



Sex Differences in Morphological Characteristics of Pre-school Children

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ABSTRACT The study was conducted on a sample of 110 preschool children. The InBody 230 apparatus was used to measure morphological characteristics and provide estimates of body composition. Results of MANOVA revealed statistically significant differences ($F=21.364$; $p<0.000$) between the subgroups. Univariate analysis of variance (ANOVA) demonstrated individual differences. Regression analysis did not show any statistically significant correlation between the predictor systems with the criterion (BMI) in boys. System predictors in girls pointed to a statistically significant correlation ($R=0.615$; $p<0.045$) with the criterion. Conclusion is that there are no major changes in the morphology and structure of body composition in either sex. Children are at a similar nutritional status and there are no significant changes in the assessment of body adipose tissue. BMI provides limited information about the relation with body composition in children, but can serve as a good parameter when monitoring obesity in children.