

## Evaluation of sex-specific differences of anthropometric parameters that were used as indicators of nutritional status in children

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Childhood overweight and obesity are major public health problems worldwide [1]. Anthropometric parameters play a central role in identifying children that are overweight or obese, or at risk of becoming so [2]. The aim of our study was evaluation of sex-specific differences of anthropometric parameters that were used as indicators of nutritional status in children. The study included 220 healthy children (110 boys, 110 girls) aged 7 from Macedonian nationality. With standard methodology (IBP) were taken following body measurements (body weight, height, circumferences (mid-upper-arm and waist) and skin-folds thickness (triceps and sub scapular). According to standard formulas were calculated: weight-for-age (BW), height-for-age (BH), body mass index-for-age (BMI), mid-upper-arm-circumference-for-age (MUAC), waist circumference-for-age (WC), and skin-folds thickness-for-age (triceps-SFTr and sub scapular-SFSc). The 7 year old boys have slightly higher mean values for (BH, BW, BMI, MUAC, WC) than girls, but sex-specific differences were not significant, except for the BW. On the other hand, skin-folds thickness (SFTr and SFSc) were significantly higher in girls. Values of the 50th percentile in boys were as follows: 26.5 kg for BW, 125.5cm for BH, 16.73 kg/m<sup>2</sup> for BMI, 17.2 cm for MUAC, 57cm for WC, 5.2mm for SFSc and 8.2 mm for SFTr. The values of these parameters in girls were: 25 kg for BW, 124.5 cm for BH, 16.35 kg/m<sup>2</sup> for BMI, 17.1 cm for MUAC, 55.8 cm for WC, 5.8 mm for SFSc and 9 mm for SFTr. These results can be used as criteria for the assessment and detection of deviations in the nutritional status in children age 7.

### References

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### Key words

Children, anthropometry, nutritional status.