

## DIET AND PREVALENCE OF OVERWEIGHT AND OBESITY IN BOYS AND GIRLS

**K.B Stavric**<sup>1</sup>, E.G. Vlaski<sup>2</sup>, R.D. Isjanovska<sup>3</sup>, L.M. Seckova<sup>2</sup>, M.S. Kimovska<sup>2</sup>

<sup>1</sup>*Department of Immunology* <sup>2</sup>*Department of Pulmology and Allergy, University Children's Hospital*

<sup>3</sup>*Institute of Epidemiology, Biostatistics and Medical Informatics, Institutes, Faculty of Medicine,*

*Skopje, Macedonia*

*[kstavric@hotmail.com](mailto:kstavric@hotmail.com)*

**Objectives:** Determination of prevalence of overweight and obesity in adolescent boys and girls and correlation of food consumption between overweight and obese boys and girls.

**Method:** Data from the ISAAC phase 3 were used. 3026 children aged 13/14 years were evaluated. The weight and height were measured and BMI was calculated. International cut off points for BMI for overweight and obesity by sex was used. Prevalence of overweight and obesity by sex, as well as relation between overweight and obese boys and girls and diet variables were determined.

**Results:** The prevalence of overweight was 12.2% and 8.8% in boys and girls respectively. The prevalence of obesity was 3.3% in boys and 0.7% in girls. The differences in prevalence for both were statistically significant ( $p=0.0024$  for overweight and  $p=0.00001$  for obesity).

Diet analysis showed that consumption of meat and eggs ( $p<0.05$ ), butter and margarine ( $p<0.01$ ) and milk ( $p<0.001$ ) had significant influence to overweight boys compared with overweight girls. Significant differences were found between obese boys and girls for consumption of potato ( $p<0.00025$ ) and cereals ( $p<0.00001$ ). For other dietary products there were no significant differences.

**Conclusion:** Boys aged 13/14 years have significantly higher prevalence of overweight and obesity. Nutritional factors influence those conditions. The prevalence of obesity in girls is very small so it is difficult to evaluate the influence of nutritional factors. It is obviously that other factors influence the obesity in girls.

