

Dynamics of anthropometric characteristics and body composition growth among adolescents (12-15) years old

Abstract

Background: Although the accurate prediction of the future growth of children and adolescents is still a challenge for all those interested in studying the growth processes, Anthropometric Characteristics and Body Composition is considered one of the most reliable means in describing the human body and following up the development of physical growth processes in various stages of age, especially adolescence.

Purpose: The study aimed to identify the differences and the dynamics of the anthropometric characteristics and body composition growth between adolescents based on age stage with emphasis on urban and rural areas.

Method: The study consisted of (600) students (12-15 Y) divided into (6) age stages (100 students for each stage) based on age/year. It was estimated by using some devices (electronic weighing scale - stadiometer - tape measure - Body Fat Burer).

Results: There were statistically significant differences among adolescents in the age stages (12.6-12 Y), (12.6 -13 Y) and (13-13.6 Y) between rural and urban areas in most anthropometric characteristics and body composition variables. In addition, there were no statistically significant differences were observed between rural and urban adolescents. The age

stages from 14 Y till 15 Y for adolescents in rural as well as urban were observed the maximum growth rates for some anthropometric characteristics (height – weight - arm length - thigh circumference - calf circumference- chest circumference - pelvic circumference).

Conclusion: the adolescent's growth rates in the rural areas of some anthropometric characteristics and body composition variables indicated a good result relative to the urban areas. The dietary intake, surrounding environment and daily lifestyle have a great effect on growth processes and rates.

Key words

Anthropometric characteristics, body composition, adolescents.