CONSUMER BEHAVIOUR BY THE PURCHASE OF HEALTHY NUTRITION PRODUCTS

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Abstract: The main aim of my article is to present chosen results of the research concerned on consumer behaviour and factors infuencing consumer by his decision about the purchase and consumption of healthy products. Nowadays there exists an ongoing trend of the healthy lifestyle and healthy nutrition within which some groups of consumers have a tendency to substitute „traditional" products by „healthy" products. In our research we were interested in attitudes and opinions of costumers on soya products (as one of the representing groups of healthy nutrition products) and associations connected with "soya" terms. The main aim was to reveal negative attitudes of respondents, frequency of consumption, reasons of non-consumption of soya products and typical targets groups interested in and consuming these products.
Key words: Consumer behaviour, healthy nutrition, soya products, factors, marketing, market research

I. INTRODUCTION

According to current statistics of cardiovascular diseases or other so-called civilization illnesses in Slovakia the issue of healthy nourishment involving tofu or soya-based products, shouldn´t be omitted. Knowledge of these products and their consumption is very important for sanitation of population. Some of consumers are aware of this trend and they start to be more interested in healthy nutrition in their lifestyle. Examination of their opinions and attitudes to soya products can bring their better understanding and companies focused on this segment which know their costumers can exploit these results for improvement of their marketing activities, e.g. by the new product development process. We have decided to examine internal factors regarding individuality of consumer: motivation, personality, perception, learning and attitude (Schiffman and Kanuk, 2004). In this phase we don´t distinguish terms consumer and costumer since we don´t consider differences between them to be important for this research.

For the purpose of understanding the demonstration of some consumers´ behaviors, for example why they refuse some products, why and which particular promotion activities accost particular group of customers or

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why certain marketing campaign didn´t work properly, company has to conduct market research. We have realized this kind of the research and we will present some of the results in following pages[2].

II. METHODOLOGY

The aim of the research was to examine how the consumers behave (through their attitudes, opinions, preferences and consumer habits) by their decision about the purchase and consumption of healthy products, in particular soya products. Firstly we wanted to find out associations connected with soya and to reveal especially negative attitudes and suggest possible imrpovements for the marketing of the company. Secondly we wanted to research a real consumption of soya products like frequency to find out which segment consumes soya products regularly and which one absolutely not. Further we were interested in reasons why they didn´t consume these products and areas for improvement. We compared (it was a requirement of the company) respondents from two regions - Banská Bystria a Prešov.

Realization of the research was in 2006 and we used the method of questioning with the tool of structured questionaire. Data collection was conducted in Banská Bystrica and Prešov regions represented by the district towns. Our sample consisted of respondents 16-years old and older. Basic, main group of respondents was 144 800 population of SR 16-years old and more and represented 80,59 % from 172 902 of all inhabitants in Prešov and Banská Bystrica, from which 75 357 inhabitants were from Prešov and 69 443 from Banská Bystrica. (Statistical record, 31. 12. 2005, Štatistický úrad SR).

The sample for our research was planned for 250 respondents. The choice was realized randomly and questionnaires were distributed to mailing boxes with an instructory and accompanying letter to each second entrance in blok of flats. Controled variables were: gender, age, education and district. After necessary factual and logical control of returned questionnnaires, 236 of them were ceded for further process. It represented 52 % respond rate from the overall number of 450 distributed questionnaires. One respondent in this research represented 732 inhabitants from the basic sample of population over 16-years old. Detailed characteristics are demonstrated in the table 1.

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[2] The data collection was realized within diploma work of Jana Kasičová „The exploitation of consumer behaviour factors for the decision proceess in the company ALFA BIO, s.r.o" in 2005/2006, supervisor: Ing. Janka Petrovičová, PhD.

Table 1: Age distribution of respondents classified according to gender, district and education

	GENDER		DISTRICT		EDUCATION			
	Woman	Man	BB	Prešov	Primary school	Without graduation	Graduation	University
15-18	9	2	5	6	6	1	4	0
19-25	22	30	22	30	1	1	42	9
26-35	22	34	26	33	1	5	26	27
36-45	28	11	21	19	0	0	20	20
46-59	36	19	29	27	1	2	23	30
60 +	11	5	5	11	1	4	6	5
Overall	128	101	108	126	10	13	121	91

Source: Own research

Statistical correctness was evaluated through the intervals of reliability. By the 5 % level of significance the representativeness wasn´t confirmed according to the characteristics age and education, but was confirmed by the gender and district. Due to high material costs and a lack of human resources it wasn´t possible to assure more representative sample.

In the data collection phase we utilised statements within four categories of information (of the man about inner and outer reality Surynek, et al. 2001). Questionnaire consisted of 24 questions. It was designed without a need of personal assistence of the researcher by the process of its filling. By our research we used dichotomic questions, multiple choice with 1- or more possibilities, evaluation scales, classification scales, one-sided scales with the even-numbered possibilities and assuming negative or positive assessment or two-sided with uneven number of possibilities. We used Likert scale, semantic differential scale and ranking scale. Respondents´ answers were encoded in MS Excel. Data were processed by the help of statistical and mathematical methods as average, median, reliability intervals, CHI kvadrat and percentages in MS Excel a Statgraphics programs. Open-ended questions were processed by the help of content analysis. In this article we will present only chosen results from this more complex research.

III. THE BEHAVIOUR OF CONSUMERS BY THE PURCHASE AND CONSUMPTION OF HEALTHY NUTRITION PRODUCTS

The first task for us was to find out interest of population about healthy nourishment. The result was a base for further analysis. With the 95% reliability we can say that the interest was in the interval between

74,57% and 84,83%, what we can interpret as a rather high level. For companies producing and selling this kind of products this finding is very positive. There were no significant differences between the districts Banská Bystrica and Prešov.

The second task was to find out respondents´ attitudes through predefined statements. Median was the best possibility for the analysis since there was a high variability of answers. The scale was from -2 to 2, where -2 meant „absolutely disagree" and value 2 expressed the opinion „absolutely agree". The detailed information is in tables 2 and 3.

Table 2: Attitudes towards healthy food in Prešov

Výrok	Median	Average	Variation coefficient
1. Soya products present a good-taste substitute for a meat.	-1	-0,33	-4,21962
2. Soya products are difficult for preparation.	-1	-0,88	-1,24897
3. Soya products are mainly for ill people.	-2	-1,22	-0,90481
4. Soya products are genetically modified.	-1	-0,60	-2,04778
5. Soya products are equally nutritive like a meat.	-1	-0,06	-23,5074
6. Soya products are very tasty.	1	0,01	173,5683
7. Soya products contribute to slender figure.	1	0,85	1,294495

Source: own research

Table 3: Attitudes towards healthy food in Banská Bystrica

Výrok	Median	Average	Variation coefficient
1. Soya products present a good-taste substitute for a meat.	-1	-0,16	-8,34091
2. Soya products are difficult for preparation.	-1	-0,75	-1,68186
3. Soya products are mainly for ill people.	-1	-1,07	-1,10751
4. Soya products are genetically modified.	-1	-0,52	-2,46729
5. Soya products are equally nutritive like a meat.	1	0,04	38,87953
6. Soya products are very tasty.	1	0,25	5,220377
7. Soya products contribute to slender figure.	1	0,91	1,249441

Source: own research

Results between Prešov and Banská Bystrica were different only in two cases. In Prešov respondents had the opinion that soya products are not equally nutritive like a meat whereas in Banská Bystrica they rather agreed that they are equally nutritive. By this statement there was a high variability in both districts. Another difference between them was in the statement „Soya products are mainly for ill people". In Prešov the rate of disagreement was higher in comparison with Banská Bystrica. It was a positive result, that respondents think that soya products are rather tasty, contributing towards slender figure, not difficult for preparation and not genetically modified, in both districts. There was a high variability of anwers regarding the taste in Prešov. The weakness of soya products seemed to be their function of the substitutuin with meat. In both districts respondents were inclined to the opinion that these products are not a good substitute with the meat.

Our third intend was to reveal associations (especially negative ones), connected with expression like soya, tofu, healthy food, soya salami…etc. that can be the base for improvements or opportunity in the case of positive associations. The first expression "tofu" was connected with negative associations only 7 times. The number of 123 respondents stated word "cheese" naturally associated for them with the word "tofu". We can interpret that it is the sign of good consumers´ awareness about tofu, but on the other hand it shows indifferent attitude towards this product.

Regarding "soya" there were more negative associations than in comparison with "tofu", on the other hand also more positive ones. Soya in most cases evoked the substitute of meat together with various forms of soya meat (slices or cubes). In the case of soya salami there appeared many negative responses, one group of opinions even consider this phrase to be a joke or nonsense. Only 3 respondents used the word "healthy" and 18 of them positively conformed to taste. In "healthy food" expression we traced especially answers including the word soya or soya products and the number was 13.

We also asked the question how they would project typical consumer of soya products. The results of this question might be used by the designing of promotion "speaker" of company, casting up a "common man" in commercial and so on. We assumed that if there will be negative image (like pale or unhealthy), it would be a base for the change. The question was designed with the expectation that respondent would describe a picture of consumer as an ideal projection of his own "ego", what is in principle his aim being achieved by the consumption of soya products. It is suitable to present this ideal target object in advertising. For analysis we used median as there is a high variability of answers. The value 3 represented "very much"

and value -3 (in the scale from 3 to -3) represented the answer "at all". Detailed information is in the tables 4 and 5 bellow.

Table 4: Projection of a „typical consumer" in Prešov

Attribute	Average	Variation coefficient	Median
slender	0,66	2,541265	1
active	0,78	2,146647	1
modern	0,80	2,441626	1
healthy	1,21	1,266102	1

Source: own research

Table 5: Projection of a „typical consumer" in Banská Bystrica

| Attribute	Average	Variation coefficient	Median
slender	0,85	1,704375	1
active	0,92	1,696773	1
modern	0,75	2,32182	1
healthy	1,20	1,231532	1

Source: own research

From the table 4 and 5 we can see that in Banská Bystrica as well as in Prešov respondents have a slight tendency to claim that consumer of soya products is slender, active, modern and healthy. More detailed results were gained from the content analysis of open-ended question. The analysis showed the picture of this consumer. He is a man interested in his health and healthy nutrition; he does not like meat, mostly woman. Otherwise he makes an impression as a common, average man. His personality is experimental, without prejudices towards new things; he is a modern man with fantasy.

The aim of the next question was to assign consumer to one of the categories according to the purchase frequency. We wanted to find out, which segment of consumers buys soya products most often. These results served as a base for calculation of dependencies. Classification of respondents according to the frequency of consumption is shown in graph number 1. In Banská Bystrica the distribution is moved slightly to the left, which means higher frequency and in Prešov towards lower frequency. In the graph number 2, consumption of soya products is displayed according to the netto month income. We can see that soya products are purchased more than once per week especially by consumers with the household income
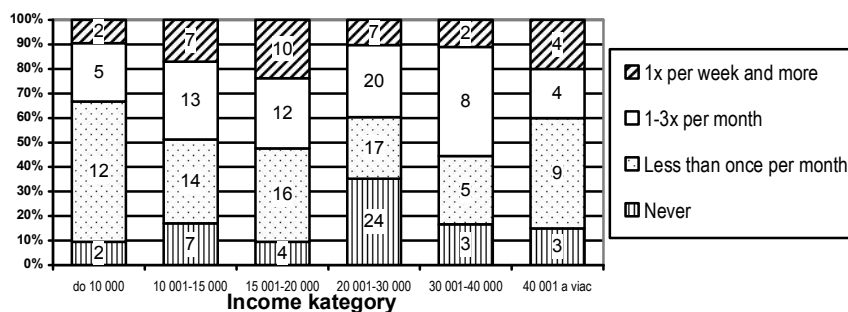
between 15 001 and 20 000 Sk. The income category of 20 001 – 30 000 Sk buys soya products at least.

Graph 1: Respondents according to the frequency of consumption
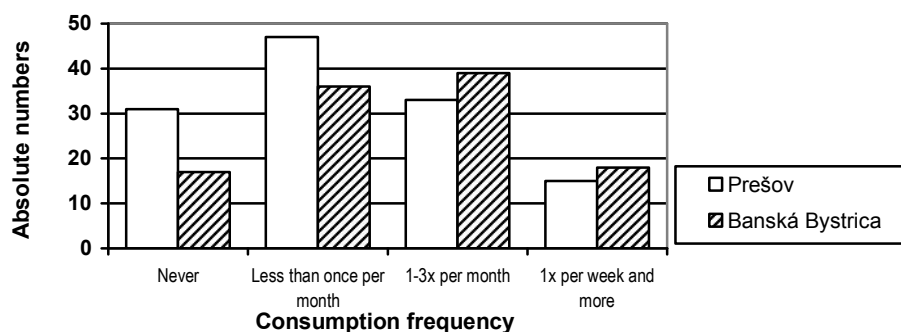
Source: own research

Graph 2: Respondents according to the income
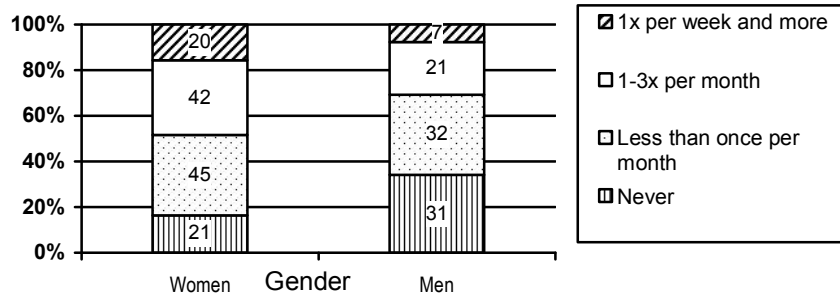

Source: own research

We can read from the graph number 3 that soya products are most frequently purchased by the age categories from 46 to 60 years and more and from 36 to 45 years. In the graph number 4 there is a result that soya products are purchased mostly by women. In the graph number 5 there is a frequency share according to four special categories. We found out that soya products are mostly purchased by vegetarians and people carrying about their figures. Sportsmen buy this kind of product at least.
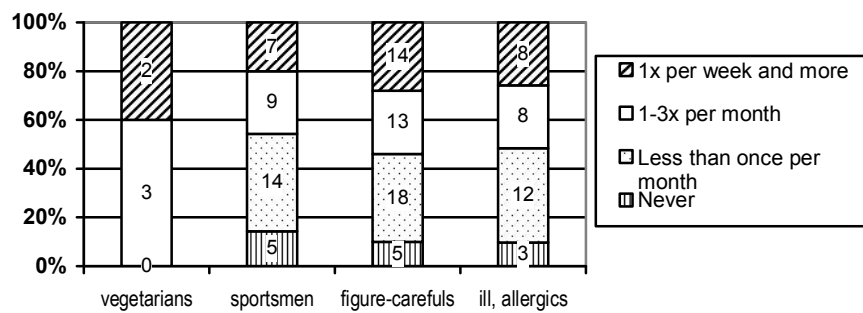
Graph 3: Respondents according to the age

Source: own research

Graph.4: Respondents according to the gender

Source: own research

Graph 5: Respondents according to the special categories

Source: own research

The following question was focused on reasons why consumer rejects soya products and possibilities of their elimination. The number of 84% respondents not consuming soya products stated that they tried them in the past. With the reliability of 95% the main reason why they do not consume these products is in 57,6 - 81,68% not fully satisfying taste. The second reason was that they do not know how to prepare these products (18%). The price was not important. In these answers company can reveal opportunities what to improve to satisfy consumers better.

We also wanted to know what should have been different so that consumers started to buy more (or started to buy at all) soya products. We tried to reveal possibilities how to accost consumers not belonging to the group consuming soya products, yet and to examine possibilities how to increase sales of current, existing customers.

Table 6: Factors according to age category

Age group	Most important factors	
	1. place	2. place
16-18	Taste	Awareness
19-25	Taste	Awareness
26- 35	Taste	Awareness, price
36-45	Awareness	Price
46-60	Taste	Awareness
60 a viac	Price	Quality

Source: own research

Particular factors were ranked in following order: taste, awareness, price, quality, image, availability. This knowledge can be exploited in decision process about marketing strategy.

People in the age of 36 – 46 years that belongs to the biggest consumers of soya products stated on the first place awareness. The only group over 60 years stated on the first place price. Very interesting information were gathered from content analysis of open-ended question where respondents expressed their own-words opinions. Results from analysis are in the table number 7.

Table 7: Results of content analysis

Categorization of opinions	Number
Poor substitute for meat, meat is more sate and rich	11
I don't know how to prepare it, receipts	8
More various and innovated assortment is desirable	6
Nothing would make mi to buy soya products more often	4
Bad taste, I don't like it	4
My community refuses it to consume	4
I miss more information, I would invite more advertisement and articles about this	2

Source: own research

The most of respondents think that soya products are very weak substitute for meat and they do not know a simple way how to prepare them.

IV. MANAGERIAL IMPLICATIONS

From the research results we can ascertain following facts that may be very useful for marketing activities of companies producing soya products, particularly for AlfaBio, S.r.o. Company. The positive fact is a rather high interest (85 %) in healthy nutrition that creates a field and opportunity at the market, whereby "soya products" were associated by respondents with the category "healthy nutrition". These products are purchased mostly by consumers in the age of 46 till 60 years, rather women and from the typology vegetarians and people carrying about their figures and healthy nutrition. Maybe surprising result was that sportsmen consume soya products at least. This knowledge is very important for segmentation process and defining the target market.

We positively assess the fact that in both districts respondents think that soya products are quite tasty, contributing towards a slender figure, not difficult for preparation and not genetically modified. These attitudes have to be confirmed further in the minds of consumers, that is a task for advertising activity and positioning strategy. The weakness of soya product appeared to be their function "the substitute for a taste of meat". With the reliability of 95% the main reason for people not consuming these products is unsatisfying taste. The second reason was a lack of knowledge how to

prepare them. The price wasn't so important in this case (except for the segment over 60).

In respondents´ statements can be found other possibilities for the company how to improve these products to satisfy them. For example in the case of soya salami there appeared many negative reactions, one group considered it even as a joke or nonsense. It can be affected also by a weak awareness of the consumers. This information can be confirmed also by the answers of respondents from 36 till 46 years old that belong to the biggest group of soya products consumers. The first most frequent possibility was awareness that should be improved to start consumption or increase it. This knowledge can be used during development of marketing strategy – according to Ansoff – strategy of penetration (with existing, maybe improved products to existing markets) or product development strategy (where the new product development process plays an inevitable role).

Typical consumer of soya products should be a man carrying about his health and healthy nutrition; he does not like meat, mostly woman. Otherwise he looks like a common, average man. He likes experimentation; he is without prejudices towards new things, modern and with fantasy. This knowledge can be used by companies while searching for a suitable type for commercial to personify an essence of their products.

For companies it is one of their key activities to examine and know the needs of their customers, their attitudes (positive or negative ones) towards these products. At the basis of this knowledge it is possible to develop an effective marketing strategy and design suitable marketing mix.

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