

## **BIOMECHANICAL CONTROL OF THE VERTICAL POSE'S STATIC STABILITY IN ONTHOGENESIS**

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**INTRODUCTION:** The localization of the human body's general mass center (GMC) depends on the distribution of the separate body links. Any changes in the human body caused by its mass to move and its previous proportion to infringe, evoke changes in the localization of the center of gravity. The objective of this research is to study the biomechanical structure of the human body's orthograde pose in onthogenesis.

**METHODS AND PROCEDURES:** Age peculiarities of GMC localization are caused by the non-equal dimensions of the head, extremities and separate body parts and also by changes in these body links' mass proportion during the growth period. They are connected with the human body's orthograde posture characteristics which have been acquired in each age period beginning with the child's first standing and ending with aging. In order to achieve this objective we used the stabilography method as one of the simplest and most quietly sensitive methods for the evaluation of the dynamics and quality of vertical pose maintenance.

**RESULTS AND DISCUSSION:** The detailed learning of general center of gravity localization with aging changes' correlation is of a certain interest for an understanding of separate body links' masses displacement in the organism's growth and not only for developing biostatics and biodynamics characteristics in the organism's growth and aging, but also for understanding the role of the gravity force in developing some anatomical-physiological characteristics of the supporting-motion apparatus that will expand the possibilities of effective control for improving movement.