Analysis of Consumers' Attitudes Towards Food Additives Using Focus Group Survey

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SUMMARY

Food additives are getting more and more importance among the consumers' food safety concerns. In this research attitudes towards food additives were analyzed in three focus groups: common consumers, doctors and food industry experts by qualitative market research methods.

It was observed that most consumers knew very little about food additives. While recognizing their technological importance, they are afraid of their health impairing effects. However, this fear is mostly theoretic; other quality characteristics and the price play a much more significant role when choosing foods. Doctors are more familiar with the chemical nature and health effects of food additives, but their shopping habits are mainly the same as the common consumers'. Through their job food industry experts get in closer relationship with food additives, therefore they generally have detailed knowledge of their technological and health functions as well. In their consumer decision process the food additive content of products is a more important factor than in the other groups.

It was concluded that, with respect to the consumers' requirements, food and health authorities should pay much more attention to providing authentic information to the public, because it is the only way to prevent developing the general fear of food additives. This project should include education involving the media and doctors, and additionally, making E-numbers list be available to the customers to help the easy identification of food additives.

KEY WORDS

food additives, consumers, attitude, qualitative market research, focus groups

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INTRODUCTION

Food industry underwent a great development in the 20th century. The technological improvement was accompanied by increasing use of food additives (DIEHL, 2002). In the 1960s the European Community established the positive list of permitted food additives, then the European numbering system, in which food additives were identified with an 'E' letter followed by a 3 or 4 digit number. The originator of the system was led by three aims. First of all to identify food additives definitely and simply to avoid mistranslations of complicated chemical names, on the other part to simplify the bureaucracy, and last but not least to protect the consumers' health by rigorous tests that each substance must pass before being admitted to the list (SOHÁR and DOMOKI, 1997).

The rapid expansion of the number and applications of food additives was watched by consumers with growing suspiciousness (ELMADFA et al., 1996). After taking over of E-numbering system in 1991, the fear of food additives increased in Hungary as well (KALAS, 1997). It is due to the fact that at the establishment of the system no adequate attention was paid to informing the public, therefore E-numbers are still surrounded by the atmosphere of mystery and distrust. The lack of information leads to several misconceptions, which may cause economical disadvantages, too.

In this research we wanted to observe how food additives are considered in specified groups of consumers and the media.

MATERIALS AND METHODS

Qualitative methods have growing importance in the international front-rank of market research. Unlike quantitative methods, qualitative market research does not provide representative or statistically verifiable results but tries to understand and analyze the motives of consumer behaviour. Qualitative market research procedures may form the basis of later qualitative analyses.

The most widely used qualitative research methods are the deep interview and the focus group survey. In the first one the respondents are interviewed individually, while in the latter case the selected members of the target group take part in a collective conversation. The advantage of focus group method is the interaction between the attendants (GORDON and LANGMAID, 1997).

Considering the above mentioned advantages, we chose the focus group surveys for our research, on the basis of our preliminary probes creating three focus groups (common consumers, doctors and food industry experts). The numbers of groups were 9, 7 and 10, respectively. The interviews were conducted in April and May, 2003. The role of the moderator was played by the author, in one case together with his scientific supervisor, Prof. Sándor Szakály. Maintaining the relaxed atmosphere, the conversations were directed along previously established guidelines. The interviews took 45 to 70 minutes, and were recorded on audio tape for later analysis.

RESULTS AND DISCUSSION

Judgment of food additives by common consumers

The majority of respondents in the consumers' focus groups have basically negative feelings about food additives. They recognize that these substances have some technological functions, but they think that food processors only add them to the products in order to make foods more marketable, thus to increase their profit.

The most condemned additive groups regarding requisiteness were preservatives and colours. However, the convenience aspect must also be mentioned: e.g. the use of preservatives results in a longer expiry period which is advantageous to the consumers, too.

Regarding the health risk of food additives different opinions were observed. Most of the respondents suppose that there are food safety regulations destined to protect the consumer's health but they are doubtful of their effectiveness. They consider the testing period to be too short, and it is almost impossible to test the interactions between the large numbers of substances. Additionally, they suppose that due to lack of money food authorities are unable to control the keeping of rules, and taking advantage of this, food processor break them. This suggests that consumers are practically not aware of the rigorous allowance and control system which lets a substance become food additive.

As a specified risk of food additives the respondents emphasized their carcinogenic effect in the first line. However, judgment of food additives is varied; substances of natural origin are generally considered to be less harmful than the artificial ones. These observations are in accordance with the results from other recent researches (FOISSY and KRÁSZ, 2003).

The most critical point of using food additives is the labelling. The E-number marking widely used by food processors is consonantly judged by consumers as negative, they think its only purpose is to conceal something from them. The main reason for this misconception is that the list containing the substances and their E-numbers are unavailable to the consumers, thus they cannot identify the certain ingredients, which leads to mistrust. The respondents suggested that in order to reassure the consumers

either this list should be posted in food stores and at family doctors' consulting-rooms or the whole chemical names should be marked on the labels.

According to the respondents and our experiences as well, media has the most important role of in forming consumers' opinion about food additives. However, this role is judged by consumers negatively, they think that the purpose of such vast amount of advertisements is to persuade and mislead consumers. Food manufacturers are not interested in providing adequate information to the public; it should be the task of the ministry for health. However, due to lack of capacity it cannot be achieved, thus the dominance of media and personal communication will remain. The role of leaflets must be particularly emphasized; most of our respondents already met some of these papers dealing with negative effects of food additives. It must be noted that vast majority of these hand-outs proved to be counterfeits (SOHÁR, 2001).

In contrast to their explicit aversion towards food additives, these substances influence the customers minimally when choosing foods. While shopping people look at the manufacturer, price, expiry period, energy and fat content of foods rather than the additives, they choose what they already got accustomed to and like. In addition to the convenience factor already mentioned, there is one more important aspect: the supposition that all foods contain additives, thus there is no way to avoid them. This attitude harmonizes with the results of the survey conducted at the beginning of the conversation querying about consumption of specified foods. Most respondents regularly consume products with particularly high additive content e.g. margarine or ketchup.

Regarding the future perspective of additives respondents came to the conclusion that food industry will develop on two different ways. Because of the growing population on Earth mass production will dominate, and to produce more and cheaper food the use of additives is going to be more and more widespread. Nevertheless, a new trend can be perceived even today. A narrow stratum of consumers aspires to more natural nutrition, and these requirements may be satisfied by additive-free, perhaps even organic foods.

Judgment of food additives by doctors

This focus group was established in order to observe how they judge the health consequences of food additives as doctors and how they approach this topic as customers.

The physicians attending the conversation, due to their chemical, biological and health studies were better informed about the issue of additives than the consumers' group. They are aware that E-numbers identify food additives and the two forms of markings are equivalent, which was not clear for several people in the customers' group.

Regarding the necessity of using food additives they believe that at some products they are essential, while at others they only make foods more consumable.

They suppose that if these substances are allowed by the authorities then they were thoroughly tested and can be safely consumed. From this point of view food additives show analogy with drugs. The doctors' aversion against additives is much less expressed than in the consumers' group, despite the fact that they have more detailed knowledge about health problems caused by food additives. In addition to the carcinogenic effect, they talked about allergy, immune dysfunctions, gastro-intestinal disorders and Alzheimer's disease. However, the additive content off foods does not play an important role in the decision process at the doctors either. Its reason is similar to that of the consumers' group.

Similarly to the common consumers, doctors think that almost every kind of food contain additives, with particular focus on sweets industry products, sparkling soft drinks, desiccated soups and pre-cooked foods in general. It is regrettable that they also named milk products as foods with high additive content. This is in harmony with some recent researches showing that the 60% of Hungarian consumers believe that milk products contain preservatives, while 45% of them think that they contain artificial colours (BERKE, 2002). It suggests that people are not at all aware of the strict protection of milk products laid down in international regulations.

The doctors do not agree with the consumers in the necessity of governmental informing on the issue of additives because they think it is such huge amount of information that people cannot handle. If they are asked about that, they even recommend their patients not to care for food additives.

About the prospective use of additives this group had similar meaning as the customers. Mass production will continue requiring additives; only health conscious people and the increasing number of allergic persons will study the label and prefer organic foods.

Judgment of food additives by food industry experts

The third focus group consisted of technologists, product developers and quality control experts working in different branches of food industry. Through their everyday work they got to know the technological functions and advantages of food additives as well as the rigorous allowance system. They suppose that most of the additives are harmless but there may be adverse substances such as preservatives. However, they remarked that

preservatives used by canning industry were still less harmful than e.g. salicylates used at the household bottling.

This is the reason why, unlike the other two focus groups, they have absolutely no aversion of these substances. However, they try to choose foods containing less food additives, but convenience and organoleptic quality has an important role in this group, too.

Product developers are pressed heavily to produce cheap and good quality foods, and this is not easy to achieve without using additives. Despite, they make efforts to use as little amount of additives as possible.

Respondents confirmed the supposition heard in the consumer's group, that at some manufacturers labelling of foods often does not correspond to the real composition. This problem was already observed by food authorities, too (BIACS, 2001).

Similarly to the doctors, these respondents also consider better consumer informing unnecessary. In their opinion food industry experts see clearly in the matter of food additives but for common consumers it is completely pointless and needless to know.

Regarding the future of food additives the attendees had the same meaning as the other groups. In addition to the traditional foods there are so-called premium products on the market even today but their solvent demand is still very slight. Food industry is even not interested in propagating these products yet because this would abate the conventional foods' image.

CONCLUSIONS

From our surveys it was concluded that most consumers have aversion against food additives. They think that these compounds are often unnecessary and health impairing. The anxiety is principally due to the lack of reliable information. Although this aversion has only slight influence on decision making process so far, in our opinion extensive education and information of the public is needed so that the consumers may not form a false opinion of food additives by unfounded rumours, and have groundless fear of foods containing these verified harmless substances. We regard the information as governmental task, with contribution of the media, family doctors, food processors and retailers, as a part of the project for propagating healthy nutrition.

Considering the consumers' demand, the E-numbers list of food additives should be widely available. This would be a more efficient method than marking the chemical names on the products, because the surface for labelling is limited.

On the basis of observations in this qualitative research, we are planning a country-wide quantitative market survey. Results of that research may help the food processors better fulfil the consumers' requirements, and provide ideas to a more effective information strategy to the food authorities.

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