

Abstract:

In this thesis is a summary of methods which specify body composition and are used in a clinical practice. In this time, these problems increase in importance because of high growth of overweight and obesity in population. Body mass index which is very often used in assessment of obesity does not inform about ratio between fat mass and fat free mass. There are also described particular somatotypes, a proper body composition, including an issue of distribution. There are also defined both particular models of body composition and methods of estimation targeted on anthropometry and caliperation, when the percentage of fat is calculated on the base of thickness of particular skinfolds, according to relevant predictive equations. Then there are described biophysical and biochemical methods used for the estimation of body composition, eg. Bioelectrical impedance analysis, Dual Energy X-Ray Absorptiometry, ultrasonography, etc. The method of biospectroscopic determination of corporal compartments is also very popular. It uses the body composition monitor and this completely non-invasive method provides many possibilities of usage in a clinical practice.