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IMPORTANCE OF APPROPRIATE NUTRITION IN PREVENTION OF OBESITY

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Introduction: Obesity is defined as a pathological accumulation of fat tissue in the body, and nutritional disorders in children are associated with the high risk of numerous health problems.

The aim of the study: To point out the complexity and importance of nutrition in the development of obesity in children aged 7, 9, 11 and 13 years.

Material and methods: Data on prevalence of obesity in childrens of 1st 3rd 5st and 7st class of primary schools in Novi Sad were obtained from health records, upon systematic examinations performed in the School Dispensary of the Health Center Novi Sad in the school year 2009./10. On the basis of anthropometric measurement of the body weight and height, body mass index (BMI) values were calculated. The nourishment status was calculated on the basis of referent values.

Results: Systematic examination included total 474 childrens - 230 girls and 227 boys. After completed systematic examination and analysis of the obtained data, we may point out the following results pertaining to the health status of children:

- Normal nourishment status was determined in 209 girls (44,09%) and 213 boys (44,93 %)

- Overweight (obesity) was determined in 26 girls (12,44 %) and 66 boys (30,98 %)

Conclusion: The obtained results suggest high incidence of obesity in both sexes, with higher rates in boys. Childhood obesity is determined by number of factors, such as genetic factors, dietary habits, physical activity, financial status, etc.

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SERUM LEPTIN LEVELS ACCORDING TO GENDER IN OBESE CHILDREN

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Overall prevalence of obesity in children has increased over the world. Leptin plays an important

role in the pathogenesis of obesity. In obese persons leptin levels are higher than physiological concentration.

The objective of this study was to evaluate the relationship between leptin and gender in obese children.

Material and method: A prospective study was carried out in the 1st Pediatric Clinic from Targu-Mures between September and 2005 December 2008; a lot of 86 children divided into two lots with similar age and sex structure: lot I with high BMI (17 girls, 24 boys) and lot II with low BMI (18 boys, 27 girls).

Leptin serum concentrations were measured and correlations between serum leptin and gender were examined by linear regression and Pearson product-moment correlation analyses.

Results: Comparing the values of serum leptin in girls with high BMI and low BMI, we observed that leptin is much higher in group with high BMI than in the group with low BMI, with a significant difference between the two groups ($p < 0.01$); significant differences exist between leptin in girls with high BMI compared to leptin in boys with high BMI ($p < 0,01$). In boys, with aging, leptin values approaching to those of adults, with a negative linear correlation between age and leptin regardless of BMI.

Conclusion: In guys, whether with high or low BMI, leptin values are similar and much lower compared to lots of girls. High leptin levels appear in all obese children with high BMI.

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BÖRJESON - FORSSMAN - LEHMANN SYNDROME: A RARE BUT IMPORTANT CAUSE OF OBESITY

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Background & aims: Börjeson - Forssman - Lehmann Syndrome (BFLS) is a rare X-linked condition characterized by obesity and developmental delay. Only nineteen unrelated cases of BFLS, with