# **RESEARCH ON CONSUMER DEMAND** IN THE DONTRACT DATERING INDUSTRY

# Gyula SÜLLŐS

Kaposvár University, Doctoral School of Management and Organizational Sciences H-7400 Kaposvár, Guba S. u. 40

## ABSTRACT

The main aim of the research was the examination of a very up to date issue with the help of recent market research tools. After summarizing the results, different conclusions have been made. On one hand consumers are getting familiar with their own specific expectations through practice, on the other hand the research analyzes and evaluates the behaviour and quality expectations of the stakeholders participating in contract catering. The conclusions of the study will be useful not only for non-profit organizations or for educational institutions but also for participants in the healthcare industry in a wider sense. Because of the high volume of contract catering and the high number of participants affected by the service, the research is based on questionnaires. Furthermore, several interviews were made with key decision makers, such as institution leaders and managers. These ensure that relevant data was collected to make the final conclusion. Our goal was to set up a relevant, reliable and flexible feedback system to measure consumer opinion. With the help of proper data analyses and the assessment of consumer needs, higher, even complete, customer satisfaction could be achieved regarding the service provided by contract caterers. I will show the sufficient nutrition and energy intake of different age groups participating in contract catering and the materials and methodologies needed to achieve these amounts. As a contrast to this, I will summarize the everyday eating patterns and the familiar and accepted meals and materials of the consumer groups on the basis of the answers to specific questions. The recent presence of different trends in diets (vegetarian, bio food, religious practices) and the challenge these diets mean to service providers will be examined. I will also discuss the challenges service providers have to face because of the changes in eating patterns and living standards affected by diseases and environmental changes and to what extent these changes can be handled in the contract catering industry. I will examine the correlation between the recommendations of different scientific institutions and the summarized consumer needs on the basis of the questionnaire. A recommendation will be made in order to develop a program that is informative, promotes and declares healthy lifestyle and changes the approach of the future generation, as well as the thinking of their parents.

Keywords: contract catering, market research, consumer needs, health, lifestyle

## **INTRODUCTION**

According to the World Health Organization one of the most important public healthcare actions a government can do in order to spread healthy lifestyle and increase economic outputs is the supplement of secure and healthy food. The education of children regarding healthy lifestyle choices and proper nutrition in kindergartens and schools is even more important since it has a great influence on their state of health when becoming adults.

The huge significance of contract catering derives from the fact that it is the main source of daily food, except eating at home, and supplies food in an organized way to people from different ages, genders, occupations, social and health groups.

On the other hand it is very important to know whether the guidelines set by the authorities and the law regarding public catering, food standards and production requirements are meeting the eating habits, expectations and taste of the target group of this research. It is important to know the regularity of meals compared to the recomendations made by international studies. Of course it also very important to see the quality of the food and to find out whether it has all the nutrients required for the proper and balanced growth of the particular age group.

## MATERIAL AND METHODS

In recent years we have conducted a questionnaire survey regarding elementary school and kindergarten students' dietary habits. The results justify that further more efficient research should be carried out by the exploration of the knowledge and habits of the examined groups and through finding more suitable devices for raising their interest in good nutrition. As the first step of this exploration we have expanded the target group and applied a quantitative market research method using the results of the previous researches. Budapest was chosen as a test city for the completion of the survey. Several elementary school and kindergarten groups were involved in the survey. 400 children were chosen and we evenly distributed the participants according to their age and gender. We have used the questionnaire method of surveying and the results were analysed with statistical methods. In case of age groups not yet able to write, we used personal interviews to receive answers. We have compared the results with the Nutrition Guidelines for Contract Caterers and Food Suppliers issued by the National Institute for Food and Nutrition Science (OÉTI). The raw materials, food types listed in the Guidelines were compared with the substantive eating habits of the target group. Furthermore, we have compared the results of the survey with the proposed regularity of food intake according to dietitians and other dietetic experts offered to the age groups involved in the research.

#### **RESULTS AND DISCUSSION**

Before the detailed discussion of the results, we will summarize the most important factors in contract catering in general and the eating habits of those participating in contract catering (especially youngsters), based on different researches.

We have found that less than half of the participants eat fresh vegetables, and almost 80% of them are putting extra salt to their meal or eating salty snacks. These results very much exceeded the recommendations made by national and international health and nutrition organizations. Even though the number of children participating in contract catering is far higher than in other age groups, according to statistics the number is lower than it should be. In nurseries and kindergartens almost 100% of the children are eating catered food (in nurseries it is obligatory to provide catering). On the contrary, in elementary schools 50%, and in high schools only 30%, of the pupils are eating under organized conditions.

The reasons for this were not examined in this research, but experience shows an obvious correlation between parent welfare and the frequency of meals.

There are several researches showing that overweight parents will create an environment that disposes the child to gain more weight, simply because of the effect of their own eating habits and behavior patterns. These researches also put in light the fact that higher television viewing time increases the chances of overeating, and through increased consumption of snacks, chips and junk food the rise of body mass finally results in overweightness or obesity (*Vári*, 2012).

The broad, representative research of the National Institute for Food and Nutrition Science (OÉTI) in 2005 has stated that 18% of school age boys in Budapest are overweight and 7% of them are obese, on the other hand nearly 20% of girls are overweight and the rate of obesity is over 6% (*Bácsi and Tusor*, 2005).

The majority of children eat five times a day, but the distribution of daily nutrient intake is very unequal. The main energy source is lunch but during this meal mainly fat and proteins are consumed. On the other hand, the main source of carbohydrates is in the snacks taken between the two full meals.

During research conducted by HBSC in 2002, among other topics, the eating habits of pupils between 5<sup>th</sup>-10<sup>th</sup> grade was also evaluated. The report revealed that the consumption of healthy food was relatively rare, moreover the ratio worsens as the age increases. On the other hand, it is positive that the ration of unhealthy food decreases by the 11<sup>th</sup> grade. Another problem is missing certain full meals (especially breakfast) during weekdays (*Németh and Szabó*, 2003).

## Analysis of eating habits of researched age groups

*Table 1* shows the eating habits of different age groups represented by the research according to meal types.

## Table 1

Meal types	Every day	Weekly (3-5 occasions)	Rarely
Breakfast	82.6	10.4	7.0
10 hour snack	51.2	38.3	10.5
Lunch	95.0	4.9	0.1
Dinner	55.6	29.4	15.0
Supper	85.0	11.7	3.3

## Eating habits of different age groups, %

Comparing the main and other meals on the basis of gender, we can see that more than 80% of children are having breakfast (boys 85.2% and girls 80%). Out of those who are having breakfast only three-five times a week 12.5% are boys and 8.4% are girls.

It is important to mention that the 10 o'clock snack is missed by twice as many boys as girls on a daily basis (13.6% and 7.4% respectively). On the contrary, the ratio of children having their 10 o'clock snack every day is only a little over 50%.

Lunch is the most consumed meal with more than 95% of the children who participated in the research eating it every day. 100% of those who have lunch three-five times a week are eating in the school under the organization of contract catering. This means that they either do not have lunch on the weekend or they skip those menus that they do not like and the missed meal is not supplemented. It also was found that some only have lunch once a week. This also makes the distribution of daily nutrient intake very uneven and causes children to eat higher amounts during later meals.

15% of children have dinner once every week or rarer. On the other hand, the ratio of those who are having dinner more than once a week is also lower than 30%.

Consumption of supper represents higher values. The majority of children are eating something in the evening.

Finally, the research showed that a little over 10% of the participants in the survey are eating fast food every week. We have found that fast food is the main supplement to missed school meals. Unfortunately, children are mainly eating different street food instead of the missed lunch.

On the whole it can be stated that the frequency of eating diminishes as age increases. In high school, children often miss breakfast, which is not supplemented with any proper, quality meal. Unfortunately, even in elementary school main meals are also often missed. The research has clearly confirmed the drawbacks of irregular eating.

#### Analysis of OÉTI guidelines on raw materials and food groups

*Table 2.* represents the different materials and food groups for different age groups for 10 nutrition days according to the guidelines of OÉTI.

OÉTI makes other guidelines according to the number of meals per day. In the case of every age group and at least *three meals per day*, the following should be included in the diet: a) 0.3 liter milk or other dairy product with the same calcium content, b) 2 portions of vegetables – except potato – out of which at least one portion is fresh. In the case of one meal per day, at least one portion of fresh vegetables – except potato – or fruit should be served (*Paller*, 2011). On the basis of the research the target groups are eating the above listed materials and food groups with different frequency. As you can see in *Table 3*, the questionnaire compares the guidelines with real, every day eating habits.

After comparing *Table 2* and *Table 3*, it is clear that neither children in kindergarten nor pupils in schools are eating the suggested food types according to the frequency recommended in the guidelines to cover nutritional requirements. It

is interesting that third of those who answered said that they eat sweets, snacks or chips every week, and 20% of them said that they eat them on a daily basis. Additionally, a third of them never or rarely, in this case only 1-3 times a month, eat fresh vegetables, even though when this age group was asked about the general rules of healthy eating, the first answer given was the importance of eating more vegetables and fruits (*Fülöp et al.*, 2009)

Researches about the body mass of the age group show that on average 30% of the children are overweight, fat or underweight. In these cases the continuous control of proper nutrition is very important. Obesity, high salt consumption and low vitamin intake are high risk factors, on the long term, for cardiovascular diseases, diabetes and some tumors or allergies. 22% of the research group does not add extra salt to their food at all. On the other hand, 30% add salt moderately, while 6.5% of the children eat fast food with high salt content on a daily basis. The effect of this is already measurable in contract catering, as children requiring special diets are increasingly common. Contract caterers have to face the challenge of different diet trends spreading widely. It is important to take note of vegetarianism, organic food, or other fashionable diets, since in the case of children unbalanced eating habits could be harmful to their health, thus contributing to the diseases mentioned above. The main advantage of contract catering is that an organized service is able to provide a balanced diet that meets the nutritional requirements in the case of every age group.

# Table 2

Materials and food groups	Service for three meals per day		
Meat	at least 6, not more than 10 times		
Processed meat	at least 6 times,		
Fish	at least once		
Liver, processed liver	at least 3 times		
Egg	at lest 3 times, not more than 5 pieces		
Rice	not more than 3 times		
Pasta	as a side not more that 2 times		
Potato	not more than 5 times		
Legumes	not more than 3 times		
Fruit or vegetable juice	not more than 2 times		
Sweets, pastry, bakery products	not more than 4 times		
Flavored milk	not more than 2 times		
Jam, chocolate cream, peanut butter	not more than once		
Oily seeds	at least once		

Guidelines for different materials and food groups for 10 nutrition days

Source: Based on OÉTI data

## Table 3

	Frequency of consumption			
Food types and groups	Not, rarely	Weekly	Daily, more times a day	
Milk, dairy products	7.6	31.8	60.2	
Egg	36.7	50.3	12.6	
Pork, beef	34.8	49.3	15.5	
Poultry meat	28.6	56.4	14.7	
Fish (also canned)	86.7	10.6	2.4	
Processed meat	11.6	26.4	61.4	
Butter	31.2	19.3	39.2	
Margarine	23.9	20.9	54.9	
Cooked vegetables	49.3	32.6	7.8	
Fresh vegetables	33.1	38.8	27.9	
Fresh, frozen fruit	11.1	33.7	54.9	
Potato	12.2	56.4	31.2	
Legumes	66.7	28.5	4.5	
Rice	61.7	32.5	5.5	
Pasta	39.4	47.9	12.5	
Vegetable, fruit juice	29.1	29.1	41.5	
Bread, bakery product	1.8	7.1	83.8	
Other food				
Jam, canned fruit	59.7	27.1	12.9	
Candy, chocolate	24.5	33.9	41.3	
Soft-drinks	21.7	22.9	55.1	
Salty, oily seeds, snacks, chips	46.4	31.6	21.7	
Hot dog, hamburger	68.4	21.3	10.0	

## Frequency of consuming different food types, %

The most important task of contract catering is to supply sufficient food to every age group while meeting the required daily nutritional guidelines for each category. Moreover, appetizing food needs to be served in a way that is attractive to the senses while ensuring variety. Producing quality, diverse food in contract catering requires sufficient financial resources together with production technology, equipment, and the professionals behind production working to control the outcomes.

To increase the number of children served by contract caterers, the participation of national institutions and public governments is very important. Spreading of the importance of healthy nutrition, helping children get familiar with different ingredients and food options and raising awareness about the effects of unbalanced nutrition can only be organized and carried out effectively with governmental coordination. Education should be started with the youngest age groups, but it is also very important to raise the awareness of parents as well in order to change their eating habits.

#### CONCLUSIONS

As a summary of the results of the research it is clear that the official guidelines about contract catering do not correlate with the everyday eating habits of children. This means serious effort must be undertaken by contract caterers, because if they keep sticking only to the guidelines, the number of nutritional problemss will continue to rise. Children generally reject unfamiliar ingredients. A high percentage of childrenregularly eat three meals per day on average. The ten o'clock snack and dinner are missed by almost half of the surveyed children. Another problem is that the missed meals are not supplemented. This is also true for all of the meals during the day. The uneven distribution of meals and unbalanced eating habits mean hidden health risks, which could be the reason for different diseases experienced as an adult. Regular, evenly distributed meals five times a day is one of the main reasons for stable blood sugar levels, feeling good, having higher stamina and better concentration. The main role of daily meals is to provide enough energy for working, studying or sporting activities. Those diets that end with a square supper but without a good walk or other activity could have the effect of storing the energy taken in with the food, finally resulting overweightness or obesity. The ingredients and food types in the guideline are important in order to ensure a balanced and healthy diet and normal growth. On the other hand, it is hardly effective if the children are not eating the food provided in schools or only eating a few types of food outside of school.

Proper education, raising awareness, is required to reach these goals in the case of schools and parents as well. To achieve this goal, long term programs are needed to change the approach to health conscious contract catering. The participation of government offices and authorities has great importance in this goal.

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Corresponding author:

## Gyula SÜLLŐS

Kaposvár University, Doctoral School of Management and Organizational Sciences H-7400 Kaposvár, Guba S. u. 40 e-mail: info@pensio.hu