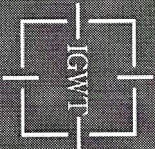


**Achieving Commodity & Service Excellence  
in the Age of Digital Convergence**

Proceedings  
Volume I

**The 16th Symposium of IGWT**



**Achieving Commodity  
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International Society of  
Commodity Science and Technology



Korean Academy of  
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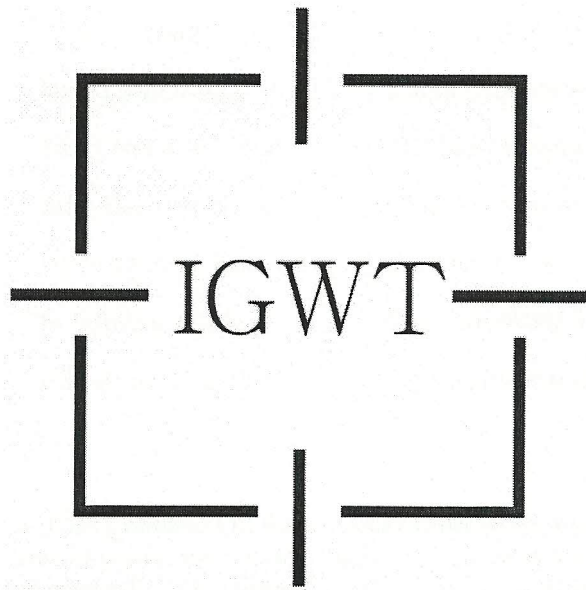
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## ORGANIC PRODUCTS - THE CHOICE OF BULGARIAN MOTHERS

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The goal of the presented survey is to analyse the perceptions and attitudes of the group of mothers with small children as consumers of organic products. The self-administered questionnaire survey method in the form of anonymous interviews following a standardised questionnaire was used for the purposes of the survey. Within the course of this research their knowledge and understanding of organic foods and foods' attributes as a motive for purchase were examined. Complete analysis of data is done on the basis of purchase of organic foods: frequency of purchase of organic foods specially marked as such; buying as result of special demand for organic products; willingness of consumers to pay a higher price for organic foods.

*Keywords:* organic foods, survey, mothers, perceptions and adjustments

### Introduction

Organic agricultural products do not have a significant presence on Bulgarian market. Trade with them is at a *very initial stage* [1]. According to the data of the Ministry of Agriculture and Food Supply (MAFS) the share of the realised Bulgarian organic products is below 1 % of the overall market of food staff in the country [2]. Over 90 % of the certified *organic products made in Bulgaria are exported* mainly to West European countries (herbs, spices, essential oils, vegetables, honey) [2]. *The country imports* a small number of certified organic products which enjoy considerable sales and advertising. Such are the baby foods of the Austrian company "Hipp" and the coffees of "Green Mountain Coffee Roasters" and "Pellini" [3, 4].

Consumers of children's and baby organic foods represent a considerable share of organic market worldwide.

In connection with this the goal of the presented paper is to analyse the perceptions and attitudes of the group of mothers with small children as consumers of organic products.

### Methodology

The self-administered questionnaire survey method in the form of anonymous interviews following a standardised questionnaire was used for the purposes of the survey. During the survey the respondents had to answer several introductory questions as well as basic problem questions relating to organic products. The questionnaire drawn for the first stage of the project was posted on the Internet forums of "BG-MAMMA" site, which deals with the issues of children's foods and eating. The forum members were informed about the purposes of the survey and were invited to participate in the survey by filling in the questionnaire. The survey was done during the period from 1 to 15 May 2007. Thirty-six mothers - visitors of the site, who answered the questionnaire voluntarily, formed the "Mothers" group.

### Description of Participants

Thirty-six women participated in the "Mothers" group and 91.67 % of them were between 25 and 35 years old, 5.56 % - were between 36 and 45 years old and mere 2.77 % were under 25 years. A big part of the respondents have university education (83.33 %), 11.11 % have college education and only 5.56 % of them have secondary education. More than half of the participants (63.89 %) live in Sofia, one quarter (25.00 %) - in a district city and 11.11 % - in other cities. Almost all of them are married (89.89

%) and all of them, without exception, have children. The average monthly income of 40.62 % of the surveyed mothers is within the range of 125 Euro to 500 Euro, and of 37.50 % - under 125 Euro. The average monthly income per household of 53.12 % of the surveyed mothers is above 500 Euro, and of 34.37 % - from 375 Euro to 500 Euro.

## Results and Discussion

### Knowledge and Understanding of Organic Foods

Nearly all mothers participating in the survey associate organic products with a *specific method of production prohibiting the use of artificial fertilisers, pesticides, herbicides, genetically modified products, hormones and antibiotics for animals*. Every third of them recognises the *healthy effect* of consuming organic foods. They define them as grown in "ecologically clean areas" with monitored quality and tractability "from the farm to the table". For some of them organic means "natural" products i.e. products which do not contain "artificial substances". One of the respondents defines organic product as "natural, not tampered by human hand". All of them demonstrated an extremely high level of knowledge about organic foods and the methods of their production.

The motive for purchase an organic product of every second of the surveyed mothers is that these foods are *free of nitrates, pesticides, preservatives, stabilisers and other chemical additives*. A great part of them attach importance to the nutritional value of the product, the absence of preservatives, colouring agents, sweeteners and "all kinds of Es." About 30 % of them point to the fact that these foods are produced in "ecologically clean regions." One of the mothers deems important the confidence she has in the producer and two of the other mothers respondents use their own produce.

Three of the surveyed mothers buy organic foods because of their appearance, two - because of their better taste. About 8 % of the surveyed mothers appreciate the higher quality of organic foods.

### Consumer Preferences to Organic Foods

In the group of mothers the listing of the preferred foodstuffs of organic production has a somewhat different profile (Fig.1):

- Fruits and vegetables (32.00 %);
- Milk and dairy products (24.00 %);
- Meat and meat products (20.00 %).

*Fruits and vegetables* take first place in the list since they are deemed as very tasty, useful and frequently used by the family and can be consumed uncooked ("in a raw state"). It is interesting to stress the fact that according to the surveyed mothers organic fruits and vegetables have "guaranteed origin and processing" and they are "free of genetically modified organisms", unlike the conventional analogues. Mothers believe that fruits and vegetables sold on the market contain a lot of harmful substances ("artificial fertilisers and pesticides") and the monitoring of their quality is very poor. The way animals are fed and the contents of hormones and antibiotics make mothers choose *organic meat and meat products*. In this group a small number of the participants (8.33 %) prefer all foods to be organic. Mothers who responded to the questionnaire place cereals and their processed products, children's food, bee honey and nuts at the end of the list.

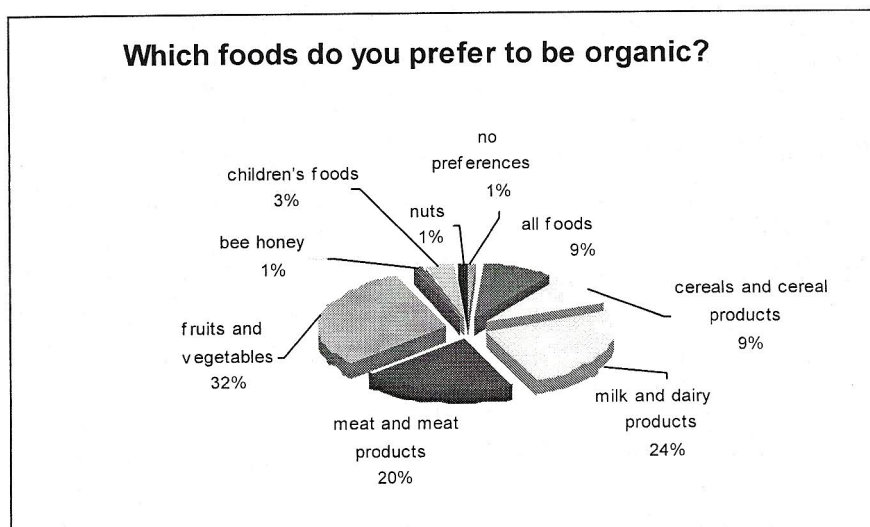


Figure 1. Preferred groups of foods by the participants.

In their answers about preferred foods mothers point out the fact that these are the everyday foodstuffs most used by the family. Most of them state that this is an important ingredient in the dietary regime of the child and would rather buy such product for their children. Mothers associate organic products with attributes, which are beneficial to their own health and that of their children. A comparative small number of the respondents state as a motive "healthy family and clean environment".

The "Mothers" group clearly expresses a preference to *fresh foods*, which is related to the beneficial health effects to the parents and the children in the family.

Attention is also paid to the lack of choice of processed foods in general and to the explanation that the product loses a great part of its nutritional values during processing and therefore it needn't be organic.

#### Purchase of Organic Foods

Organic foodstuffs have an extremely great appeal among surveyed mothers. Twenty-nine or 80.56 % of them state they wish to buy them every or almost every day, 13.89 % would like to buy organic foods 2-3 times a week, and only 5.55 % - only once a week.

More than half of the surveyed mothers (61.11 %) *look especially* for organic foodstuffs. For many of them the reason is their child's health. In quite a few cases they point to the shortage of such products on the market, the poor choice of brands and the problems with the regularity of the supply. For eighth of them (22.22 %) these products are hard to find or could not be found at all and their prices are higher than those of their conventional analogues. One of the mothers states that there is not a "reliable organization", which would control the quality of the foodstuffs, and another one doubts the products are genuine.

Two of the mothers get supplied with their own produce and three of them - state that they buy from the market but only from producers whom they trust.

The opinion that *supermarkets, local shops and hypermarkets* are very suitable outlets for the sale of organic products is predominant among mothers (this is the opinion of 34,32 %, 20.89 % and 17.90 % respectively of the respondents in this group). Specialised shops and municipal open markets come next in the list.

Convenience during the purchase and accessibility of organic foods is significant for these consumers. Mothers with young children prefer the proximity of the outlet and specialised stores are very often not within the vicinity of the consumer.

#### Readiness of Consumers to Pay a Higher Price for Organic Foods

The results about the readiness of mothers participating in the survey ("Mothers" group) to pay a higher price for organic foods are presented in Table 1. It is noticeable that every second mother who

answered the questionnaire is likely to pay for organic foods a price up to 30 % higher than that for their conventional analogues, and for 16.66 % of the respondents in this group the price of such products, which are beneficial to their children, is irrelevant.

**Table 1. Readiness of participants to pay a higher price for organic foods.**

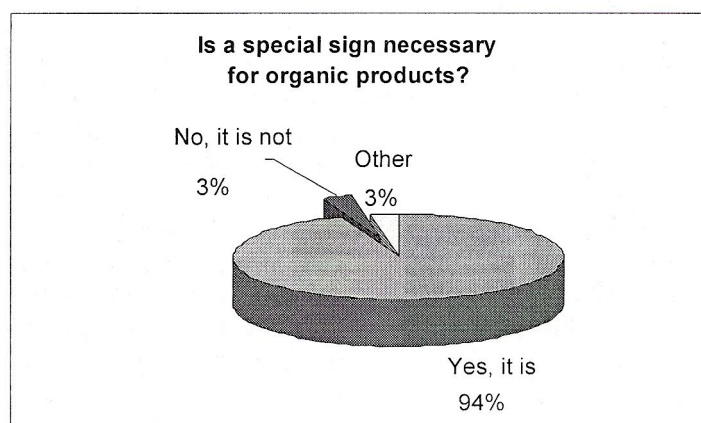
Price they are ready to pay	Number of respondents	Relative Number of respondents, %
The same as for a conventional product, but not higher	1	2.77
Up to 10 % higher	3	8.33
Up to 20 % higher	4	11.11
Up to 30 % higher	18	50.00
More than 30 % higher	4	11.11
Price is irrelevant	6	16.66
Total	36	100.00

#### Marking of Organic Products

Mothers who replied to the questionnaire confirm the above shown results. They look carefully for similar marking (72.22 %), but cannot find it especially on foods, which their children consume. A solitary example of recognising the organic signs is a range of imported baby foods. They believe that the existence of special marking (sign) on the label would make the choice of foods easier and it "should be seen immediately without seeking it out". This group is also aware of the concept of special marking (sign) for easier recognition among other products. The participants are distrustful to such markings and mix them up with other eco-signs relating to the recycling of food packaging.

Those who reply that they do not look for such sign (22.22 %) justified their answer with the fact that they do not know this type of markings; they are not informed about their existence and have never seen them before.

Fig. 2 shows that 94.00 % of the mothers in the group believe that a special sign for organic products is very necessary. The grounds for these are: facilitation of consumers' choice; differentiation from other products; guarantee for the organic origin and the quality of the foods; information about and advertising of organic foods.



**Figure 2. Necessity for a special sign for organic products in the "Mothers" group.**

According to them the sign should be easily recognisable i.e. "should be seen at a glance", properly protected to avoid "any unscrupulous producer to take advantage of it". It should be launched on the market and create trust among consumers and its appropriate application should also be controlled.

Only one of all the mothers states the opposite in the questionnaire – “artificial products should be marked while the natural ones should remain unmarked this being their sign”.

### Information about Organic Foods

The predominant opinion of the participants in the “Mothers” group (83.33 %) is that there is not information about organic products as well as about their advantages or benefits. They think that this information is extremely insufficient in Bulgaria and some of the respondents specify its absence in the media, among doctors, educational institutions, etc. Only 13.88 % of the respondents have information, which they have been able to find:

- over the Internet, but they specify this does not apply to Bulgaria;
- by chance (“a term paper on this topic which my brother wrote some time ago”);
- from BG.MAMMA forums;
- in specialised literature “inaccessible to ordinary people”.

### Conclusion

The majority of the survey participants define correctly organic foods as “ecologically clean products”, produced “by a natural method or as naturally grown foods”, which do not contain harmful to health ingredients (nitrates, preservatives, etc.). Almost all surveyed mothers associate organic products with their specific method of production prohibiting the use of artificial fertilizers, pesticide, herbicides, genetically modified products, hormones and antibiotics for animals. Respondents associate organic foods predominantly with healthy lifestyle. Every third of the surveyed mothers worries about the health of her child and the quality of the food and sees a solution to her qualms in the consumption of organic foods. They define them as grown in “ecologically clean regions, with monitored quality and tractability “from the farm to the table”.

An extremely high percentage of the survey participants express their desire to purchase organic foods all the time. Mothers show additional high interest in organic foods because they take into account the usefulness of the products and the desire to give their children the best possible foods which the market offers.

Consumers who participated in the survey are aware of the fact that they pay more for products with greater added value due to their ecological method of production.

The majority of consumers reply that they look for a special marking (sign) on the label, which gives information about the organic products. Respondents mention the need for knowledge about organic marking because there are no examples and information.

All respondents confirm the necessity for a special sign for organic products and recognise the lack of information about these foods as well as their advantages and disadvantages.

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