

Summary

The doctoral dissertation concerns the students of University of Rzeszow, people in a particular period in life when they are pressured to undertake specific behaviours often of negative impact on their health. The problems of influence of various factors on human organism remains important and valid especially in the context of the so-called lifestyle diseases that have become an increasingly serious problem also in our country and occur in increasingly younger people. The research includes 428 female and 303 male students from two departments: Faculty of Biology and Agriculture and Faculty of Physical Education.

The objective of the research was to learn about mutual relationships between genetic, socioeconomic and lifestyle factors and selected physiological and morphological characteristics of human organism. To accomplish it, various research tasks were performed using anthropometric and survey methods.

The dissertation provides a description of somatic composition of the students, especially from the point of view of body mass and distribution of fat tissue in the body. Information was gathered on characteristics of their lifestyle and occurrences of musculoskeletal pain of the spine, and measurements of systolic and diastolic blood pressure were taken. The research allowed for assessment of the relationship between somatic composition, socioeconomic conditions and lifestyle and selected physiological characteristics of young people and the relationship between their socioeconomic situation and lifestyle and their somatic composition. The relationship between the type and year of studies, body composition and selected physiological characteristics of the students was studied as well. Usefulness of selected somatic indicators in assessment of body fat content was evaluated. New system for classification of people as to body fat content and distribution was developed, the so called adiposity phenotypes. The key for Kretschmer's somatic typology was updated, the body frame types were characterised from the point of view of body mass and adiposity and from the point of view of occurrence of any musculoskeletal pain of the spine and aortic blood pressure values.

The specified objective of the research was completed by analysis of the results of the research conducted by the author, discussion and formulation of final conclusions.