

ABSTRACT

Title:

The influence of lifestyle on selected parameters of body composition of high school students.

Objectives:

The main objective of the thesis is to determine the impact of lifestyle on selected components of body composition of the high school students. The secondary objective is the statistical processing of data obtained from the body composition measurements and from the responses obtained from the questionnaires about lifestyle.

Method used:

60 high school students aged 17–20 years were measured by BIA method. Appliance used for the measurement was BODYSTAT 1500. We obtained information about lifestyle from questionnaires.

Results: The average percentage of body fat of boys is 12.2 ± 2.6 %. In comparison with the standard, these boys have lower or below average values. The average value of body fat of girls is 22.5 ± 5 %. We consider this average value as normal. 43 % of the respondents sleep 7–8 hours per day as recommended. Boys drink more water than girls. The average time spent with a cell phone and with a PC by respondents per day is $3.2 \text{ h} \pm 1.5$ hours. The most common answers of way of spending free time are sports, activities with friends and family, watching movies/TV shows and reading books. Most students (65 %) use public transportation to get to school. 48 % of students perform physical activities and sports during all week. The remaining 52 % prefer either the weekend or school week. We found a significant relation between the quantity of trainings in sport clubs per week and body fat regarding boys. Between time spent on electronic devices and body fat, we found a significant relation for both girls and boys. Girls who attended sports club have higher basal metabolic rate compared to girls who are not active athletes.

Keywords: BIA, BMR, physical activity, leisure time, sports, adolescence