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Body Composition Differences in Elite Young Soccer Players Based on Playing Position

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ABSTRACT The purposes of this study were to compare anthropometric and body compositions (BC) parameters and to identify morphological asymmetries related to the playing position in 104 elite youth soccer players. The following parameters were measured by whole-body bioelectrical impedance analysis: Body Height (BH), Body Mass (BM), Lean Body Mass (LBM), relative Lean Body Mass (LBMr), percentage of Fat Mass (FM), the ratio of Extra Cellular Mass to Body Cell Mass (ECM/BCM), segmental proportion of muscle mass in upper extremities, trunk, lower extremities and percentage differences between the upper (Δ UE) and lower (Δ LE) extremities. The criterion of “playing position” had a significant effect on all of the screened variables except ECM/BCM, FM, LBMr, and Δ UE ($p > 0.05$). There was detected significant differences in Δ LE with respect to playing positions ($F_{(5,98)} = 6.53$, $p < 0.01$, $\eta^2 = 0.25$). Research has shown differences between anthropometric indicators and BC variables in players of different playing positions.