

EVALUATION OF CONSUMERS' HONEY PURCHASE HABITS IN HUNGARY

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Abstract

The objective of the study is to develop a strategy for Hungarian honey sales based on the consumers' purchase habits. Altogether 902 people were asked randomly by questionnaire. Data collection was carried out personally in supermarkets as well as fruit and vegetable markets (in Debrecen, Nyíregyháza, Szolnok). Altogether 821 questionnaires were evaluated. Cross tables were created according to sex, age, qualification and income. Data coherences were analysed through Pearson Chi² statistical method. Main findings are as follows:

- There are many different types of honey produced in Hungary, but people don't know too much about them, they consume only a few of them.
- Mainly the so-called traditional acacia and flower honey are consumed.
- Analysing the variables we didn't find significant differences in the different groups; most important criteria when purchasing honey are quality, price, type of honey and quality of packaging.
- Older people take into consideration mainly the price, name of the producer and size of packaging.
- Most of consumers purchase honey only a few times per year, or monthly and mainly in supermarkets or directly from the producer.

Keywords: healthy lifestyle, honey purchasing, nutrmarketing

Introduction

While honey has been used for thousands of years to treat wounds and ailments, scientists have only recently begun to explain the precise effects of the natural sweetener's antiseptic and antibacterial qualities on human health (14).

In 2005, the EU25 consumed approximately 24 % of the world's annual honey production (318 tonnes). Honey consumption is increasing slightly. It profits from the health trend in the EU. The fluctuations in consumption have been caused by imports of honey contaminated by substances which are prohibited in the EU. Table 1 presents the total and per capita consumption of honey in the EU. Data on 2006 for several countries are not available and, therefore it is difficult to determine the total honey consumption in the EU in 2006 (17).

On the basis of Table 1, it can be stated that the total honey consumption of the EU increased by approximately 2 % annually on average between 2002 and 2006. Note that because of the market maturity, future growth in consumption will only be small. The important factor contributing to the growth of the market is the health trend in which honey has a role as a natural health product. The fact that honey is a natural product and has therapeutic as well as medicinal properties appeals to many EU consumers who are becoming more health-conscious.

Table 1: Total and per capita honey consumption in the EU, 2002-2006, respectively in thousand tonnes and in kg

	2002		2004		2006		Average annual change in total consumption
	Total	Per Capita	Total	Per Capita	Total	Per Capita	
<i>EU average</i>	-	0.8	-	0.8	-	0.9	-
<i>Germany</i>	100	1.2	97	1.2	90	1.1	-3 %
<i>Spain</i>	38	0.9	40.2	n.a.	n.a.	n.a.	
<i>United Kingdom</i>	32	0.5	30	0.5	32	0.5	0 %
<i>France</i>	29	0.5	29	0.5	n.a.	n.a.	n.a.
<i>Italy</i>	18	0.3	14	0.2	25	0.4	9 %
<i>Poland</i>	13	n.a.	15	n.a.	21	n.a.	13 %
<i>Greece</i>	16	1.5	17	1.5	18	1.6	3 %
<i>Romania</i>	7	n.a.	6	n.a.	11	n.a.	13 %
<i>Austria</i>	12	1.5	11	1.3	10	1.2	- 4 %
<i>Portugal</i>	5	0.5	8	0.8	8	0.8	12 %
<i>The Netherlands</i>	7	0.4	6.8	n.a.		n.a.	n.a.
<i>Sweden</i>	6	0.7	6	0.7	6	0.7	0 %
<i>Belgium</i>	6	0.6	7	0.7	n.a.	n.a.	n.a.
<i>Denmark</i>	6	1.1	5	0.9	n.a.	n.a.	n.a.
<i>Czech Republic</i>	5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Slovakia</i>	2	n.a.	2	n.a.	5	n.a.	23 %
<i>Bulgaria</i>	4	n.a.	4	n.a.	3	n.a.	- 6 %
<i>Finland</i>	3	0.6	3	0.6	n.a.	n.a.	n.a.
<i>Ireland</i>	2	0.5	2	0.5	2	0.5	0 %
<i>Hungary</i>	3	n.a.	4	n.a.	2	n.a.	- 12 %
<i>Lithuania</i>	1	n.a.	1	n.a.	1	n.a.	9 %
<i>Latvia</i>	1	n.a.	0	n.a.	1	n.a.	0 %
<i>Estonia</i>	0	n.a.	0.7	n.a.	0.8	n.a.	n.a.
<i>Luxemburg</i>	0.3	n.a.	0.3	n.a.	0.3	n.a.	2 %
<i>Malta</i>	0.1	n.a.	0	n.a.	0	n.a.	- 100 %
<i>Cyprus</i>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Slovenia</i>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: I7

The leading market for honey in the EU is Germany. Germany accounted for 27.3 % of total EU consumption in 2004. Both a large population and a high per capita consumption of 1.2 kg add to the high consumption in Germany. Germany is also a leader in consumption of organic food in the EU and by far the largest market for fair-trade honey in the European Union. The second largest market in the EU is Spain. The Spanish market amounted to 40.2 thousand tonnes in 2004, accounting for 13.2 % of total EU25 consumption. The third largest market in the EU is the UK. Honey consumption in the UK amounted to 0.5 kg per capita and a total of 31.1 thousand tonnes in 2004, accounting for 10.2 % of total consumption in the EU25. The fourth largest market for honey in the EU is France. The French market amounted to 29.2 thousand tonnes in 2004 with a per capita consumption of 0.5 kg, accounting for 9.6 % of total EU25 consumption. The fifth largest market in the EU is Italy. Italy accounted for 6.8 % of total EU consumption, amounting to 14.0 thousand tonnes. Although total consumption in Italy is relatively large, per capita consumption amounted to only 0.4 kg in 2004. The next large honey market in the EU is The Netherlands. It accounted for 2.2 % of total EU consumption with a per capita consumption of 0.4 kg and a total consumption of 6.8 thousand tonnes in 2004. Consumption is small as it is generally limited to bread spreads (18).

Romania is also one of the biggest honey exporters and one of the main competitors of Hungary in the European Union. Per capita honey consumption in Romania is very low – between 100-150 g/capita/year – comparing with the consumption of this product in other EU Countries. (16)

In case of Ireland the honey consumption was 0.5 kg per capita in 2006. As regards the Irish consumer, there are three attributes: pure, Irish and healthy product were indentified by focus groups. The important differentiating attributes of pure 100 % Irish honey were indentified as: texture (thick or runny), colour (dark golden or light golden), source (mass produced or made by a small-scale producer), price and packaging. The Irish consumers are price conscious (16).

In Bulgaria honey consumption is very low – varying within the range of 400 to 500 grams per capita per annum, which values are insignificant, as compared to the respective values for honey consumption in other countries (15).

In case of Croatia the national honey consumption is also very low, 0.4 kg per capita per a year (Svecnjak et al, 2008).

Hungarian beekeepers contribute to the total European honey production with about 15 to 20 % – 25,000 tons per year. Out of the 25,000 tons it exports about 20,000 tons. The most important export market countries of Hungary are Germany, the United Kingdom, France and Italy. Unfortunately only 5,000 tons are for domestic consumption. Surprisingly, Hungarian consumption is only 0.4 to 0.5 kg per capita per a year. Peter Bross – president of the Hungarian Beekeeper Federation – blames the relatively small consumption on the incomplete honey marketing during the Communist period (13).

Position of honey in the consumption structure in Hungary

Changing of consumption habits contributed to the appearance of new diseases. This trend has been continuously ongoing for the last few decades. At the beginning these so called civilisation diseases became more and more common in the developed countries only. Nowadays these diseases reached the medium developed countries, as well. At the same time the trend changed in the developed countries and the number of such diseases is dropping (BÍRÓ, 1990; SZAKÁLY, 1994).

Honey is not only a sweetener for people nowadays, but even more: important part of nourishment since it includes almost all the important elements, such as vitamins, etc. that are needed for our health. Quality of the Hungarian honey is better comparing it with honey produced in other countries in the world. The market position of honey unfortunately is not enough stable, the branch has a lot of problems, for instance the fact of counterfeit of the product. Of course there is a need from consumer side to buy excellent quality Hungarian honey, but most of the shopping is carried out in hypermarkets, where lower quality is available at a very cheap price.

Research Method

Primary and secondary research methods were used for data collection and evaluation, as the most internationally accepted ones. Within the framework of the secondary research the restructuring and evaluation of the available data were carried out (HAJDÚ-LAKNER, 1999). Within the framework of the primary research a questionnaire was created and used for data collection. The questionnaire included several questions. The flexibility of questions ensures that this method is one of the most popular ones in primary research (KOTLER-KELLER, 2006).

The main objective of this survey was to analyse honey purchase habits in the 3 main cities (Debrecen, Szolnok and Nyíregyháza) of the North-Great Plain Region. Altogether 902 people were asked randomly. The questionnaire contained open and closed questions. In some cases ranking from 1 to 5 had to be done by the interviewed people. Data collection was carried out personally (in 100 %) in hypermarkets and

fruit and vegetable markets of the above mentioned cities. In addition to it, a special shop for selling honey, called “Mézkuckó” was also involved in Debrecen. From the 902 filled questionnaires 81 was not suitable for further evaluation. Altogether 821 questionnaires were evaluated.

Regarding the representativeness of the sample, age, sex and qualification were analysed. In all cases the figures of the sample were compared with the relevant figures of the Hungarian Central Statistical Office (HCSO). Results can be seen in Table 2. Regarding qualification and sex there is only 2-5 percent difference between the figures of the sample and the figures of the Hungarian Central Statistical Office. Regarding age, the representativeness can be considered good in case of age 18-25, 26-35 and 46-60. In case of age 36-45 the sample is over represented, in case of age over 60 the sample is under represented.

Table 2: Demographic features of the sample (n = 821)

Variables		Results of the sample for the North-Great Plain Region (%)	HCSO data for the North-Great Plain Region (%)	Representativeness
<i>Distribution according to Age</i>	Age 18-25	15.0	17.0	good
	Age 26-35	20.3	18.0	good
	Age 36-45	25.5	14.0	over
	Age 46-60	23.8	26.0	good
	Age above 60	15.5	25.0	under
<i>Distribution according to Sex</i>	Women	59.9	55.0	good
	Men	40.1	45.0	good
<i>Distribution according to Qualification</i>	University/College at least	33.0	30.9	good
	Secondary School	61.5	58.7	good

Source: own research, 2008 and 11

Main findings regarding consumers’ honey purchase habits

As it was mentioned in the ‘Research Method’ chapter, people were asked about their honey purchase habits. In the followings the results of the survey are presented.

Question 1: What kind of honey do you buy?

In this question people were asked to name at least three different kinds of honey that they most often buy. As it can be seen in Figure 1, most people (80 per cent) named acacia honey on the first place, other types of honey were named on the second place (60 per cent) and polyflower honey was named on the third place (90 per cent).

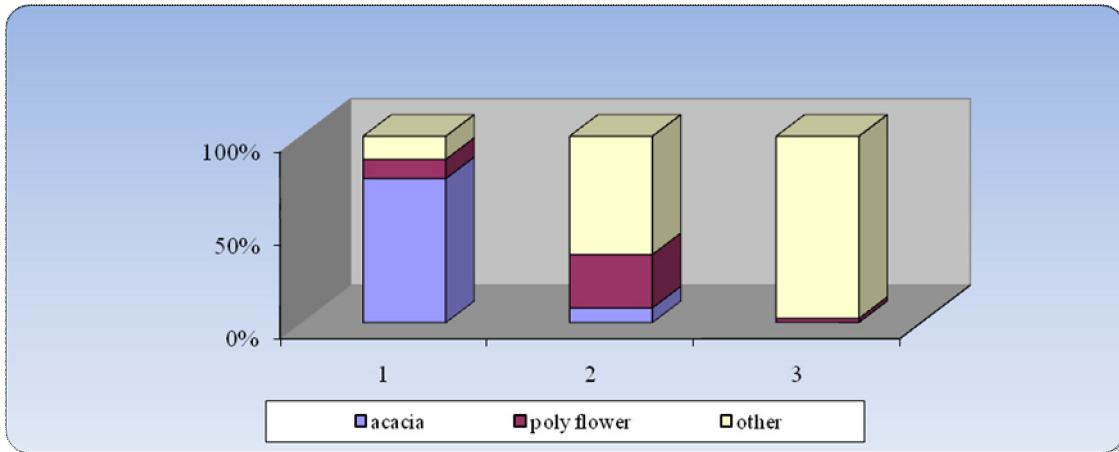


Figure 1: What kind of honey do you buy? (n=821)
Source: own research, 2008.

Analysing the sample according to sex, income and place of residence there was no significant difference regarding the knowledge of different types of honey.

Analysing the sample according to age there was significant difference regarding this topic. It can be stated that most of the other types of honey are purchased by people aged between 18-25 years. Most of the acacia honey is purchased by people aged between 36-45 years. Most of the polyflower honey is purchased by people aged between 46-60 years.

Question 2: What are your criteria when purchasing honey?

In this question people were asked to rank different criteria to be taken into consideration when buying honey. (At least three different criteria had to be named.)

It can be seen in Figure 2, that product quality and price were ranked on the first and the second places, in addition to it, the type of honey, and quality of packaging were ranked on the third and fourth places. Other criteria such as colour, flavour, name of producer and origin are less important when buying honey.

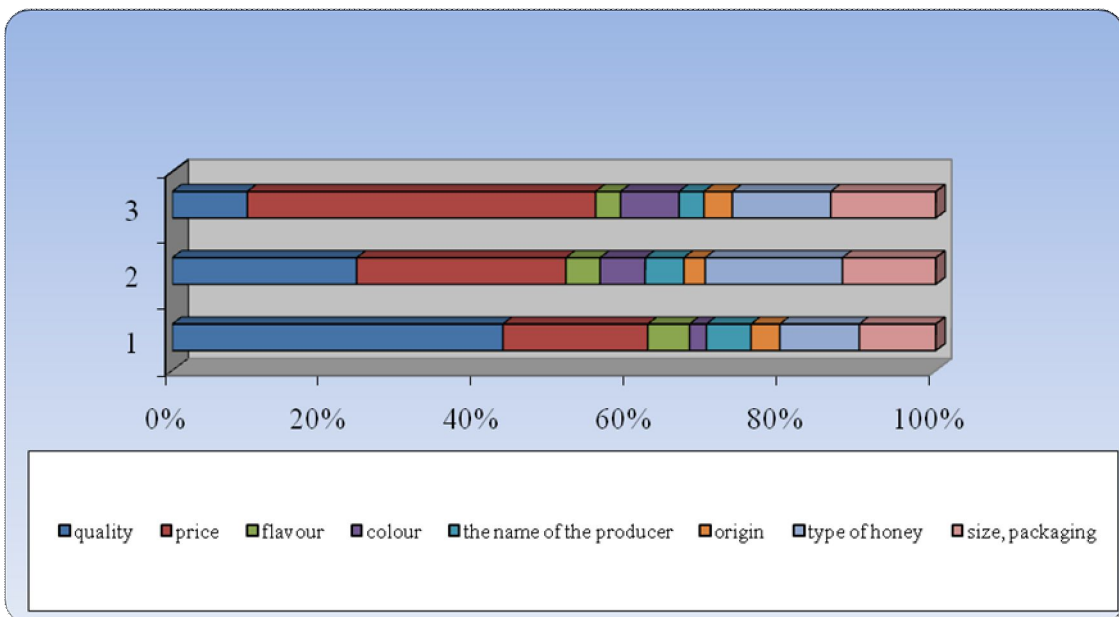


Figure 2: What are your criteria when buying honey? (n=821)
Source: own research, 2008.

Analyzing the sample with Kruskal-Wallis probe, the results can be seen in Table 3. It can be stated that there are significant differences regarding each variables in the different groups (first place, second place, third place criterion).

Table 3: Test results between the different groups of variables and criteria to be taken into consideration when buying (n=821)

Options	Chi-Square test	Df	Significance (p = 0,05)
<i>1st place</i>			
<i>Age</i>	9.559	7	0.215
<i>Sex</i>	14.329	7	0.046
<i>Place of residence</i>	15.396	7	0.031
<i>Qualification</i>	15.013	7	0.036
<i>Net income per person in the family per month</i>	13.666	7	0.057
<i>2nd place</i>			
<i>Age</i>	9.309	7	0.231
<i>Sex</i>	7.677	7	0.362
<i>Place of residence</i>	6.387	7	0.495
<i>Qualification</i>	10.937	7	0.167
<i>Net income per person in the family per month</i>	16.089	7	0.024
<i>3rd place</i>			
<i>Age</i>	15.568	7	0.029
<i>Sex</i>	14.175	7	0.048
<i>Place of residence</i>	4.679	7	0.699
<i>Qualification</i>	8.956	7	0.256
<i>Net income per person in the family per month</i>	15.262	7	0.033
<i>Kruskal Wallis Test</i>			
<i>Grouping Variable: What are your criteria when buying honey?</i>			

Source: own research, 2008.

Analyzing the sample according to age, sex, place of residence, qualification and net income regarding the first place criterion (quality of the product), it can be stated that there was no significant difference in case of age and net income per person. In case of the other variables there were significant differences. Regarding the variable sex, more men (41.3 %) named the quality of the product as a first place criterion. Regarding the variable place of residence, people living in villages (44.3 %) named the quality of the product mostly on the first place. In case of qualification, people with higher education degree (43.9 %) named on the first place the quality of the product.

Analyzing the sample according to age, sex, place of residence, qualification and net income regarding the second place criterion (price of the product), it can be stated that there was significant difference only in the case of net income per person. It means that people with monthly net income of 61-100 thousand forint per person (28 %) named price on the second place.

Analyzing the sample according to age, sex, place of residence, qualification and net income most people named price of the product on the third place. It means that these people named other criteria on the first and second places. It can be stated that there was significant difference in case of age, sex and net income per person. Regarding the variable age, people aged between 26-35 years (27.5%) named this criterion mainly on the third place. Regarding the variable sex, more women than men named price on the third place (26.2%). Regarding the variable net income per person, people with monthly net income of 101-150 thousand forint per person (31.8 %) named price mainly on the third place.

Generally it can be stated that quality is the most important criterion for women and men as well. The same tendency can be seen in case of price. Analyzing the flavour and colour of the honey it is more important for women (5.3 % and 3 %) than men (4.9 % and 0.6 %). The same can be stated in case of name of the producer (women: 6.1 %, men: 3.9 %) and origin of honey (women: 4.6 %, men: 3 %).

In case of Romanian consumers, the main attributes for which honey is appreciated are the quality of being a natural product and the medical uses of the product. Properties such as colour, taste, aroma, thickness are more appreciated than packages, brand name, labels. The country of origin plays an important role in the decision to buy. Romanian consumers appreciate more the local honey than the imported one, in which they don't have trust. The nutritional value is not an important property in the decision to buy. The price is one of the reasons of the non-consumption of honey, especially for people with incomes between 100-200 lei/member of family (16). Arvanitoyannis and Krystallis (2006) present that in Romania there are four main dimensions of honey purchasing motivation: medical benefits of its consumption, dietary quality, ethical character of honey and suitability with food consumption lifestyle. Three clusters of honey consumers in Romania emerged through cluster analysis: the common consumers, the younger consumers, indifferent towards honey and the enthusiastic consumers, who are also more willing to pay premium prices differentiation for the organic type of honey. Quality cues are defined by search attributes of the bulk product (colour, taste, aroma, thickness), rather than credence attributes (warranties, brand name, country-of-origin) (12).

Question 3: How often do you buy honey?

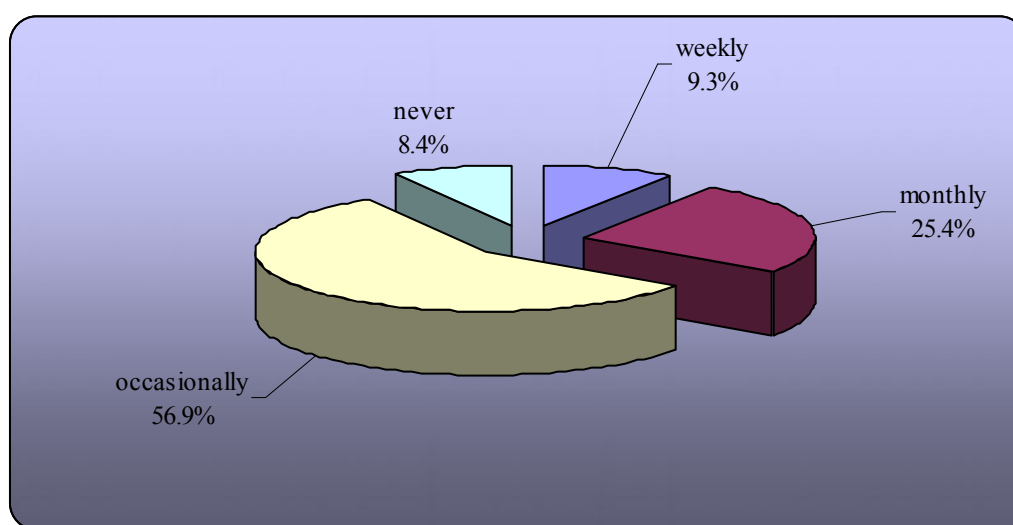


Figure 3: How often do you buy honey? (n=821)
Source: own research, 2008.

As it can be seen in Figure 3, most people purchase honey occasionally (56.9 %) or monthly (25.3 %). Only 9.3 % of people purchase honey weekly or more often. The ratio of people who never purchase honey is relatively high, 8.4 %. We wanted to know what the reason of that is. 39 % of people answered that they didn't like honey at all, 32 % got it as a present and for 27 % somebody else bought it and in case of 2 % people produced it themselves.

Is the Hungarian origin of honey important for you?

Analyzing the sample it can be stated that most of people (70 %) emphasized the importance of the Hungarian origin of honey.

This answer is parallel with the current food consumption trend. This trend emphasizes that consumers insist on regionalism and its products (Töröcsik, 2006).

Question 5: Where do you buy honey?

Results of the question can be seen in Figure 4. Unfortunately most people (42.3 %) buy honey in hypermarkets; producers were named on the second place (16.6 %) and markets on the third place (15,8 %).

Taking into consideration that most people emphasized the importance of Hungarian origin of honey there is a contradiction between this answer and the place of purchasing. Although the Hungarian origin of honey is very important for people, they buy honey mainly in hypermarkets where mostly not Hungarian honey is available. People should focus on local markets where mainly the local producers offer their products. In case of this the origin is not a question.

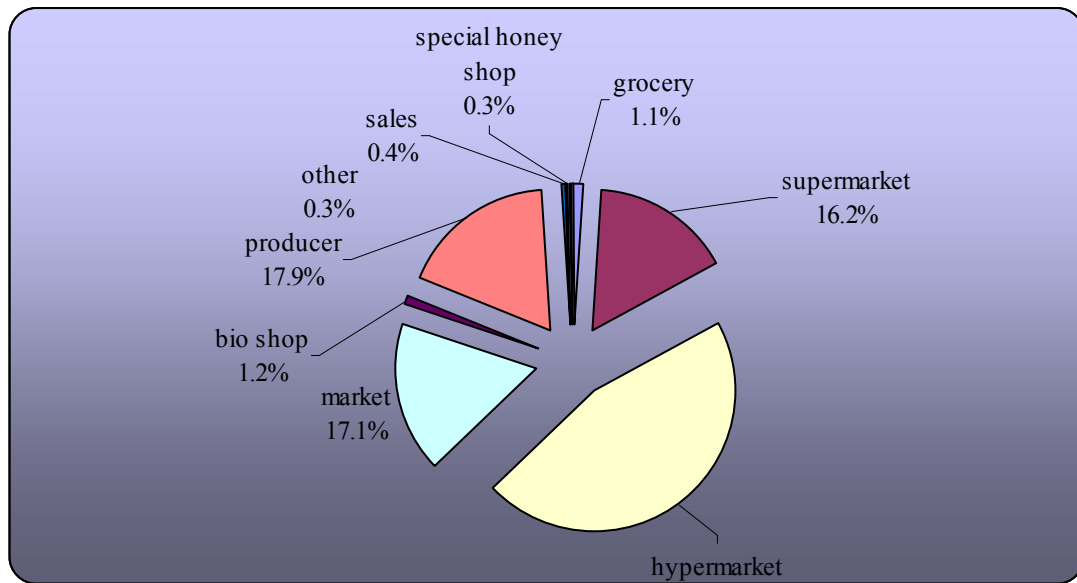


Figure 4: Where do you buy honey?
Source: own research, 2008.

Question 6: What is your opinion about the price of honey available in shops?

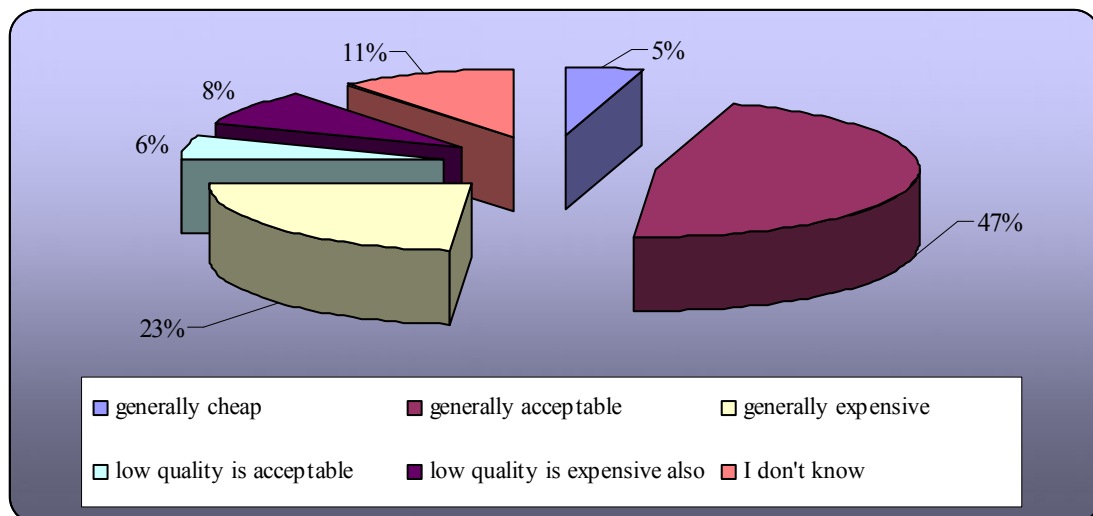


Figure 5: What is your opinion about the price of honey available in shops?
Source: own research, 2008.

As it can be seen in Figure 5, price of honey is acceptable for most people (47 %). 23 % answered that the price was expensive and 8 % considered that they could buy low quality for high price.

Question 7: What factors could increase the quantity of honey to be purchased?

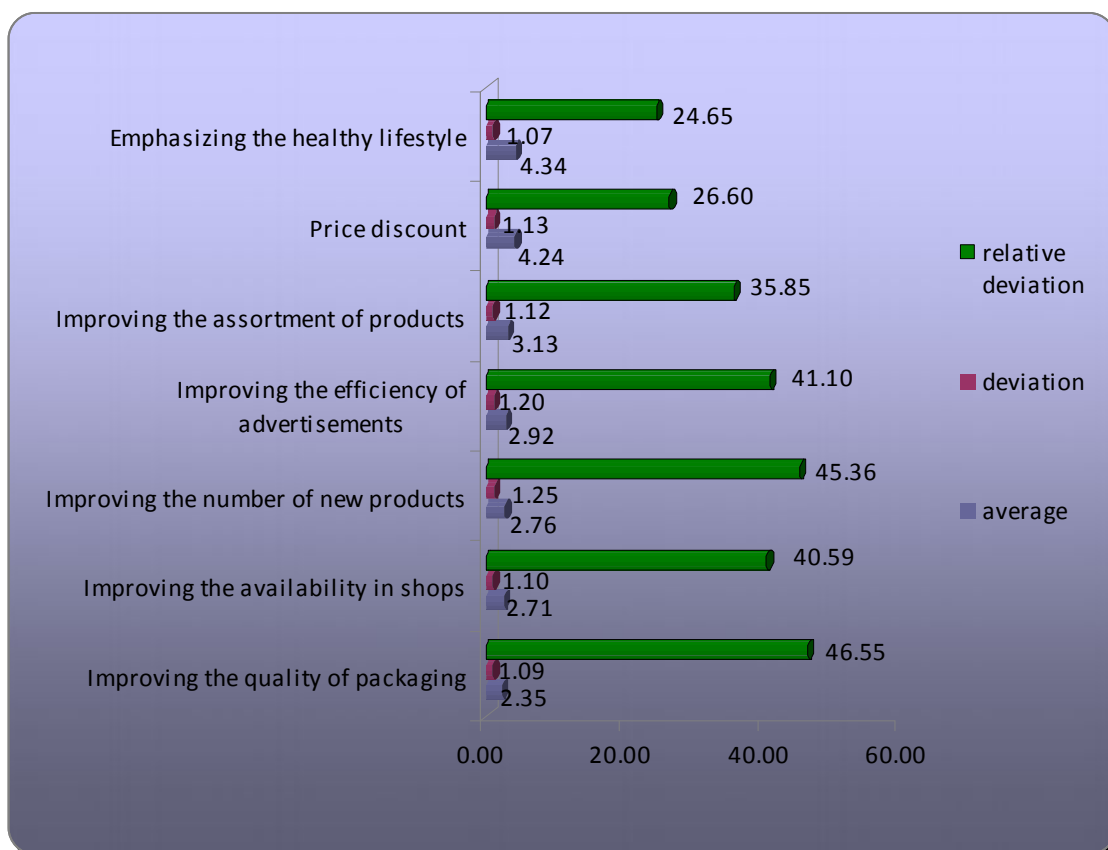


Figure 6: What factors could increase the quantity of honey to be purchased?

Source: own research, 2008.

People were asked to rank the factors from 1 to 5, where 5 means the highest motivation. Analyzing the different factors the results can be seen in Figure 6. Average, deviation and relative deviation calculation show that “healthy lifestyle” and “price discount” were ranked with the highest points (4.34 and 4.24). It means that these two factors could mostly motivate people to buy more honey. The “assortment of products” was named on the third place with an average point of 3.13. The least important factor is the “quality of packaging” with 2.35 points.

As it can be seen the factor “price discount” was ranked on the second place. Hungarian consumers are very price sensitive, the results of the factor analysis confirms this fact.

Calculation of relative deviations shows medium variability regarding the factors “emphasizing the healthy lifestyle” (24.65 %) and “price discount” (26.60 %). In case of the other factors relative deviations show relatively high variability (35.85 - 46.55 %).

EVALUATIONS AND FINDINGS

Main findings are as follows:

- There are several types of honey produced in Hungary, but people don't know too much about them, they consume and purchase only a few of them.
- Mainly the so-called traditional acacia and flower honey are purchased.
- Analysing the variables we didn't find significant differences in the different groups; most important criteria when purchasing honey are quality, price, type of honey and quality of packaging.
- Older people take into consideration mainly the price, name of the producer and size of packaging.
- Most of consumers purchase honey only a few times per year, or monthly and mainly in hypermarkets or directly from the producer.
- "Emphasizing the healthy lifestyle" and "Price discount" factors could mostly motivate people to buy more honey.

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