

## Anthropometric evaluation in older individuals in relation to their physical activity level

Laura Capranica, Giancarlo Condello, Simone Falbo, Antonio Tessitore, Roberta Forte, Caterina Pesce

Department of Movement, Human and Health Sciences, University of Rome Foro Italico, Rome, Italy

Individuals older than 55 years tend to adopt sedentary lifestyles (European Commission, 2014) and unhealthy eating attitudes (Ahmed and Haboubi, 2010), which lead to an increase of body fat and risks of non-communicable diseases (Rosembloom and Bahnes, 2006; Sallinen et al., 2008). To investigate the association between the level of involvement in physical activity (PA) on anthropometric features with advancing age, height, body mass, waist (WC) and hip (HC) circumference, and triceps skinfold were measured in 20 athletes (training:  $>5$  hrweek<sup>-1</sup>), 37 physically active (structured PA: 2 hrweek<sup>-1</sup>), and 42 sedentary ( $<1$  hrweek<sup>-1</sup>), older individuals (55-84 yrs). Moreover body mass index (BMI), waist-hip (WHi) and waist-height (WHe) ratio, and fat arm index were calculated. A 2 (gender)  $\times$  3 (activity level) verified differences ( $p < 0.05$ ) between groups. No difference for gender emerged for BMI, HC, and WHi. Athletes showed lower ( $p < 0.05$ ) BMI, WC, HC, WHi, triceps skinfold, and arm fat index, and higher height values than physically active and sedentary counterparts. For body mass, a difference ( $p < 0.05$ ) emerged only between athletes with respect to sedentary counterpart. No differences emerged between physically active and sedentary groups. Findings indicate that in older ages only a high physical activity level allows controlling the anthropometric features, thus posing senior athletes at a lower risk of related non-communicable diseases.

### References

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### Keywords

Senior athletes, structured physical activity, anthropometrics.