Anthropometrical indexes as nutritional indicators in 5 years-old macedonian children

Biljana Zafirova - Marija Papazova - Julija Zhivadinovik - Biljana Trpkovska
Institute of Anatomy, Medical Faculty, “SS. Cyril and Methodius University”, Skopje, Macedonia

Evaluation of sex-specific differences of anthropometrical indexes that were used as indicators for assessment of nutritional status in children aged 5. The study included 226 healthy children (113 boys, 113 girls) aged 5 from Macedonian nationality. With standard methodology (IBP) were taken following body measurements (body weight, height, mid upper arm circumferences-MUAC and skinfolds thickness triceps–SFTr and subscapular-SFSc), and according to standard formulas were calculated: weight-for-age (BW), height-for-age (BH), body mass index-for-age (BMI), mid upper arm circumferences-for age (MUAC), and skinfolds thickness-for-age (SFTr and SFSc). Results showed sex-specific differences in a large number of the examined anthropometrical parameters (BW, BH, BMI) in favour of the boys. On the other hand, skinfolds thickness (SFTr and SFSc) were significantly higher in girls. Values of the 50th percentile in boys were as follows: 21 kg for BW, 115 cm for BH, 15.48 kg/m$^2$ for BMI, 15.5 cm for MUAC, 4.1 mm for SFSc, and 7 mm for SFTr. The values of these parameters in girls were: 20 kg for BW, 113.5 cm for BH, 15.01 kg/m$^2$ for BMI, 16 cm for MUAC, 4.7 mm for SFSc and 7.8 for SFTr. These results can be used as criteria for the assessment and detection of deviations in the nutritional status in children aged 5.

References

Keywords
Children; anthropometry; nutritional status.