

CONSUMER PERCEPTION OF COCOA-ENRICHED HONEY: YOUNG SEGMENT IN SLOVAKIA

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Abstract:

Even though the honey consumption in Slovakia is slowly increasing, there exist less attractive types of honey, which beekeepers are not able to sell directly to consumers. There is a need to provide value-added products and attract the consumers' attention by offering novelty products in the form of flavoured honey. In general, these products represent honey enriched by other healthy ingredients such as cocoa, ginger, nuts, cinnamon or other bee products. The purpose of the paper was to identify the perception and attitudes of young segment in Slovakia towards cocoa-enriched honey. The primary research was based on a questionnaire survey focused on product perception and consumer behaviour towards cocoa-enriched honey. 292 respondents between 18 – 24 years participated in the research. The questionnaire survey was extended by product testing. The results showed that the majority of respondents perceive cocoa-enriched honey as natural, innovative and would purchase it. However, it was mostly females, respondents who regularly eat healthy and those who perceived these products as a healthier alternative to commercial chocolate spreads. The main motives of purchase were taste and health aspects. In general, respondents would consume this product in the form of spreads in the morning or when they desired something sweet. They would prefer to purchase it directly from a beekeeper, in retail stores or in a specialty shop. The optimal price per 250g would be 2 – 3 € and even higher. In conclusion, the paper study provides useful information for Slovak beekeepers in terms of product positioning, product image and its perception.

Key words:

value-added product, honey market, enriched honey, consumer research, Slovakia

JEL: M31

1 Introduction

Perception is defined as a process of selecting, organizing and interpreting information and incentives to create a meaningful sense about products around us. In general, perception in consumer behaviour is related to price, quality, perceived value, benefits, and convenience. Perception of quality and price are generally used as exogenous variables (Horská & Siringoringo, 2012). Price is supposed to be a rational and decisive factor (Kubicová & Kádeková, 2011; Predanocyová et al., 2018), while the quality of food strongly depends on its sensory attributes (Nagyová et al., 2018).

According to Berčík et al. (2016a) the purchasing behaviour at the point of sale is influenced by consumer perceptions, including the perception of store environment (Berčík et al., 2016b). Moreover, decisions of consumers in case of food products are influenced by various factors, including not only cultural, social, psychological but also personal variables. Some of them are changing under the influence of new trends – for instance the increasing importance of quality and product origin (Pierański et al., 2017; Géci et al., 2017). Nevertheless, it should be stated that consumer's perception of quality is

more important than the quality itself (Mokrý et al., 2016). The quality, quantity and price level of goods chosen by consumers depends on individual level of income, however, it is necessary to highlight the importance of income in the family budget (Kubicová et al., 2013). In addition, consumers prefer to purchase mostly those food products which will fulfil their satisfaction (Golian et al., 2018).

Honey is considered to be a valuable product according to its nutritional value. In general, it contains minerals, vitamins, enzymes, antibacterial and antioxidant substances (Martinovski & Gulevska, 2017; Šedík et al., 2018b). However, according to Hazuchová et al. (2018) if consumers are not attracted by honey type, brand or design, their attention is focused on information about the product itself. Furthermore, the consumer study in Slovakia conducted in 2017 revealed that the most important factors at honey purchase are the country of origin, taste and type of honey (Guziy et al., 2017). Another consumer research in Slovakia, which studied the perception of honey quality based on four sensory attributes (taste, aroma, colour and texture), found out that the majority of consumers identify the quality of honey according to its taste (Šedík et al., 2018a).

Novelty products including novelty honey should be promoted in an appropriate way in order to avoid negative emotional responses by highlighting the properties of novelty product and providing suggestions for its usage (Stolzenbach et al. 2013). Furthermore, companies should present honey as a modern and attractive product by designing an appropriate communication strategy in order to foster positive attitudes towards a generic product (José Sanzo et al. 2003).

2 Objective and Methodology

The main objective of the paper was to study consumers' perception of selected flavoured honey. The survey was conducted during spring 2019 and studied the perception of 292 young consumers between 18 – 24 years (tab. 1) towards rapeseed honey flavoured with cocoa powder. Each respondent participated in a product testing. Obtained data were processed and analysed in SPSS ver. 25 and XLSTAT. Hypotheses identification was based on previous research conducted as a pilot testing of cocoa-enriched honey in 2018 (Šedík et al., 2019).

Applied statistical tests:

- Mann-Whitney U test
- Pearson Chi-square test
- Fisher's Exact Test,

Formulated hypotheses

Hypothesis no. 1: Men and women evaluate sensory features of honey (taste, aroma, colour and consistency) differently.

Hypothesis no. 2: There exists dependence between willingness to buy cocoa-enriched honey and gender.

Hypothesis no. 3: There exists dependence between willingness to buy cocoa-enriched honey and the place of residence.

Hypothesis no. 4: There exists dependence between willingness to buy cocoa-enriched honey and its perception as a healthier alternative to commercial chocolate spreads.

Hypothesis no. 5: There exists dependence between willingness to buy cocoa-enriched honey and respondent's healthy eating habits.

Hypothesis no. 6: There exists dependence between willingness to buy cocoa-enriched honey and the frequency of consumption of honey.

Hypothesis no. 7: There exists dependence between the respondents' perception of cocoa-enriched honey optimal price and gender.

Hypothesis no. 8: There exists dependence between the respondents' perception of the optimal price of cocoa-enriched honey and respondents' income per month.

Table 1 The profile of young respondents

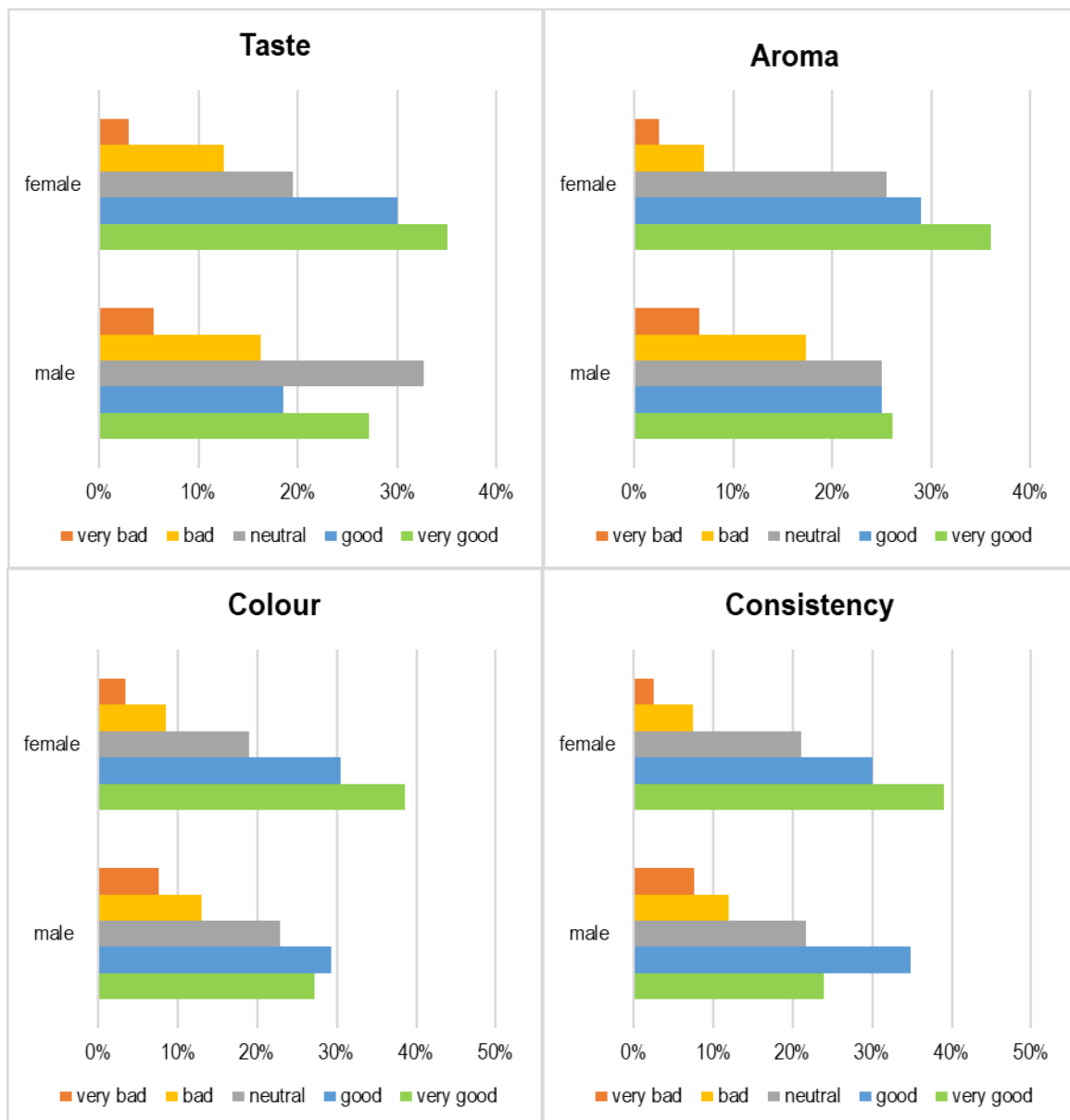
Gender		Place of residence	
male	31.51%	urban	43.84%
female	68.49%	rural	56.16%
Education		Monthly income netto	
secondary	52.05%	up to 400 €	72.95%
university	47.95%	401 - 600 €	14.38%
Economic activity		601 - 800 €	6.16%
student	87.33%	more than 800 €	6.51%
employed	12.67%	N = 292	

Source: own processing

3 Paper results

The survey examined the consumer behaviour of young segment towards honey with the addition of cocoa powder. All 292 respondents also participated in the sensory test of the product. The overall evaluation was positive. Young respondents involved in research evaluated 4 aspects - taste, smell, colour and consistency by using a 5-point scale (1 - very good, 2 - good, 3 - neutral, 4 - bad and 5 - very bad). The majority of respondents evaluated these aspects as very good and good. In the context of the question, it was assumed that there were differences in the assessment of the examined aspects between men and women. Based on the results of the Mann-Whitney test it is possible to identify the differences between gender in the assessment of taste (p-value = 0.015), aroma (p-value = 0.006), colour (p-value = 0.0159) and consistency (p-value = 0.007). The results showed that women evaluated aspects more positively compared to men (Fig. 1).

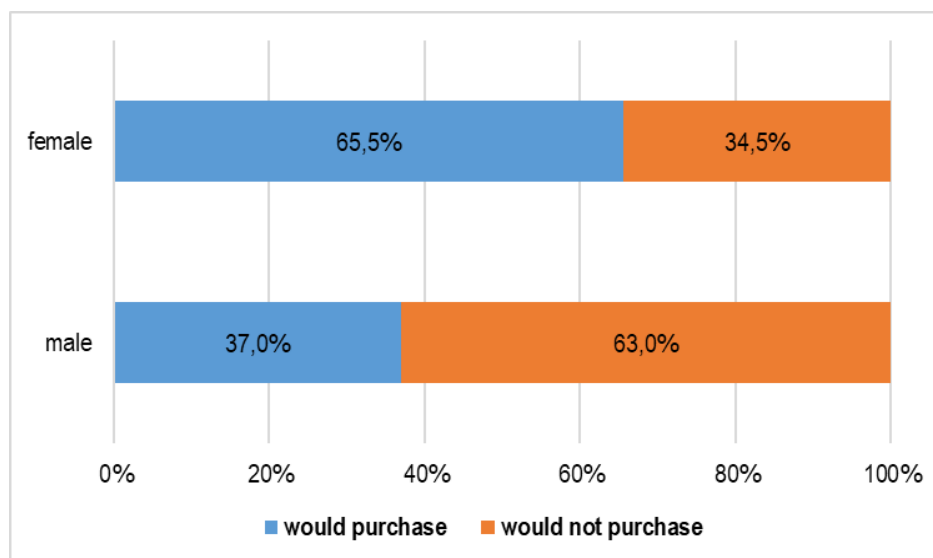
Figure 1: Sensory evaluation of cocoa-enriched honey



Source: questionnaire survey, 2019

In the research, we were interested whether young consumers would buy a cocoa-enriched honey. Based on the research results, it can be stated that 56.5% of young respondents would have an interest to buy the tested product and would prefer to consume it either when they have the desire to eat something sweet (40.6%) or in the morning (25.4%). The most frequent way of consumption would be in the form of a spread (60.3%), direct consumption (33.1%), and as an ingredient (6.5%). The dominating motives were taste and health aspects while the main barriers of purchase were taste (unpleasant or too sweet) followed by the preference of normal honey, or the fact that consumers perceived the product as ordinary. In this regard, the dependence between the purchase of this type of honey and the gender of young respondents was examined. Based on the results of the applied Fisher Exact test ($p\text{-value} = 0.000^{**}$), it can be stated that there is a dependence between the purchase of the cocoa-enriched honey and the gender of the respondents. The results showed that 65.5% of women would buy cocoa-enriched honey, while only 37.0% of men would prefer to buy it (Fig. 2).

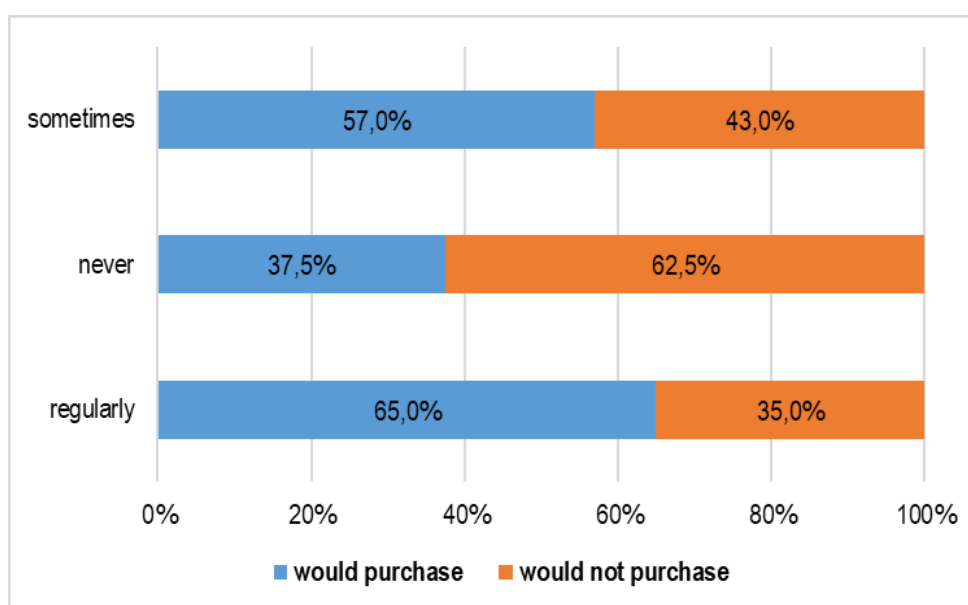
Figure 2: Purchase intentions according to gender



Source: questionnaire survey, 2019

In the context of buying cocoa-enriched honey, we were interested in young respondents' purchase intentions regarding healthy eating habits. Based on the results of the research, it can be stated that 20.6% of respondents regularly respect the principles of healthy eating and 68.5% of young respondents consume healthy food only sometimes. In relation to this issue, the stated hypothesis examined the dependence between respecting healthy eating habits and the purchase of cocoa-enriched honey. The results of the Pearson Chi-square test showed that the examined dependence was confirmed ($p\text{-value} = 0.039$), suggesting that 65% of young consumers who tend to eat healthy would buy cocoa-enriched honey. On the other hand, 62.5% of young consumers who do not respect the principles of a healthy eating would not purchase this type of honey (Fig. 3).

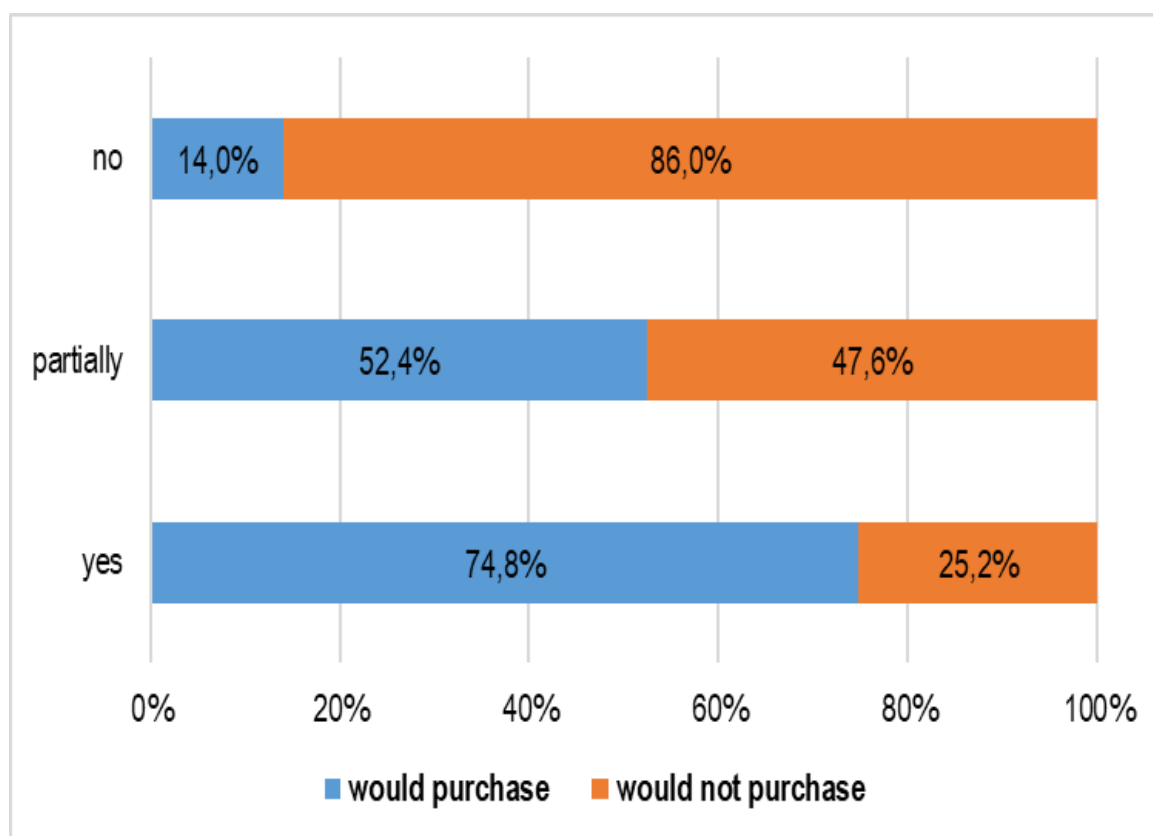
Figure 3: Respondents' purchase intentions regarding healthy eating habits



Source: questionnaire survey, 2019

Another aim of the research was to find out whether cocoa-enriched honey is considered as a healthier alternative to commercial chocolate spreads by young consumers. Research results showed that 47.6% of young respondents perceive it as a healthier alternative to chocolate spreads, while 35.3% considered it only partially. Only 17.12% of respondents do not consider it as a healthier alternative at all. In connection with this, the following hypothesis assumed the dependence between the perception of cocoa-enriched honey as a healthier alternative to commercial chocolate spreads and the purchase of cocoa-enriched honey by young consumers. Based on the results of the Pearson Chi-square test it is possible to confirm the dependence. 74.8% of young consumers who perceive cocoa-enriched honey as a healthier alternative would buy this type of honey. On the contrary, 86% of young respondents who think that cocoa-enriched honey is not healthier in comparison with chocolate spreads would not buy it (Fig. 4). The results also showed that the consumption frequency of honey does not influence the willingness to purchase the analysed product.

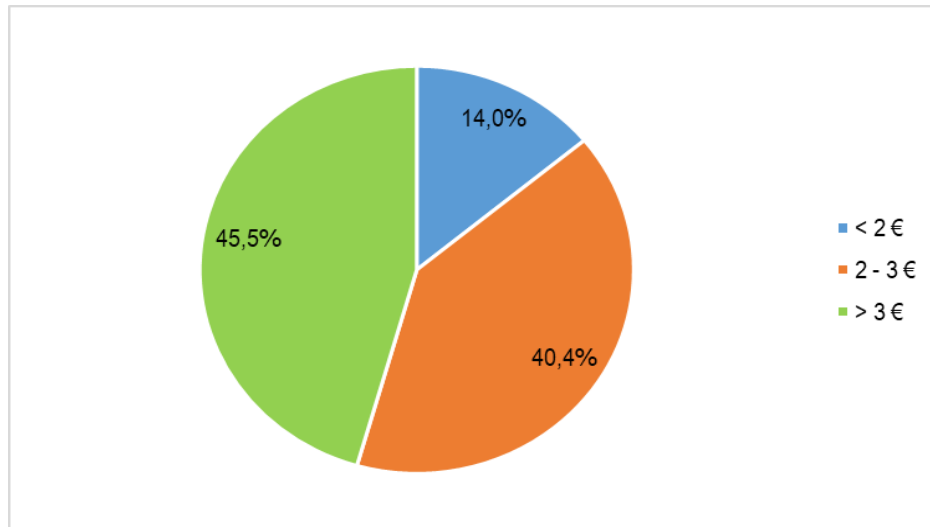
Figure 4: Respondents' purchase intentions and product perception as a healthier alternative to commercial chocolate spreads



Source: questionnaire survey, 2019

Due to the fact that the price is a discussed and important criterion in the process of buying food products, we were interested in the optimal price for 250 grams of cocoa-enriched honey from the point of view of young consumers. The majority of respondents (45.0%) consider the optimal price of 250 grams to be more than 3 €. 40.0% of young respondents would pay 2-3 € for 250 grams of cocoa-enriched honey and 14% of respondents consider less than 2 € to be the optimal price (Fig. 5). In addition, the results of Pearson Chi-square test did not confirm the impact of respondents' income (p-value = 0.239) and respondents' gender (p-value = 0.095) on the perception of the optimal price.

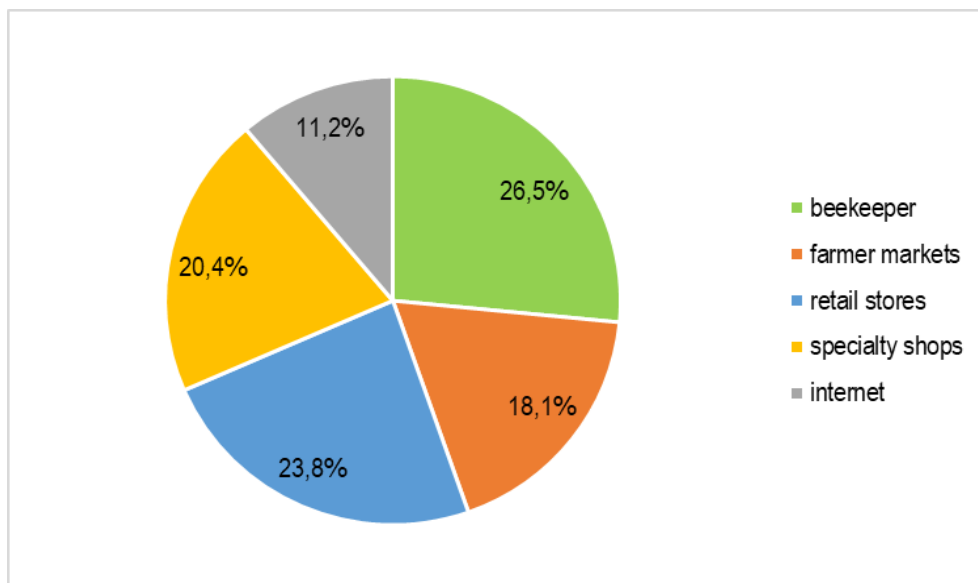
Figure 5: Respondents' perception of the optimal price per 250g



Source: questionnaire survey, 2019

For the sale of a new innovative product, it is necessary to select the place of sale correctly. For this reason, in our research we examined which place of purchase would be attractive for the Slovak young consumer. The survey results showed that beekeepers (26.5%), retail stores (23.8%) and specialty shops (20.4%) would be the most preferred place of purchase of cocoa-enriched honey. Only 11.2% of young respondents stated that they would prefer to purchase it via the Internet (Fig. 6). In relation to this issue, the hypothesis assumed the dependence between the place of purchase of cocoa-enriched honey and the place of residence of young respondents. The results of the applied Fisher Exact Test showed that no dependence was confirmed (p-value = 0.906).

Figure 6: Preferred place of purchase



Source: questionnaire survey, 2019

In addition, only 51.7% of young respondents have heard about flavoured honey in spite of the increasing trend of superfoods or functional food in the market. Based on the research results, it could be concluded that the majority of consumers from young segment perceived the analysed product as natural and innovative.

4 Discussion

There exist very few studies regarding the honey with additions (flavoured honey). Most of them deal with nutritional value, functional properties, or biological and antioxidant activity. For example, there exists a study regarding the honey supplemented with bee bread and propolis (Kowalski and Makarewicz, 2017), linden honey with dried apricots (Ćetković et al., 2014), honey with additions of selected spices (Wilczyńska et al., 2017), linden and acacia honey with dried cherries (Vulić et al., 2015) and acacia honey with prunes (Tumbas et al., 2012). According to a study conducted in Romania, consumers are willing to pay higher prices for traceability of honey with plums or walnuts (Borodin et al., 2013). However, the majority of studies examined only the nutritional value, functional properties, or biological and antioxidant activity.

Only one pilot testing was published about consumer perception of cocoa-enriched honey. This study was conducted in 2018 and 257 young Slovak consumers between 18 - 30 years participated in it (Šedík et al., 2019). Similar results were obtained. All sensory attributes were evaluated positively and females were more interested in the purchase of this product. A current study involves higher sample of young consumers between 18 – 24 years, however, future studies on the current topic are required in order to validate the results by involving various age cohorts in the research sample.

5 Conclusion

This paper has studied consumer perception towards honey enriched with cocoa powder and the majority of young consumers perceived it as innovative, natural product and would purchase it. The main motives of purchase were the product's taste and health aspect, while the main barriers of purchase were an unpleasant or too sweet taste followed by the preference of normal pure honey. The respondents, who would be willing to purchase it, would mostly consume it as a spread in the morning or when they desire to eat something sweet. They would mostly prefer to purchase it directly from a beekeeper, in a retail store or in specialty shops. The optimal price per 250 grams would be 2-3 € or higher. Regarding the product perception, the majority of respondents consider this product to be a healthier alternative to commercial chocolate spreads. Moreover, the willingness to purchase these products was proven to be depended on gender, healthy eating habits or product perception. In general, this product would be purchased mainly by females, respondents who regularly follow healthy eating habits or those who consider this product as a healthier alternative to commercial chocolate spreads. In case of the managerial implication of the findings, it could be concluded that the study has a potential in providing important information for beekeepers towards product positioning, product image and its perception, which could be essential for designing an effective marketing communication for product introduction in the market.

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