

Evaluation of physiological characteristics of female handball athletes #78

Rafael Paludo Vargas¹, Deise Daniele Dick¹, Paulo Ricardo Nunez², Arnaldo Tenório da Cunha Júnior³.

¹University of Contestado-UnC, Concórdia-SC; ²UNIDERP, Campo Grande-MS, Brazil; ³Federal University of Alagoas – Campus Arapiraca, Arapiraca-AL, Brazil.

E-mail: deise.fisioterapia@yahoo.com.br

The handball is characterized by a variety of movements accomplished with intensity alternation. In this way, the knowledge about the predominant energy sources in the actions, with the intention of bringing more effectiveness to the structuring and the prescription of the training, becomes fundamental. Because of that, the objective of this study was to determine the physiological characteristics of female handball athletes. The sample was constituted of 20 female athletes, participants of the Associação Atlética Universitária de Concórdia team - SC, in 2007. The maximum aerobic power (Bruce Protocol); maximum anaerobic power (Wingate Test) and lactate threshold were evaluated. The obtained results were: VO_{2max} $45.3 \pm 3.0 \text{ mL} \cdot \text{kg}^{-1} \cdot \text{min}^{-1}$; maximum anaerobic power $10.1 \pm 1.2 \text{ Watts} \cdot \text{kg}$; early lactate $2.9 \pm 0.8 \text{ mmol} \cdot \text{L}$ and late lactate $5.2 \pm 1.9 \text{ mmol} \cdot \text{L}$. The results demonstrate that the athletes present values inside the reference patterns for female handball athletes. The evaluated variables in this study, when associated to other intervening factors for the performance, contribute in a significant way as parameters for the diagnosis of the athletes' training status, as well as for the elaboration of an individualized training program, seeking an improvement of the performance.

Key words: VO_{2max} ; exercise test; sports.