ANTHROPOMETRIC, BODY COMPOSITION AND SOMATOTYPE DIFFERENCES OF IRANIAN ELITE FEMALE BASKETBALL AND HANDBALL PLAYERS

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The aims of the present study were: (1) to determine the anthropometric profile, body composition and somatotype of female basketball (B) and handball (H) players, (2) to compare the mean scores among sports and (3) to detect possible differences in relation to competition level. A total of 28 female athletes, all members of the Iranian national teams, participated in the present study. Anthropometric measures required for the calculation of body composition indexes and somatotype components were obtained according to the established literature. Although B and H group had homogeneity in somatotype characteristics (p<0.05). There was a significant difference somatotype characteristics among B and H group (p<0.001). Somatotype characterised as meso-endomorph in B group (3.6, 3.5, 2.4) and H athletes’ somatotype was meso-endomorph (3.6, 4.7, 1.7). There is no significant difference of body mass index, waist to hip ratio (WHR), fat weight, fat percent, fat free weight, WHR and stature, weight and triceps skinfold thickness among B and H group. Anthropometric and body composition variables of elite female basketball and handball players were same. But they had different somatotype characteristics. Selection criteria, hours of training and sport-specific physiological demands during the game could explain the observed differences.