

## **Abstract**

**Title:** Comparison of selected anthropometric parameters of competitive quadrathletes and racing kayakers.

**Objectives:** The aim of this work is to assess the somatotype and anthropometric characteristics in elite athletes in marathon kayakers and quadrathletes.

**Methods:** This research included the analysis and comparison of two groups of athletes. Using the Heath-Carter system of measurement, somatotypes were calculated using the computer formula, 'Somatotype – Calculation and Analysis'. Body composition was determined through the use of skinfold calipers SK in conjunction with noninvasive bioelectrical impedance analysis (BIA). Specifically, the Tanita 980 MS and BIA 2000 measurement units.

**Results:** Two research samples were developed (speed kayakers as one, quadrathletes as the other), whose results (set average) were compared. On the basis of anthropometric data and calculations, it was found that both research samples corresponded in their somatotype category, ectomorphic mesomorph. According to this research, the speed kayakers (with a focus on marathon distances), are generally taller and heavier than the quadrathlete sample, yet had relatively less body fat.

**Keywords:** Somatotype, body composition, BIA, skinfold, quadrathlon, flatwater kayaking