Unhealthy Behaviours of School Children

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Abstract: Aim: The objective of the study was to ascertain nutritional customs of pupils in grade schools. Material and Method: Anonymous questionnaires were done to a sample of 380 children, aged 10 to 14, in 20 fourth-to eight grade classes from 2 schools in Cluj-Napoca: one from down-town, the other one from a poorer neighbourhood. Results: Almost half of students revealed to have an irregular diet. In the last month, some of them did not have enough food or money to buy it (much of them come from the poorer neighbourhood). In this latest school, a triple percent of children have a vegetable diet (no meat, in fact). The obsession to lose weight and the irregular diet has conducted to lose appetite in over 30% of girls. About 60% take vitamins or nutritional supplements. Social status as well as the irregular diet is reflected in general status: over one third feel sad, alone, useless or cry without any reason. Some of the pupils which have problems with daily food supply, think the life is hard and do not worth to live it. Conclusions: There is a wide diversity in nutritional customs of children. Some of them are due to inappropriate nutritional knowledge or a wrong perception of being on fashion as well as to social status. Although the economic conditions are difficult to change, we consider that nutrition education should still be a part of health teaching.

Keywords: Food; Nutritional behaviour; Children; Health.

Introduction

Food is a fundamental human need, a basic right, and a prerequisite to good health [1-3]. The key to optimal health is to discover how to maintain the physical, mental, psychological and social states. There is no general formula for achieving this ideal; each of us must take responsibility for himself, by establishing good health behavior. One of the things to consider is proper diet.

We know a lot about foods and about the principles of a healthy diet (since Hypocrite time) but we still do not know enough. Even though we know and we are concerned about a good diet, we do not make changes to improve our diet [3,4].

What and why do we eat what we eat? Our daily food choices have a lot to do with our age, gender, genetic makeup, occupation and lifestyle; where we live; and our family and cultural background [3,5]. Foods symbolize much of what we think about ourselves. We bond relationships and express friendships around the dinner table. We cope with stress and tension by eating or not eating. Food can be used also as a reward [6].

Throughout our lives we spend eating 13 to 15 years of our waking hours [7]. Taste (a driving force for most of the foods we consume) and texture are the most important things that influence our choices of food. After that we consider the cost and convenience of food.

Our preferences begin early in life and then change as we interact with parents, friends, and peers. Exposure to people, places, and situations often leads us to expand and change our food patterns [8]. Unfortunately, as young children our food experiences may have been severely limited by parents or other adults responsible for us. Adults may have introduced us to only a small subset of available foods because some excellent foods are often considered inappropriate for children, or

because they do not have nutritional knowledge. Just being exposed to a variety of food can help make us less resistant to try new foods [1,9]. Young children prefer foods that are sweet or familiar. Preschoolers are usually quite willing to try new things. During school years, children are often strongly influenced by their peers [4, 6, 10-12].

Adults need to give children under their care a variety of foods to try. It might take time, but children usually come to accept new food. Some food choices are tied to our routines and habits and some nutritional habits are hard to break. People often agree that their cooking habits are very similar to those of their mothers. And, consequently, if mothers have pore knowledge (general or nutritional), the children will know less about good nutrition.

That was the reason of conduction the study; to see if nutritional education is required in grade schools, and it must to become a part of health teaching.

Material and Method

Anonymous questionnaire comprising 136 questions were administered to a sample of 380 children, aged 10 to 14, in 20 classes (fourth to eight grade) from Cluj-Napoca, a big city located in Transylvania, Romania. We have chosen 2 grade schools: one from down-town, where children come from families with high income (named B school); and one from a poorer neighborhood (named C school).

The questionnaires referred to diet, tobacco use, alcohol drink, and aggressive behavior. We discuss here only the results concerning the nutritional habits.

Results

According to our study, only half of children eat breakfast every day, 20.58% of them seldom skip breakfast. Most of them (40%) skip breakfast because they use to do like this or perhaps their parents work and don't supervise them. Another important part of children admit they are in a hurry; they have no time, because they get up late in the morning. The lunch and dinner is always served by 63% from children; 12% of them skip lunch (always or often), and 11% skip dinner. Skipping dinner is a way to do for 45% of children and a way to lose weight (30%).

Eating in fast foods or restaurants, more than twice a week is regular for 10% of the children from downtown. As we expected, only 4% of the children from the other school eat in such places. Many parents are working until late in the afternoon, so that the children, without available grandparents, have to prepare the meal by themselves. Being alone and having no time, most of the children spend less then 15 minutes for breakfast, and 15-30 minutes for lunch and dinner. Almost 4% of the subjects use to eat hot meals.

Many children eat snacks in the morning or in the afternoon, especially fruits (89.71%), sweets (60.95%) or milk (56.73%). Approximately 6% of poorer children and 3% of "high income" children admit they have had days in which their families didn't have enough foods or money to buy foods.

Overall, 4% of children do not eat meat (2% in B school, 7% in C school; p<0.01), The obsession for loosing weight as well as the irregular diet, have conducted to eating disorders: 10% of children are hungry all the time, and almost 20% of them have a decreased appetite (figure 1). The percentages are higher at the C school, and, of course, are higher in girls (31%) than in boys (12%).

Over 35% of girls are concerned about their weight (being thin is a desirable social attribute for them). Many children have developed an obsessive desire for this fashion and try to do something about it: 34% of children from B school (22% from C school) and 34% of all girls (24% from all boys) try to lose weight. The methods the children want to lose weight are: sports, self food deprivation or special teas (Table 1).

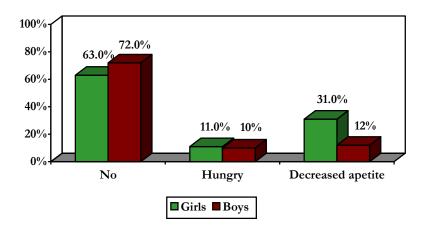


Figure 1. Distribution of eating disorders

Table 1. Methods used in order to lose weight

| Method | Percent |
|-------------|---------|
| Nothing | 49.70 |
| Vomiting | 1.06 |
| Pills | 1.58 |
| Dieting | 9.03 |
| Special tea | 5.01 |
| Exercise | 29.13 |
| Others | 4.49 |
| Total | 100.00 |

Almost 60% of children in our study became obsessed by their perceived need for a high vitamin and mineral intake so they take these nutritional supplements.

In our study, less then 20% of children take part daily in a physical exercise and almost 4% of them do not exercise than few times/year (Table 2).

Table 2. Practicing sports

| Frequency | Percent (%) |
|----------------|-------------|
| Few times/year | 3.69 |
| 1/month | 3.96 |
| 2-3/month | 5.07 |
| 1/week | 11.61 |
| 2-3/week | 33.98 |
| 4-5/week | 23.75 |
| 6-7/week | 17.94 |
| Total | 100.00 |

In addition, 39% of school children spend more of 2 hours per day in front of the television set or the computer.

Although sugar used to be the main diet "monster", children in our study prefer sugar to any other synthetic sweetening.

The social status as well as the diet reflected in general feelings: over one third of children are sad, alone, useless or cry without any reason.

Interesting, only 7% of all children think the life is easy and all of them come from the poorer school!! Some of the children that have problems with daily food supplies believe that life is hard and does not worth living.

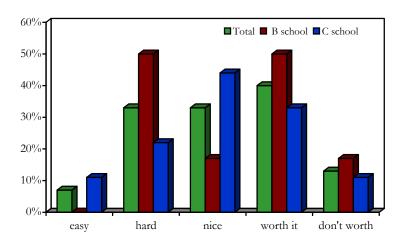


Figure 2. Without food and how is life?

Linking this question "how is life?" with the question "didn't you have enough food or money to buy it in the last month?" we can see a similar aspect: despite their problems, the poorer children are much more prepared and resistant, thinking that life is easy and nice (figure 2).

The last question was referred to the foods the children have consumed and the frequency they did it. Many of them, surprisingly again, never eat beef, fish, been, rice, pizza or whole-wheat bread.

There are important percentages of children eating daily (or more times a day) milk, sausages, bread, sandwich, cereals and vegetables. Many school children use to drink every day soft drinks and tea (more popular than milk, although not so beneficial to the diet).

Discussion

Nowadays, we live in a fast-paced world. Many people are looking for ways to save time. Overall, women want to spend only 30 minutes or less each day selecting and cooking food, and men want to spend only 15 minutes on such activities [13]. Children, also, want to save time.

In our study, half of children skip breakfast, which is the most appropriate meal to replace the carbohydrate stores used during the night's sleep. Although skipping breakfast might save them a few minutes, they are likely to be less alert and efficient than if they have eaten this meal.

Why children skip lunch? They have courses for 6-8 hours per day and, consequently they have no time to eat. Skipping dinner is a way to do for many children, or a way to lose weight, obesity being a highly stigmatized condition, obese people suffering from altered body image.

Eating in fast foods or restaurants is not too popular, because food is relatively expensive in Romania, especially in restaurants. Anyway, the average Romanian spends much over 50% of income for food.

Another important aspect revealed by this study was an economic one. A double percent of poorer children admit they have had days in which their families didn't have enough foods or money to buy foods. Although the vegetarian diet is not too popular in Romania, many children from C school do not eat meat, giving information on buying capacity of a disadvantaged group (the meat has a very high price).

Some psychological factors, such as a person's own image, may have a strong influence on their eating patterns [14-18]. The obsession for loosing weight as well as the irregular diet, have conducted to eating disorders, which are more frequent at the poorer school and, of course, at girls.

Besides diet, exercise is another aspect of lifestyle related to health. People who regularly jog or take part in other physical activity say that it makes them feel good. Nevertheless, in our study, very few children do any kind of physical activity.

Linking the question "didn't you have enough food or money to buy it in the last month?" with question "how do you feel?" we could observe that a bigger percent of children from the B school (from down town) feel sad or useless. Despite their problems in assuring daily foods, children from C school (from neighborhood) are confident and joyfully.

Conclusions

There is a wide range in the nutritional intakes and habits of the children. Some of them are due to the inappropriate nutritional knowledge or to a wrong way to become thin. Food behavior is also influenced by the social status or the psychosocial and emotional factors.

Among other factors, early experience, strongly influence food likes and dislikes. That is why we believe that general nutrition education, the most useful form of health education, often the most effective, is required in the grade schools, as a part of health teaching.

Considering the various determinants of diets, it is now well recognized that health education alone is not enough to effect a change in the population's diet. Other factors outside the control of individual consumers (from advertising of food products to access to affordable fresh foods) have a significant impact on food choices. An effective strategy to improve nutritional health must address a wide range of issues which hinder or help good nutrition.

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