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CONSUMERS' BEHAVIOUR ON POULTRY MARKET

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Abstract: *The main aim of my work is the knowing of the consumers' behaviour in relation of the processed poultry products. In the cause of the carrying out, I made a marketing research, used the questionnaire. The consumption of red (pork and beef) meat and white (poultry) meat is balanced, but it is moved away the flows. I also examined the importance of the product-choice factors. The most important aspects are: the standard quality, the taste of products, the hygienic and the appearance by the opinion of the asked people.*

Most of the questioned persons (75,4%) buy some poultry products. The frequency of the shopping was the biggest in the case of "red products" and cold cuts. The 97,6 percents of the poultry-products consumers was divided into 7 factors and 4 clusters respectively by the factor- and cluster-analysis based on the life-style, the demography and the attitudes.

Keywords: *Poultry, consumer's habits, questioner*

1. INTRODUCTION

An enormous boom is to be seen in the world's keeping of poultry, the products of the poultry species play a more important role in the supply with food of the population of Earth. We eat more of the rich in protein and poor in fat poultry products, compared to the total meat consumption every two years 1% more.

The development of the traditional poultry-raising and joining international co-operation started in Hungary in the 60s. With the taking over of the up-to-date slaughter and processing technology the Hungarian poultry industry became a significant factor on both the national and the international markets.

The boom of the poultry consumption has started in Hungary in the last 10 years, of which the reason is not only to be found in the price increase of the pork products, but also in the changes in the nutrition habits of the consumers. Above the low

prices, it is known of the poultry, that it is a type of meat which is healthy and easy to digest.

„The time has come, when no one can do without the long-term predictions in the poultry sector.” The significant overproduction that has took place in the last years, can be attributed to several reasons, and gives much trouble for the companies. Nowadays, the companies of the poultry sector can only take the advantage of the potential market, if they meet the changing consumer needs in every aspect. For increasing the sales, the producer should know the consumer and purchasing habits of the national population, they should determine the target audience of the different products, and should adapt themselves to the latest nutrition needs and trends.

2. THE MATERIAL AND METHODS

I chose the personal questionnaire method from among the lot of possibility. The aim of my work was a representative survey of 1000 people.

The basis of compiling the population was the data of the latest population census of Hungarian Central Statistical Office (HCSO) from 2001. The selection took place with the help of the development of a multiple-stage sampling procedure:

- The population of the country was divided according to the seven regions;
- It was determined according to the population data of each region, that out of the 1000 how many consumer should be made to fill out the questionnaire in the given region;
- In every region, a county was chosen, then with the help of the latest publications of HCSO the number, respectively the ratio of the inhabitants living in the county seat, in the cities and in the villages was calculated;
- Besides this, I examined the three types of settlements concerning the distribution of

- the inhabitants by sex, by age and by school qualification;
- Finally, a quote system was worked out, and the questionnaire was distributed according to this.

For the easier processing, the applied questionnaire contains closed questions, to which in most cases the people could answer with the help of an interval scale. The scales are most of the time five-graded, as the respondents can easier understand and use them according to the notes at school. In some cases seven-graded scales were applied, e.g. when the consumer frequency was examined, the five grades would not have been enough. Above the closed questions, open questions were also put in some cases. The questionnaire deal with the following 5 areas:

1. The consumer habits of the processed poultry products;
2. The purchasing habits of these products;
3. Image-control;
4. Hidden variable;
5. Lifestyle-analysis.

The processing of the data:

- The answers of the received questionnaire were encoded, and then the received value was laid down in the chart of the mathematical-statistical program of the SPSS 12.0 for Windows.
- The evaluation has been done with the help of this program: frequency examination, averages, t-probe, the analysis of the significance, as well as factor- and cluster analysis.
- For the easier evaluation and for the lucidity of the results, I made graphs and diagrams with the help of the Microsoft Excel program.

When making a frequency examination, above the regular distribution, a „consumer frequency index” was developed, and I calculated the consumer and purchasing frequencies concerning the processed poultry products. The number of the days of the year is considered to be 365, and to the answer-categories the values of the Table 1. belong.

Table .1 Calculating the consumer frequency index

Answer-category	The way of calculation	Multiplier
More times a day	$365 * 2$	730
Daily	$\frac{365}{7} * 7$	365,0
3-4 times a week	$\frac{365}{7} * 3,5$	182,5
1-2 times a week	$\frac{365}{7} * 1,5$	78,2
1-2 times a month	$12 * 1,5$	18,0
Rarely than a month	$\frac{12}{2}$	6,0
Never	-	0,0

3. RESULTS

My principal conclusions are as follows:

3.1. Consuming habits

The consumption of red (pork and beef) meat and white (poultry) meat is balanced, but it is moved away the flows. This fact is showed by the consumption frequency. The poultry-meat is eaten 139 occasions per year, the other meats are less. The answerers have the poultry-meat, because “it is healthy” or “I like more than the others meat” (Fig. 1.).

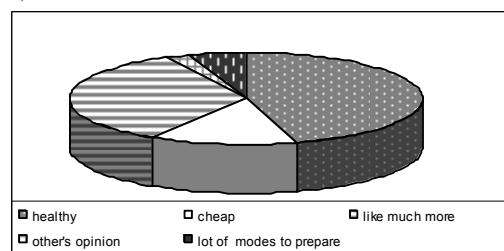


Fig. 1. The reasons of the poultry-meat popularity (n = 487)

After the general meat-consumption I analysed the processed poultry products on the basis of the Codex Alimentarius Hungaricus. The answerers eat mostly “red products” and cold cuts, on 105 and 95 occasions per year. The hams, the products made of liver and the quick frozen products are eaten on 57-47 occasions in every year; but the smoked-cured products, the sausages,

the conserves and the aspics only on 26-12 occasions. The popularity of them is parallel with the frequency, but people like much more the hams.

Only few asked people could denominate favourite product-label, the others did not care of the product-makers. I can emphasize two products the "red products" and the quick frozen product. In the both cases people mentioned SáGa Foods.

I also examined the importance of the product-choice factors. The most important aspects are: the standard quality, the taste of products, the hygienic and the appearance by the opinion of the asked people. The less important are: the knowing and the brand of the products, the name of the processing factory and the advertising.

3.2. Purchasing habits

In the second part of the questionnaire I asked people about their purchasing habits.

I knew, that most of the questioned persons (75,4%) buy some poultry products. The persons who do not shop these foodstuffs are: mostly men, singulars, low educated, between 16-29 years olds; in a few word: high-school students.

Further I examined the buying of the processed poultry products. The frequency of the shopping was the biggest in the case of "red products" and cold cuts, 71 occasions per year per capita, it means people buy these goods every 5 days. In the case of the other products we can draw parallel between frequency of the purchasing and of the consumption (Table 2.).

Table 2. The purchasing-frequency of the products (n = 754)

Products	Purchasing frequency Occasion/capita/year
"Red products"	71
Cold cuts	68
Hams	40
Products made of liver	37
Quick frozen products	29
Sausages	17
Smoked-cured products	16
Conсерves	14
Aspics	9

I took the measure of the bought quantity per occasion. In general people shop 110 decagrams quick frozen products, 34,5 decagrams "red products" and least, 22 decagrams aspics. With the help of these two data series I determined the

bought quantity per year. Compared with the statistical data, I established: the answerers can not esteem the bought quantity, well; their data are far exceed the original data.

I sized up the favourite places of purchasing: in general the customers like supermarkets and "shop-chains", but sometimes they go to the little shops for the very often bought products (Fig. 2.).

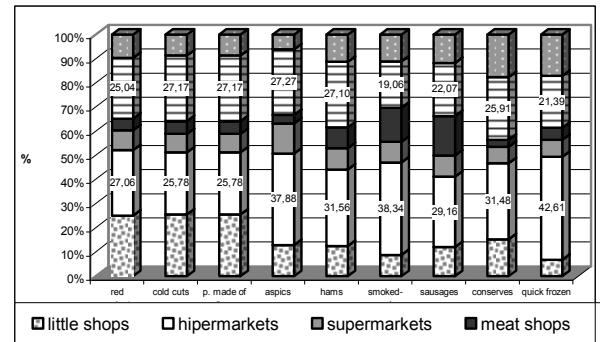


Fig. 2. The places of the purchasing (n = 284 – 691)

The popularity of the pre-packed products grows, but the main part of the shoppers (50-60 %) likes if the seller wraps the products (with the exception of products made of liver). I examined also the faithfulness to products and brands. It does not characteristic of mostly answerers, they substitute products with each other (33-47%) or they have no favourite product (17-30%).

I distinguish two methods of the shopping: impulsive and planned. The latter typical of the less part of the asked people (23%) and their 32 percents decide in the stores about the shopping. The main part of people said, they applied both methods.

The opinions about the price and quality are different, common people think these factors are good, but the older and the moneyless persons are discontent with these factors. This fact is vindicated by the agreement with buyers' assertion: "the price of the good quality is too high" – in all get medium score.

3.3. Image-examination

The answerers had to nominate one, then five poultry-processing firms. This task was successful, the 68 percents of the consumers could do it. They listed "SáGa Foods", "Bábolna", "Merian (Orsi)" and "Hajdú-Bét (Valdor)". On the basis of the answers I determinated the groups, which may be the main buyer company of the factories (Table. 3.).

Table 3. The special groups are characteristic of the firms

Factory	Age	Income	Region	Settlement
SáGa Foods	40-59 (44,3 %)	Below the average (42,3%) Over the average (42,5%)	Central Trans-Danubian (68,5 %)	Village (42,9%) County town (42,5 %)
Merian Rt.	over 60 (16,8 %)	Over the average (16,4%)	Central Region (18,7 %)	Capital (22,6 %)
Hajdú-Bét Rt.	16-29 (11,5 %)	Much over the average (14,3%)	Northern Hungary (34,7 %)	Village (10,7 %)
Bábolna Rt.	30-39 (21,4 %)	Average (24,7%)	Western Transdanubian (42,2 %)	City (21,4%)
Hungerit Rt.	over 60 (9,5 %)	Much below the average (10,2%)	Southern Great Plain (27,4%)	City (7,7 %)

In this part I asked people about the establishment of a trade-mark. The half part of the questionnaire-filler would like it, but their 32 percents do not know is it good or not for them.

3.4. Factor- and cluster-analysis

Finally I requested my customers to give any information for the life-style-analyse. After the apprehension of the answers I made factor- and cluster-analysis. The 97,6 percents of the poultry-products consumers was divided into 7 factors and 4 clusters respectively by the factor- and cluster-analysis based on the life-style, the demography and the attitudes. The most substantial factor is the price for the members of the "A" cluster, and the quality for the people of the "B". Persons belong to "C" cluster like the branded, convenience products, and the moneyless pensioners from "D" think the most important factor is the price.

4. CONCLUSIONS, PROPOSALS

As a result of the primary researches, I recommend the followings for the planning of the marketing strategy for the poultry sector and for the companies. When listing the conclusions, I am following the traditional 4 P-s of the marketing mix.

Our examinations have demonstrated that the men mainly prefer sausages to the „red products” and cold cuts, having significantly larger water-content; at the same time many of them do not know that

sausages made of poultry exist. Only a small circle of the consumers know these products, but they are not satisfied with their quality. It would be effective to advertise these products -in the appropriate media,- on the other hand to re-examine, to correct, to develop them.

When choosing the products the permanent quality, the taste belonging to the products, the hygienically aspects and the look are the most influential factors, so the companies should lay more emphasis on them. I think it is important to stress this, because it turned out from quantitative research that there are consumers who experience the worsening of the quality, respectively they are usually not satisfied with the quality of the products.

In case of the consumption and the purchasing of the products the results of the significance test show in many cases strong significance regarding the regions. When investigating the compound of the regions, I experienced, that there are no significant differences regarding the sex, the marital status and the age, but the school qualification shows such variances. The reason for this is that according to the data of the population census of HCSO, the distribution of the people with different school qualification is different in certain regions. Resulting from this, the net income/month/person, the sense of the income differs significantly. I can declare, though the different compound of the regions can influence the data, and the order, but the companies must not neglect the relations, because in these parts of the country such people live.

A certain part of the consumers is expressively price sensitive, but there are some sections, for which the quality is also important. Some companies try to put product lines with different brand names on the market, due to which target audience they mean it. This should be followed by other companies as well, because they make the decision of the customers easier.

Though the purchasing habits have altered, and many people prefer pleasure-shopping- and the hypermarkets belonging to them-, the questionnaire research shows, that the customers search some products in smaller stores. It would be important to have this factor in view, and make the choice of these products not only in the large, but also in the small supermarkets bigger.

The consumption data and the image-control bring us to the conclusion, that a big part of the population does not know the companies of the national poultry sector, and mixes them with the companies of the meat industry, having long traditions. I suggest the sector to adopt a corporate marketing strategy, with the help of which the total demand could increase, through emphasizing the advantages of poultry. For making this both the Poultry Product Board and the Agriculture Marketing Centre were perfectly appropriate.

5. BIBLIOGRAPHY

1. AC Nielsen Hungary: Mai Piac Évkönyv, 2001
2. AC Nielsen Hungary, 2003a
<http://www.acnielsen.hu/hirek/35.htm>
3. AC Nielsen Hungary, 2003b
<http://www.acnielsen.hu/hirek/40.htm>
4. Biacs P. - Szőke M. - Lajos J.: Az élelmiszerfogyasztás felgyorsuló átalakulását a fogyasztási szokások lassúbb változása kíséri II. Élelmezési Ipar 52 (11) 337-340 (1998)
5. Biró Gy.: A hús jelentősége az ember táplálkozásában, a múlt tényei, a jelenlegi ajánlások és perspektívák. A Hús 10 (1) 10-12 (2000)
6. Berke Sz.: A funkcionális minőség összetevőinek fogyasztói megítélése állati eredetű alapélelmiszereknél. PhD értekezés, Kaposvár, 2003.
7. Fórián Z. Gyorsuló szerkezeti változások a magyarországi baromfiiparban. Rabo-bank Hungária Rt., Budapest, 2001.
8. Gaál B.: A magyar háztartások élelmiszerfogyasztási szokásai Marketing & Menedzsment 30 (3) 71-75 (1998a)
9. Gaál B.: Milyen lesz a XXI. század elejének élelmiszerfogyasztója? Marketing & Menedzsment 30 (4) 51-55 (1998b)
10. Gaál B.: A közösségi marketing nemzetközi gyakorlata. Gazdálkodás 43 (3) 76-82 (2004)
11. GfK Piackutató Intézet: Élelmiszerfogyasztási és vásárlási szokások. Elemzés, Budapest, 2002.
12. Hoffmann M. - Kozák Á. - Veres Z.: Piackutatás. Műszaki Könyvkiadó, Budapest, 2001.
13. Hofmeister - Tóth Á. - Töröcsik M.: Fogyasztói magatartás. Nemzeti Tankönyvkiadó, Budapest, 1996.
14. Horváth Á.: A fogyasztói magatartás és az élelmiszerfogyasztás jellemzői. Doktori (PhD) értekezés, Gödöllői Agrártudományi Egyetem, 1996.
15. Horváth Á.: Élelmiszercímek és az egészségtudatos fogyasztói magatartás. Marketing & Menedzsment 29 (6) 53-56 (1997)
16. Kopint Datorg Rt. Hús fogyasztás alakulása Magyarországon. Tanulmány, Budapest, 1999.
17. Kotler, P.: Marketing management. Műszaki Könyvkiadó, Budapest, 1991. és 1998.
18. Lakner Z. - Bánáti D. - Szabó E. - Kasza Gy.: A magyar fogyasztó és az élelmiszererek biztonsága. A Hús 13 (1) 49-55 (2003)
19. Lakner Z. - Horváth Zs.: A magyar élelmiszerpiac az átalakuló társadalmi-gazdasági erőtéren I. Élelmezési Ipar 52 (11) 333-335 (1998a)
20. Lakner Z. - Horváth Zs.: A magyar élelmiszerpiac az átalakuló társadalmi-gazdasági erőtéren II. Élelmezési Ipar 52 (12) 358-360 (1998b)
21. Lehota J - Lakner Z. - Tomcsányi P.: Fogysztás, marketing és minőség az agrárgazdaságban. Minőség és agrárstratégia – Magyarország az ezredfordulón. Magyar Tudományos Akadémia, Budapest, 59-82 (1999)
22. Magyarország, 2003. Központi Statisztikai Hivatal, 2004.
http://portal.ksh.hu/pls/ksh/docs/hun/xftp/i_doszaki/pdf/mo2003.pdf
23. Népszámlálás, 2001. Területi adatok. Központi Statisztikai Hivatal, Budapest, 2003.
24. Pénzes É. - Réti A.: Húsfélék és húskészítmények fogyasztásának várható alakulása Magyarországon. Gazdálkodás 44 (2) 55-59 (2000)
25. Szakály Z.: Korszerű állati eredetű alapélelmiszerek piacképességének vizsgálata. Kandidátusi értekezés. 1994.
26. Wagenhoffer Zs.: Az állati eredetű termékek fogyasztásának várható alakulása a Világban. A Hús 13 (2) 104-107 (2003)
27. Zsarnóczay G.: Kényelmi húskészítmények. A Hús 11 (2) 93-95 (2001)

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