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SCIENTIFIC RESEARCH



MORPHOLOGICAL CHARACTERISTICS AND BODY COMPOSITION DETERMINATION OF ELITE VOLLEYBALL ATHLETES

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Abstract The purpose of this study was to evaluate the morphological characteristics and body composition of the elite volleyball athletes. One hundred and twenty four males ($n = 124$) were participated in the study, volleyball athletes ($n = 62$) and non athletes ($n = 62$) and were divided into three age-groups: 10-11yr. ($n = 43$), 15-16yr. ($n = 41$) and 18-25yr. ($n = 40$). Measurements of height, body mass, sitting height, armspan, selected diameters, circumferences and skinfolds were obtained. The MANOVA and Scheffe post-hoc test indicated that the elite volleyball athletes present higher values in height, armspan, and had a prevalence in the lower limbs against the trunk. Also, non significant differences were observed in percent body fat between athletes and non-athletes. These findings indicated that Volleyball is a sport that requires specific morphological characteristics such as height, armspan, height ratio, leg length, which may be considered as talent criteria.

Key words: Kinanthropometry, growth and maturation, training, elite volleyball players.

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