was 3.72 (variance 1.17) meaning that the respondents somewhat agreed this statement.

According to the level of education, unfortunately the higher the level, the less important the animal welfare concerns are (Figure 4).

According to the fragmentation by location of the interviews the statement was agreed the most in Székes-

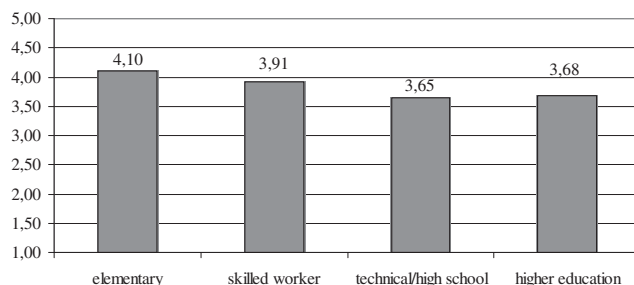


Figure 4. Distribution of the respondents' agreement fragmented by the level of education

(“I am purchasing/would purchase „Free-range chicken” because I surely know that it was raised outdoors under humane circumstances”)

fehérvár (4.12) and the least in Debrecen and Nyíregyháza (3.58 and 3.57, respectively).

4.4. Knowledge and opinions on the promotion, outlook and packaging of the “Free range chicken” current products and those under introduction to the market

At first we wanted to know if the respondents have seen/heard a commercial promoting the „Free-range chicken”. The research concluded that 67% responded negatively. Only 21.1% of those living with their parents (the younger generation) were reached by any commercial, while this at those without children was 47.3%. At the same time, the more health-conscious the respondent, the more he/she is susceptible for commercials promoting the „Free-range chicken”.

The next question was asking if the respondents met any promotion of „Free-range chicken” in the supermarket before. The word “before” was included in the question because a promotion campaign was undertaken during the time of interviews, and we were interested in knowing if the respondent came across any before, but not that whether he/she was noticing or not the one currently running.

It was also asked if those meeting supermarket promotion for „Free-range chicken” before have purchased it during the campaign. 43.4% of the respondents did, the share was the highest for those raising elder children and the lowest for those living with their parents (23.9%). The more health-conscious the respondents were the more „Free-range chicken” products they were purchasing during the promotions.

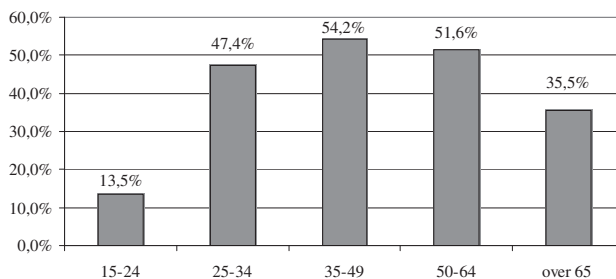


Figure 5. Rate of respondents by age group purchasing products under the promotion campaign for “” (N=142)

Figure 5 show that the promotion in supermarkets were primarily influencing the decisions of the mid-aged, especially those 35–49 years (52.4% bought products under the campaigns) and the least of those 15–24 years (13,5).

4.5. Product safety

Three questions were dealing the issue of food safety, the result of one of them is shown here. We intended to know how the H5N1 virus – bird flu – influenced the poultry purchasing habits of the consumers.

The majority (68.8%) did not change his/her habits, but 13.2% did not buy any poultry products. 6.9% neglected the poultry meat and 3.8% bought „Free-range chicken”.

Table 4. Distribution of the responses on the reactions on H5N1 (bird flu) appearance

Frequency category	Responses (number)	Distribution (%)
<i>I did not changed my poultry purchasing habits</i>	696	68,8
<i>I did not buy any poultry products</i>	133	13,2
<i>Other</i>	71	7,0
<i>I did not buy fresh poultry meat</i>	70	6,9
<i>I bought „Free-range chicken” because I trusted in it more</i>	38	3,8
<i>I have never heard of this virus</i>	3	0,3
<i>Total</i>	1 011	100,0

Question No 14: „What was your reactions when the H5N1 virus – i.e. the bird flu, dangerous also for humans – appeared in Hungary?

The respondents could formulate their own opinion on this issue (N=71). The most frequent answers were: decreased poultry purchasing, became more aware of what is purchased, consumed poultry raised at home, preferred pork, bought poultry from small producers.

The fragmentation by gender resulted in significant results (Pearson Chi² test, p= 0,0003; Cramer V coefficient = 0,151). Male replied not changing the poultry purchasing habits (77.5%). The other possible responses were dominated by female replies (15.7, 7.3 and 4.5% did not buy and poultry products, did not buy fresh products or bought „Free-range chicken”, respectively).

The more health-conscious the respondent was, the more he/she alters the poultry purchasing habits (Pearson Chi² test, p= 0,004; Cramer V coefficient = 0,113). This statement is valid for each possible responses.

91.7% of the underclass respondents did not change the poultry purchasing habits (Pearson Chi² test, p= 0,017; Cramer V coefficient = 0,091), but it is surprising, that the

rate of changing did not increased with the income levels – as we have expected in advance. In contrary, those living near the underclass level changed their habits (14.5%) and in “other” ways, and these were those not buying fresh poultry meat at all in the highest number (15%). Also the respondents from this and the highest income category were those buying „Free-range chicken” the most (7 and 7.1%, respectively).

5. Conclusions

In harmony with the statistical data the present study is also representing the significant role of chicken meat in the domestic meat consumption followed closely by pork. It was inevitably proven that the so-called health-conscious segment consider chicken as one of the healthiest meat types, thus the health-consciousness should be emphasized during the individual or common marketing campaigns, especially in case of „Free-range chicken”.

„Free-range chicken” brand is considered mainly by middle class consumers, typically those urban population with higher education and who are intend to follow health-conscious lifestyles as much as possible.

It was also proven that bird flu affected primarily women and those in the health-conscious category, i.e. these turned down the products usually bought before. It is not surprising that the relative rate of those buying pork was increasing against poultry, however the trust in „Free-range chicken” was increasing.

According to the results of the survey we can state, that consumers require the safe, traceable, healthy and good quality chicken products that was produced under “natural circumstances”.

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