Abstract

Objective: to determine variation on somatotype and waist circumference (WC) in university students during a three-year follow-up.

Methods: a total sample of 36 first-year university students was recruited in 2012. Heath-Carter anthropometric somatotype and waist circumference were assessed in 2012 and 2014. Results: male students showed mesomorph component (3.7-5.3-1.8) as dominant in 2012, while in 2014 endomorph and mesomorph components were equal (4.1-4.5-1.6). The somatotype in female students was dominated by endomorphic component in 2012 (5.4-4.6-1.7) and 2014 (5.3-3.2-1.6). Among somatotypes, for both, male and female students, only endomorphy showed statistically significant differences during the follow-up ($p = 0.00$). The endo-mesomorphic somatotype was dominant in men with 61.9% in 2012 and 38.1% in 2014. Women showed a higher percentage for meso-endomorphic somatotype with 60% in 2012 and 80% in 2014. In men, WC between 2014 and 2014 showed a statistically significant increment of 4.8% ($p = 0.00$). In women WC increased by 13.3% but no statistically difference was observed ($p = 0.10$).

Conclusions: this study showed somatotypic change with tendency in increased endomorphy in both men and women. Despite WC values were similar to the national mean, cases with cardiometabolic risk increased during the follow-up period based on this measurement.

Keywords

Somatotype, Waist circumference, University students.