

EVALUATING THE EATING HABITS FROM THE CHOSEN SAMPLE OF PRIMARY AND SECONDARY SCHOOL STUDENTS IN SLOVAKIA

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Abstract: *In this article we discuss the evaluation of eating habits from the chosen sample of primary and secondary school students (respondents) in Slovakia. The needed data was gained with the help of a questionnaire which was disposed within the project „Healthy nourishment“ by the State educational institute in Bratislava during the years 2006 – 2007. The questionnaire was filled out by 2534 respondents. The questions were divided to four regions, personal data, information about the family type, place of residence, employment of the parents, property ratio, education of the parents, nourishment and eating habits. Based on statistical analysis we can claim, that the age and education of the parents influence the eating habits of the respondents.*

Key words: *eating habits, nourishment, students*

Theoretical resources

At present time we face difficult life circumstances. Most of us live in extreme stress and busyness. We suffer under the influence of polluted air, full of dust and toxic rod, with lowered content of oxygen. Excessive noise increases our jitterbugs. More of our work is replaced by machines. The work puts only minimal physic requirements on us, therefore e do not have enough exercise. The ruthless social and professional competition, dealing with unsolvable conflicts, which grow from day to day, and a lot of other different influences cause, that we are more sick, physical and also psychical. If we include our own congenital faults and dispositions, it is obvious why the number of organic faults, neurosis and psycho-somatical disease increases (Diehl, 2002).

The present estate of population rings alarm and forces the man to do something for his own health and not to stay inactive. The last years brought big changes in the populations lifestyle, but the praxis and prognosis are alarming. For many an excessive taking of calories and unbalanced nutrients nourishment is characteristic. The consumption of foods from animals with the content of saturated fats and cholesterol increases. The intake of vitamins, minerals, pulp and other healthy materials which some

foods content in natural stadium is seriously threatened by the trend of eating artful or processed products. The world around us is overchemicalised and this concerns the air, work and life environment, food we eat, but also the excessive consumption of chemical preparatives in the form of drugs, which has a increasing tendency and which leads to higher the already high life costs. To change this unnatural life style, getting to know the power of natural mediums, to have enough of exercise, positive life style and the feeling that a lot of us can do more for our health than any physician or medical discovery, this all are a few of the possibilities for organizing ones life the way to have the highest possible amount of health and well being (Foster, 1994).

Health is the most precious thing that man has. Everyone should protect it and direct his regime, so he can hold the health till the possible highest age of life. An essential part of the regime is nourishment, which is one of the most important physiological expectations trough which we can prevent various civilization illnesses, mostly the hearth-vascular system, diabetes, cancer, but also exanguinity, osteoporosis, we can improve the immunity etc. This is also confirmed by scientific surveys, which state, that the men's health is among other factors contingent on 40-60 % trough nourishment.

The first physicians prescribed against illnesses mostly food. From a lot of preserved documents flows that for example Plinius claimed, that cabbage will cure eighty percent of illnesses and onion twenty-eight. Garlic was considered as a holy plant. And we could go like this further. Modern researches prove that the old age physicians even not knowing anything about microbes, hormones, vitamins and cholesterol, and being able to rely only on their own experiences, experiences of their predecessors and cousins, were not wrong in their knowledge. The most important foods, which supply the body with main substances which insure health and well-being, include most of all vegetables, fruit, cereals, pulses and stimulants (Bodlák, 2002).

Every parent wants his child to be healthy. Therefore if we want the child to carry off to his future life the most important gift – the health, it is necessary to begin with the healthy nutrition in the family changing the usual approach to the creation of the menu and kitchen preparation of dishes. That means, get over the stereotype and head to new, often unusual types of meals, their kitchen preparation and their implementation to family eating. It is important also because during the long term consultancy praxis we often meet inheritable illnesses, which are often influenced by dishes and foods preparation which are inherited from generation to generation along with the same illnesses (Ostertágová, 2005).

The parents usually, even if subconsciously, relate to the attitudes and habits after which they were raised. Whereas everyone of them originates from another environment, so they opinions can often differ. One of the basic conditions of influencing the child is the upbringing unity of the parents. They have to come along and try to find same methods and goals (Gregora, 2004).

The nourishment of children and youths has to ensure an all-round evolution of the organism. The habit to vegetable side-dish, salads, enough fruits etc. should be established (Halačka a kol., 1988).

For the colourfulness and quality of the nourishment, its distribution to separate daily portions us, the parents are responsible. How much the child will eat, we leave

on him. The taste depends also from the period of evolution. In the first year, when the child grows, every healthy child eats with taste. In the second year, the tempo of growth is slowing down and therefore also the desire to eat is shorter. The beginning of school attendance is often characterized with the fact that the child eats and sleeps worse. The aversion sometimes leads to morning vomit and to refusing of the morning meal. The cause is jitterbug, a lot of adventures in school, and a lack of time before leaving home for school. Sometimes the cause for a temporary aversion can be an increased environment temperature, or tidiness. Of course behind the aversion, various different illnesses can hide, which cannot be underestimated (Gregora, 2004).

For keeping the health, the organism needs not only energetic suitable, sufficiently colorful nourishment, but great impact has an optimal consuming regime, that means a number of daily meals, periodical time of their preparation, by keeping appropriate intervals between the meals and their mutual proportionality, balance, and quality. From the view of optimal evolution and performance, this is not something to be neglected, and has a special impact particular in childhood (Béderová, 1993).

The goal of the research

The goal of the research was with the help of a questionnaire, which was elaborated within the scope of the project „Healthy nourishment“ trough the State pedagogic institute in Bratislava during the years 2006–2007, to discover the eating habits of the students of chosen primary and secondary schools, and also the information allowing social – economic analysis of obtained data.

Research hypothesis

- Hypothesis 1: We assume, that younger students will have better eating habits.
- Hypothesis 2: We assume, that students from economic better situated families will have better eating habits.
- Hypothesis 3: We assume, that the education of the parents will influence the eating habits.
- Hypothesis 4: We assume, that gender will influence the eating habits.

Characteristics of the research sample

The group of respondents was built by students of various classes of the second grade of primary schools and students of secondary schools, whereas we included schools from cities and villages. Primary schools were represented by ZŠ Gorkého in Trnava, ZŠ A. Kubinu in Trnava, ZŠ Špartakovská in Trnava, ZŠ Atómová in Trnava, ZŠ Hrnčiarovce nad Parnou and ZŠ in Cífer, ZŠ Podzámska in Hlohovec, ZŠ Červeník. Secondary schools were represented by students of Secondary sanitary school in Považská Bystrica (SZŠ), Secondary technical training centre in Považská Bystrica (SOU), Secondary school of hotel services and trade in Púchov (ZSShso), Secondary school of hotel services and trade in Trenčín, Secondary industry school of E. Belluš

in Trenčín, Pedagogic and social academy of bl.Laura in Trnava, Privat secondary training centre of gastronomy, services and trade in Trnava, Secondary grammar school in Považská Bystrica, Secondary school in Nové Mesto nad Váhom, Secondary grammar school of M.R. Štefánik in Nové Mesto nad

Váhom, Secondary grammar school of Pierra de Coubertin in Piešťany, Hotel academy of Ľudovít Winter in Piešťany. Overall number of respondents of the research sample was 2534 students. The percentual representation of boys was 50,8 % and girls 40,2 %. The age group of the sample was from 10 to 20 years.

Methods and process of the research

Information about nourishment and eating habits of the students were obtained with a questionnaire. The questionnaire was elaborated through State pedagogic institute in Bratislava for the needs of the project „Healthy nourishment“ and we did not intervene into its content. The questionnaire was the same for all age groups and all schools, it contained 21 entries and was divided into four sections:

- personal data of the student – gender, age, heights, weight,
- information of the family type and their members, living place, employment of the parents and economical status,
- education of the parents,
- nourishment and eating habits.

To the particular answers in the questionnaire we assigned numerical values according to their accuracy, so it would be possible to statistically analyze and compare individual fields and also particular year-classes.

The data obtained by the questionnaire and knowledge test was elaborated into a table which was evaluated through multiple dispersion analysis in the program Statistica.

The outcomes of the research and discussion

In this research we were following eating habits of a chosen group of respondents in various primary and secondary schools in Slovakia. The evaluation of eating habits was based on the age of respondents, social situation of their family, reached education level of their parents and their gender. Statistical calculations and values of particular followed influences are shown in table 1.

Followed factor	SS	St. voľnosti	MS	F	p
Age	16,79	1	16,793	0,8374	0,360390
Social situation	213,71	1	213,712	10,6575	0,001138**
Education of parents	227,74	1	227,740	11,3570	0,000784**
Gender	340,19	1	340,189	16,9646	0,000041**

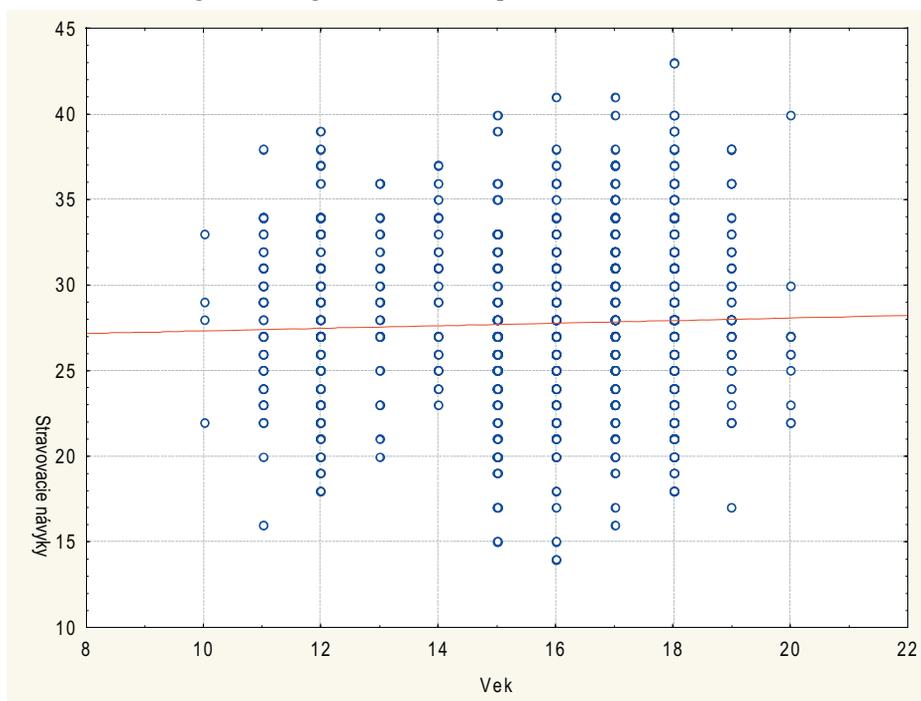
Based on this table we can say that it proved the high influence of social situation of the respondent's family, achieved level of parental education and gender on the respondent's eating habits.

Hypothesis evaluation

Hypothesis 1, where we assumed that younger students will have better eating habits than the older ones was not proven ($P = 0,360390$). We resulted from the fact, that younger students, where we include 10 till 12 years old, have better eating habits than the students of higher grades of primary and secondary schools, because their eating habits are still controlled and controllable by their parents and are not influenced by eating in scholar dining rooms. At the older students usually a trend to avoid periodical eating in scholar dining rooms appear, and they prefer the nowadays very popular „fast-food“. Girls, mostly in the higher grades, in connection to the trend of thin model look, avoid any eating in fear of gaining weight. Graphic illustration of this influence is shown in graph 1, based on which it is obvious, that the age in our observed sample did not influence the eating habits.

Graph 1

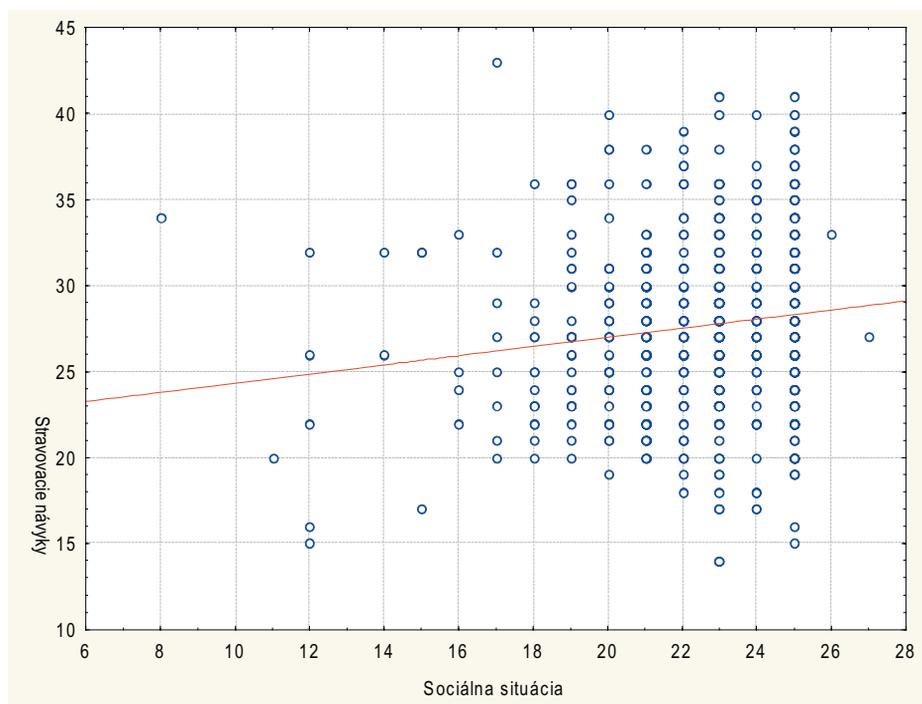
Influence of the age on eating habits of the respondents



In hypothesis 2 we assumed that the students from economic better situated families will have better eating habits. This hypothesis was proven ($P = 0,001138^{**}$). When we laid down the hypothesis we assumed that students who live in economic better situated families will have better eating habits because better economic situation of the family will make it possible for them to consume energetic and nourishing valuable foods, mostly out of season fruits and vegetables and it broadens the possibilities of physical various activities. It can also reflect in present time as an often discussed problem, that the parents may provide their children with enough material goods but can not provide them with enough of their attention, care and passion. An advantage can this way become a disadvantage, because plentitude of material goods and equipment of households and children rooms can attach kids to the chair at the computer or TV, which is often connected with an uncontrolled energetic supply in form of sweets or salty delicatesses and on the other side a lack of sport physical activities and healthy living in the open. In our sample we found out, as pictured in graph 2, that the respondents who's social situation was better had also better eating habits, it can be connected also with the results of the next hypothesis, in which we investigated the influence of parental education on eating habits.

Graph 2

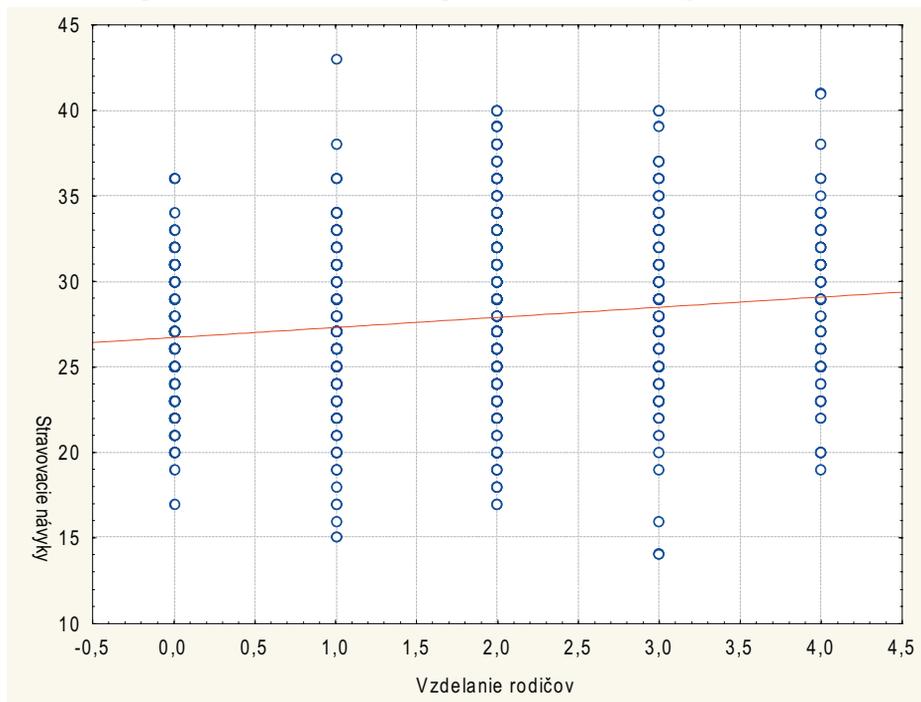
Influence of social situation of respondent's families on their eating habits



In hypothesis 3 we assumed, that higher education of the parents will positively influence eating habits of their children, this hypothesis was proven ($P = 0,000784^{**}$). Like in the previous hypothesis, also here we assumed stronger influence of parents on eating habits of the respondents – students, regarding to their education. We assumed, that the parents who graduated, are interested and have enough information in the field of healthy nourishment and have some principles of rational nourishment and eating, because they know and realize the impact of nourishment and healthy lifestyle for the life their family members, in the first place as a prevention of various illnesses, and this assumption was proven as seen in graph 3. In this hypothesis, it is again important to underline the importance of the family when creating eating habits of the children, because this knowledge and the connected habits strongly influence the eating habits of their children

Graph 3

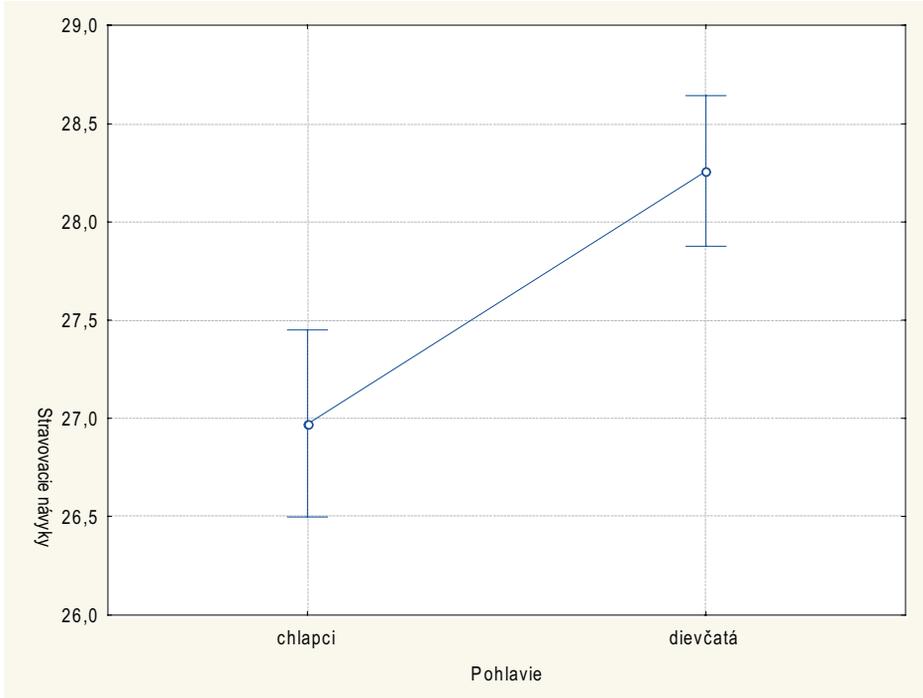
Influence of parental education of the respondents on their eating habits



In hypothesis 4 we assumed, that the respondents gender will influence their eating habits, after a detailed statistical analysis it was proven, that our assumption was right, that means our hypothesis was proven ($P = 0,000041^{**}$). When laying down this hypothesis, we resulted from the assumption, that girls as future mothers, are more aware about the importance of healthy nourishment for their lives and health, which can later influence the health of their future children and therefore they will have better knowledge about healthy nourishment, which will positively influence their eating

habits. In the graph nr. 4 we can see, that the eating habits of the girls were really on a much higher level than the eating habits of the boys.

Graph 4
Influence of gender on eating habits of the respondents



Conclusion

Information and recommendations about how to live and eat healthy are easy to find in current literature. Some keep on repeating, some generalize, some contradict, and a lot of them change with increasing scientific knowledge, on the other hand, those which result from traditions and ideologies are straight dogmatic and do not take into account the newest medical pieces of knowledge.

In our study, we did not want to bring any recommendations how to eat healthy, but we wanted to find out what the eating habits of the students of primary and secondary schools in Slovakia are. We judged these from the view of the age of the respondents, their gender, social possibilities of the family, and education of the parents. Based on statistical evaluation we can say, that the eating habits of our sample of respondents were influenced by gender, social situation of the family and parental education.

Based on the discovered results we would like to recommend, that in schools but also in families should be more attention given to healthy nourishment and the questions of healthy lifestyle. The youth should be aware of the risks, which obesity brings as the

result of excessive intake of food with high energetic value and lack of exercise, on the other hand what negative results can starvation and minimal intake of energetically valued food for keeping a slim body bring.

It is important, that especially teenagers realize, that in every young man, but especially healthy young man is the future of our next generations.

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HODNOTENIE STRAVOVACÍCH NÁVYKOV VYBRANEJ VZORKY ŠTUDENTOV ZÁKLADNÝCH A STREDNÝCH ŠKÔL NA SLOVENSKU

Súhrn: V uvedenom príspevku predkladáme hodnotenie stravovacích návykov vybranej vzorky respondentov slovenských základných a stredných škôl. Potrebné zdrojové údaje sme získali pomocou dotazníka, ktorý bol vypracovaný v rámci projektu „Zdravá výživa“ Štátnym pedagogickým ústavom v Bratislave v rokoch 2006 - 2007. Dotazník vyplnilo 2534 respondentov. Otázky v dotazníku boli rozdelené na štyri oblasti osobné údaje informácie o type rodiny, bydlisku, zamestnanosti rodičov a majetkové pomery, vzdelanie rodičov, výživa a stravovacie návyky. Na základe štatistického vyhodnotenia výsledkov môžeme skonštatovať, že vek a vzdelanie rodičov ovplyvňujú stravovacie návyky respondentov.

Kľúčové slová: stravovacie návyky, výživa, žiaci