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CONSUMER ATTITUDES, MOTIVATIONS AND MISBELIEVES RELATING TO ORGANIC FOODS

Factors influencing the consumption of bio foods are detailed in our studybased on our research results. Altogether 312 students from the University of Debrecen were surveyed via questionnaires. Attitudes, motivations, blocking factors and influencing factors relating to consuming bio foods are introduced. In surveying the attitudes relating to bio foods we focused on health, quality, price, environmental consciousness, fashionable trends, colour and taste. Our hypothesis is that attitudes towards traditional and bio foods are different; the students asked consider bio foods more expensive, healthier, of better quality and more environmental friendly than traditional foods. The attitudes of people are definitely influenced by others whom they have every-day-contact with. Furthermore, there are independent thinkers who discover the given products through their own experience. We also detail to what extent respondant attitudes were influenced by their own experiences, the opinions of family, friends, relatives, colleagues and experts on bio foods. Even the causes and motivations for consuming bio foods were investigated. We examined whether the consumption of bio foods is a trend, simply prestige or just a popular belief. The factors blocking the consumption of bio foods were also revealed. Besides high prices factors lack of knowledge, the small number of bio shops, and unsatisfying choices in supply were examined, as well. We investigated what may cause the realization of improper price image.

1. INTRODUCTION

"You are what you eat." Do people think of this truism every day? Do they pay attention to the material from which they build their bodies? The source of foods that we eat is essential. Stimulation of consuming bio foods is becoming a more and more centralized topic not only from the aspect of fashion, but for the sake of health and environmental consciousness (TOTH, 2009). Unfortunately, only few people consume regularly these kinds of foodstuffs, but it is a positive phenomenon that the tendency is increasing (GYARMATI, 2004). The youth may play a relevant role in future consumption, since they have grown up in a world in which one can have information on bio foods. Probably it is easier to convince them since their attitudes may be better shaped if they see that others in their ages consume these products, then they will be willing to do the same. The contribution of the young generation is very important with respect to the future as long-run aims may be reached by them, their consumption will influence our environment and they are responsible for sustainability. This study concentrates on the motivations, attitudes and beliefs of university students towards bio foods.

2. LITERATURE REVIEW

The number of people consuming bio foods reflects an increasing tendency, as balanced diet becomes more and more relevant for them, by which the risks of illnesses may be decreased (HOFER, 2009). At the same time ecological farming takes place only on 3% of arable land in Hungary. The ratio of selling bio products is increasing; however, more than 80% of them are exported. The main reason for this is the narrow stratum of consumers within Hungary (TÓTH, 2009). A 2010 online survey of the NIELSEN market research company on purchasing bio foods is the biggest research into this subject all over the world. In 2010 altogether 54 countries, even Hungary, were asked, from which it turned out that every eighth Hungarian consumer buys bio products, while in Europe every third person is the average.

Regarding bio food consumers, TÔTH (2009) classifies them into four consumer strata. The first consumer group involves people who have troubles with their health. The second group of consumers is the group of enlightened and intellectual people having a higher education degree. People in the third group have changed to bio foods in their diet and wish to change their way

of life. Pregnant women and mothers belong to the fourth group, who purchase bio products to promote the health of their children and avoiding illness. Most environmentally conscious consumers concerned about their health look for bio products, because they have realized their advantages. According to another research, consumers having a higher education degree prefer buying bio foods (SCHÄFFERNÉ DUDÁS, 2008).

This study concentrates on the attitudes relating to bio foods. From the aspect of marketing "the attitudes may be concluded from the talks and actions of people. The attitudes are concepts with respect to brands, ideas, behaviours and everything to which emotion may be linked" (EAST, 1990, 62. p.).

The general attitudes of bio food consumers are the following: "they look for the quality. They find the secret of long life not in the medical care but in the actions, abstinent and temperance of mankind. They generally believe in alternative and natural therapies, try to avoid traditional methods and act regardless the public expectations" (WWW.INNOVA.ESZAKALFOLD.HU). According to the results of INNOVA, the consumers of bio foods look for tasty, natural foodstuffs, require more information on the products and want to understand and know the characteristics in which bio foods are different and better than conventional ones. They do not want to belong to the public, they believe in a healthy diet. An extra attention is paid to families with children, as parents consider the bio food as even a tool of prevention.

It is a relevant thought that "diet plays a dominant role in health" (SZAKÁLY and BERKE, 2004, 320. p.).

The interest in bio and organic foods is at a low level in Hungary, which is caused by several factors. One of the biggest obstacles is the high price of these products (DEÁK, 2003; GYARMATI, 2004; HOFER and VARSÁNYI, 2006; LEHOTA et al., 1997; NAGY, 2004; SZENTE, 2006). The supply of bio products in Hungary is rather narrow despite the expansion, which makes it harder for consumers to purchase them (GYARMATI, 2004; NAGY, 2004). The purchase of bio products may be difficult, which may contribute to the low level of consumption (GYARMATI, 2004; HOFER and VARSÁNYI, 2006). The results of several researches proved the fact that the information on bio products is insufficient and consumers are not familiar with the concepts relating to bio foods (GYARMATI, 2004; NAGY, 2004; SZENTE, 2006). Certain consumers are faithful to conventional foodstuffs and are not willing to change, which may also influence the low consumption of bio foods (NAGY, 2004).

The interest and health consciousness of the youth is much more intensive than it is in elderly generations. HOFER (2009) concluded that the motivation of bio food consumers is to achieve a healthy way of life and to avoid illness. Typically the consumption of bio foods is not simply due to prestige or trend.. Other authors' research also proves the fact that one of the main motivations for people consuming bio foods is health care (YIRIDOE, BONTI-ANKOMAH and MARTIN, 2005).

A result of an examination showed that unfavourable price image holds back a significant part of the consumers from purchasing. Because of this, it is necessary to change this price image, which requires regular and conscious communication (FÜREDINÉ KOVÁCS et al., 2006).

One of the important areas of social marketing is nutri-

marketing, which aims to introduce and spread health care foodstuffs and "it concentrates on target groups and takes information of diet in the centre of the marketing and communicating strategy" SZAKÁLY and BERKE, 2004, 325. p.). According to HOFER (2009), the eating habits of consumers may be changed through social and nutrimarketing, despite the fact that their present consuming behaviour is more attractive for them. It was concluded that the low level of information may be the reason for the extremely low consumption, which may be a strict task for the marketing in the future.

3. HYPOTHESIS

Surveying the attitudes of the respondents in the sample relating to bio foods concentrates on health, quality, price, environmental consciousness, fashion, colour and taste. Our hypothesis regarding this is that the attitudes towards conventional and bio foods are different. The students surveyed consider bio foods more expensive, healthier, of higher quality and more environmental friendly than conventional foods.

The attitudes of people are definitely influenced by the other people they meetday-to-day. Furthermore, there are people who are independent from other people's opinion and discover the given products through their own experiences.

Our research also details the extent to which extent respondant attitudes are influenced by their own experiences, the opinions of family, friends, relatives, colleagues and experts on bio foods

Even the causes and motivations for consuming bio foods were investigated. We examine whether the consumption of bio foods is a simply a trend, done forprestige, or whether it is just a popular belief. The factors blocking the consumption of bio foods were also revealed. Besides high prices factors, lack of knowledge, the small number of bio shops, and unsatisfying choices in supply were examined. We investigate that what may cause the realization of improper price image.

4. INTRODUCING THE RESEARCH

Questionnaires were used for the examinations in which the questions were structured on the basis of different sources (LENGYEL, 2008; SCHÄFFERNÉ DUDÁS, 2008; HOFER, 2009; TÓTH, 2009), supplementing them with our own thoughts. 319 persons were given the questionnaire; 312 of them answered all of the questions. The respondents were students at the University of Debrecen in the Faculty of Arts and Humanities and in the Faculty of Applied Economics and Rural Development. 217 of them were full-time students, 94 students were correspondence (part-time) students (2 of them did not respond). Regarding the sex distribution, 253 women and 59 men (1 man did not respond) answered to the questions. The youngest respondent was 18 years old, while the oldest answerer was 53 years old. The age does not follow a normal distribution (Kolmogorov-Szmirnov test: D=0.233, p<0.001); the median is 22. Regarding their qualification, 157 answerers graduated from secondary school and passed the school leaving exam, 65 respondents have any qualifications gained through trainings organized by OKJ (National Training Register), 48 students

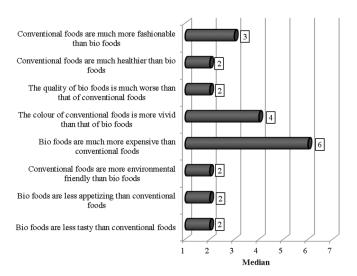
have diploma with college degree and 39 students have university degree. 4 students have PhD degree.

This study focuses on the part of the questionnaire highlighting attitudes, consuming habits and misbeliefs. The task of the respondents was to judge the bio foods comparing them to conventional foods. The basis of comparison was the taste, environmental impacts, price, colour, quality, effect on health, and percieved fashionability of the foodstuffs. We measured the general attitudes of the answerers towards bio foods by this question group. One further question examines the reasons for purchasing bio foods. The questionnaire also highlights factors blocking purchases and factors influencing opinions on bio foods.

5. RESULTS

When surveying the attitudes of the respondent relating to bio foods, we examined them parallel to conventional foods. The qualifying statements had to be judged in a 7-degree-scale. The examination concentrates on health, quality, price, environmental consciousness, trendiness, colour and taste. The sentences gave a more positive reflection about conventional foods than bio foods, thus the lower point given to a factor, the more positive the bio foods were judged. Judging the qualification among the listed statements is outstandingly important. This component carries much more information as we would think at first. The quality includes the followings: it is not harmful to the demand of the consumer, contains essential energy and mineral, its enjoyment value is high, and saves its characteristics within a specific period of time in case of proper storage. Quality means all these for us in our research.

The normality of items may be tested by Kolmogorov-Szmirnov test. Neither of them is a variable reflecting normal distribution, in this way medians have to be calculated for the general examination of attitudes (Figure 1). Our hypothesis with respect to this is that the attitudes towards conventional and bio foods are different. The students asked consider bio foods more expensive, healthier, of better quality and more environmental friendly foods than conventional ones.



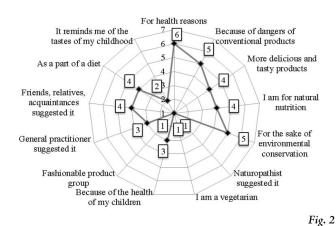
The Medians of Attitudes Relating to Bio Foods

Fig. 1

On the basis of the medians, it is clear that the students consider bio foods healthier, showing better quality, more environmental friendly and tastier foodstuffs than conventional ones. Choosing bio foods is rather a fashionable trend, but the difference is not significant. According to HOFER (2009), consuming bio foods just for fashion and its prestige consumption is not typical. Regarding the price of bio foods, they are higher than in case of conventional foods. Another research showed similar results, in which the respondents found organic foods more expensive by 60 to 80% than conventional foods (FÜREDINÉ KOVÁCS et al., 2006). On the basis of the gained results our hypothesis proved to be appropriate.

The attitudes of people are definitely influenced by other people with whom they are in an every-day-relationship. Furthermore, there are people who are independent from other people's opinion, who discover the given products through their own experiences. The interviewees had to reflect the fact that to what extent certain people and their personal opinions modify their attitudes relating to bio foods. Students are mainly influenced by their personal experiences, modifying and forming their attitudes. Families and experts have a great role in forming their opinions on bio foods. Colleagues have the smallest impact. This result is a very good reflection of their way thinking, since it is the best way to gain own experiences on the given product or listen to family members. Besides, the opinions of experts may help us in forming our attitudes through gaining reliable information. In such cases unreal opinions on bio foods are not generated because people who could negatively modify our view on bio foods are excluded from the chain.

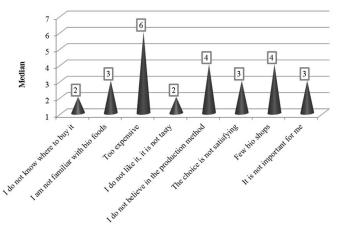
The questionnaire also detailed the reasons and motivations for consuming bio foods. The possible answers were judged by a 7-degree-scale. As the variable does not show a normal distribution, the median is used as a central value and the results are introduced by items (Figure 2). The major motivations for consuming bio foods include health care, avoiding the harmful effects of traditional foodstuffs and saving the environment. We got similar results to LENGYEL (2008). The less motivating factors relate to fashion, the suggestion of naturopathist, the fact of being a vegetarian and recalling tastes from the childhood.



Medians of Motivations Relating to Consuming Bio Foods

Consuming bio foods just because of its potential trendiness or due to prestige are not typical. HOFER (2009) got the same result as well. This is also a controlling point, as the fashionable statement was also listed in the question about attitudes and choosing bio foods from the aspect of fashion was not typical again.

We revealed a difference relating to marital status. According to the result of Mann-Whitney test, there is a significant difference in case of the motivation factor "because of the health of my children" and families having children are more motivated in buying bio foods (M=4) than those in other categories (M=2), as they are mainly childless. There are several factors hindering the consumption of bio foods. *Figure 3* illustrates the results. As the variables are not of normal distribution, the medians are reflected.



 ${\it Fig.~3}$ Medians of Factors Blocking the Consumption of Bio Foods

The biggest blocking factor seems to be the price of bio foods; the respondents find these products too expensive. FÜREDINÉ KOVÁCS et al. (2006) got similar results. We asked a question earlier with respect to the price gaining the same answer, which proved the fact that the respondents' answers were proper. Factors that moderately pull back the consumption of bio foods are the followings: consumers do not believe in the production method, and there are few bio shops operating. This may lead to the price question: if they do not believe in the method of the production, it is obvious that they are not willing to pay more for bio foods. Many of the answerers think that it is not important to buy bio foods. The insufficient choice is not a big blocking factor, but worth mentioning. However, two surveys from the year 2004 proved that the narrow supply made the purchase by consumers harder (GYARMATI, 2004; NAGY, 2004). Now it seems that this has been solved and the supply is wider. The fact that the consumers are not familiar with bio foods is not spread either, not hindering the consumption, which is a step forward as previous researches reported that the information on bio foods is insufficient and consumers do not know even the relating concepts (GYARMATI, 2004; NAGY, 2004; SZENTE, 2006). The lack of knowledge where to buy bio foods and the taste are not typical blocking factors.

6. CONCLUSIONS

On the basis of the results our conclusions relate to the price of bio foods. In almost every research dealing with the consumption of bio foods, it is stated that the high price of bio foods causes low levelled consumption. In our opinion, the main reason is the fact that the consumers do not know why they should pay more for bio foods. Until they understand this and build this into their values, they will not be motivated for purchasing. Nutrimarketing would join here as a relevant field of social marketing, which serves the introduction and spread of health care foodstuffs. The eating habits of the consumers may be changed by nutrimarketing. The improper information distribution may be one of the reasons for the extremely low consumption. It would be important to spread campaigns concentrating on healthy way of life, to identify a new solvent target group and ensure more favourable availability. The campaigns should highlight the advantages of bio foods relating to health aspects and environmental conservation and the dangers of conventional products.

REFERENCES

- (1) **Deák B.:** A környezetbarát termékjelölés gazdasági szerepe. Vezetéstudomány 3 33-42 (2003)
- (2) East, R.: Changing Consumer Behavior. Cassel Ltd., London, 1990.
- (3) Fürediné Kovács. A., Gelencsér M., Miklay G.: A magyar ökoélelmiszerek iránti kereslet az ökopiacokon és a szupermarketekben vásárlók körében. A Magyar Biokultúra Szövetség 2006. évi fogyasztói megkérdezése
- (4) **Gyarmati G.:** A hazai biolisztek fogyasztásának időbeli és területi sajátosságai. Évkönyv 2004. 1. kötet, Pécsi Tudományegyetem Közgazdaságtudományi Kara, Regionális Politika és Gazdaságtan Doktori Iskola, Évkönyv 2004. 1. kötet, 2004, 176-182.
- (5) Hofer M., Varsányi J.: Biofogyasztási felmérés előkészítése széles hallgatói körben tesztelt kérdőív alapján. Konferencia előadás, Innováció, társadalmi felelősség, fenntartható fejlődés – marketing megközelítésben, a Magyar Marketing Szövetség – Marketing Oktatók Klubjának 12. Országos Konferenciája, Budapest, 2006. augusztus 24-25.
- (6) Hofer M.: Bioélelmiszerek fogyasztásának tendenciája Magyarországon. Doktori értekezés, Győr, 2009.
- (7) Lehota J., Komáromi N., Horváth A., Papp J.: Az ökológiai mezőgazdálkodás termékeinek export és hazai piaci helyzete, a fogyasztói magatartás jellemzői, trendjei és az EU-csatlakozás várható hátasai. Zöld Belépő, EU-csatlakozásunk környezeti szempontú vizsgálata, Kutatási jelentés, Gödöllő-Budapest, 1997.
- (8) Lengyel P.: "Biomarketing" A bioélelmiszer-piac bemutatása, a kategória iránti kereslet alakulása a fiatal felnőttek körében. Budapesti Gazdasági Főiskola, Szakdolgozat, 2008.
- (9) Nagy Sz.: A környezetbarát termékek marketingje. Marketing & Menedzsment 6 17-24 (2004)

- (10) **Schäfferné Dudás K.:** A környezettudatosság többszintű értelmezése és a környezettudatos fogyasztói magatartás vizsgálata. Doktori értekezés, Pécs, 2008.
- (11) **Szakály Z., Berke Sz.:** A táplálkozás, a minőség és a marketing kapcsolata élelmiszereknél. In: Berács J., Lehota J., Piskóti I., Rekettye G. (szerk.): Marketingelmélet a gyakorlatban. KJK-KERSZÖV Jogi és Üzleti Kiadó Kft, Budapest, 2004, 320, 325.
- (12) **Szente V.:** Tendenciák az ökoélelmiszerek fogyasztásában és értékesítésében. Élelmiszer, táplálkozás és marketing 3 31-36 (2006)
- (13) **Tóth H.:** Innováció az életmódban avagy a hosszú élet titka. ECOSTAT Kormányzati Gazdaság- és Társadalom-stratégiai Kutató Intézet Műhely. 2009. július URL: http://www.ecostat.hu/archiv/download/muhely/ECOS-TAT_muhely_090715.pdf

- (14) www.hu.nielsen.com: URL: http://hu.nielsen.com/site/20100819.shtml (letöltés ideje: 2013. november 1.)
- (15) www.innova.hu: Biogazdálkodás URL: http://innova.esza-kalfold.hu/hu/dokumentumtar.html#doc_17 (letöltés ideje: 2013. november 1.)
- (16) Yiridoe, E. K., Bonti-Ankomah, S., Martin, R. C.: Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. Renewable Agriculture and Food Systems 20 (4) 193-205 (2005)

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