

## **Abstract**

Until recently, the children's obesity was a symbol of high social status and health. Today, excess weight in children and adolescents has become one of the most important health problem. High rates of obese children showed the importance of the problem and create an absolute need to search the causes of it.

The study included 1,012 children, who attending primary schools in the Bieszczady region. Following a favorable opinion of the Bioethics Committee the survey was conducted among parents / carers and anthropometric measured in children. Obesity in children was assessed by BMI centile charts (OLAF, 2010). In order to investigate the effect of obesity risk factors the odds ratio (OR ratio- odds) was calculated for each agent alone, assuming the significance of differences at  $p < 0.05$ .

The average age in the group was 9 +/- 2 years. Among the respondents, 45% were boys and 55% girls. The difference was statistically significant ( $p = 0.002$ ). The prevalence of obesity in the study group was 7.2% (8.3% among girls and 5.9% among boys). Biological agent which had the greatest impact on obesity in primary school children Bieszczady region was obese parents, in the case of obesity both parents the chance of occurred obesity in child was the highest (OR- 46.5). It was also the impact of low birth weight (less than 2500g ) on the incidence of obesity in children ( $p = 0.006$ ). Excess weight more often occurred in children from the city (10.6% vs 5.3%) and had better housing conditions ( $p = 0.04$ ). By evaluating the impact of selected dietary habits in the study group was founded that a large number of meals eaten per day ( $p = 0.001$ ), consumption of large amounts of sweets ( $p = 0.04$ ) and eating dinner right before bedtime affected the incidence of obesity in the children. Considering ways of spending leisure time and the degree of physical activity had showed that obese children often preferred to a passive lifestyle (-0.137) and non-obese active lifestyle (0.437).

Taking concrete action in the prevention of excess weight gain, among the youngest children, have a huge importance, specially for the health next generations.