

Abstract

Title: Comparison selected parameters of body composition 10–11 aged children from different socioeconomics regions

Objectives: The main objective of this work is comparison selected parameters of body composition (% fat, fat-free mass, % total body water) by children aged 10–11 years in the Prague and Most. Another objective is comparison the observed parameters of body composition by boys and girls separately.

Methods: Body composition was measured by bioelectrical impedance analysis device BIA 2000-M. Followed parameters are the percentage of body fat, the absolute amount of fat-free mass (FFM) in kg, the proportion of total body water (% TBW). Data was processed in NUTRI Plus, IBM SPSS version 22.0 using the Mann-Whitney t-test and Microsoft Office Excel. The sample consisted of 48 probands aged 10–11 years.

Results: Children in region Most have an average higher proportion of fat than children from Prague. Prague's children have more average amount of FFM and % TBW than children from Most. Boys from Most have a greater proportion of fat than boys from Prague. Boys from Prague have more FFM and TBW %. By girls were no significance differences.

Keywords: body composition, bio impedance, fat mass, fat-free mass, total body water

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