

## **Physical fitness and anthropometrical profile of the Brazilian male judo team.**

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The present study had as objectives (1) to compare the morphological and functional characteristics of the male judo players of the Brazilian Team A (n=7) with the judo players of Teams B and C (reserves; n=15), and (2) to verify the association between the variables measured. Thus, 22 athletes from the seven Olympic weight categories were submitted to: a body composition evaluation (body mass, height, ten skinfolds, eight circumferences, three bone diameters and percent body fat estimation); the Special Judo Fitness Test (SJFT); maximal strength tests (one repetition-maximum, 1 RM, in bench press, row, and squat); and the Cooper test. One-way analysis of covariance was used to compare the groups. The relationships between variables were determined by the Pearson coefficient correlation. The significance level was fixed at 5%. No significant difference was found in any variable between them. The main significant correlations observed were between the following variables: VO<sub>2</sub>max and number of throws in the SJFT (r=0.79); percent body fat and estimated VO<sub>2</sub>max (r=-0.83) and number of throws in the SJFT (r=-0.70); chest circumference and bench press 1 RM (r=0.90) and in the row (r=0.80); and thigh circumference and squat 1 RM (r=0.86). However, there was no significant correlation between circumferences and 1 RM/kg of body mass. According to these results the main conclusions are: (1) the physical variables measured do not discriminate performance when analysis is directed to the best athletes; (2) a higher percent body fat is negatively correlated with performance in activities with body mass locomotion (Cooper test and the SJFT); (3) judo players with higher aerobic power performed better in high-intensity intermittent exercise; (4) judo players with bigger circumferences present bigger absolute maximal strength.