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#### **REVIEW**

on the monograph "Specific loads and relative indices of physical performance and maximum oxygen consumption of female judokas",

authors: Manolachi Victor, Mrut Ivan, Manolachi Veaceslav

The study of the maximum oxygen consumption (MOC) physical and performance of athletes is widely implemented in practice in the sports medicine field, the coaches, teachers and researchers activity. The rather high information content of the PWC<sub>170</sub> and methodological test its simplicity contributes to the fact that it is used not only by physicians, but also by trainers.

Currently, standards and norms have been developed, being necessary for assessing the results of individual testing physical performance maximum and oxygen consumption (MOC) not only for athletes, but also during mass examinations of various categories of the population. However, a huge inconvenience is the process of recalculations and mathematical processing, which is hard and time-consuming.

On the basis of numerous studies and empirical experience, the authors propose a new non-traditional approach to determining the relative indices of physical performance and maximum oxygen consumption in female judokas using specific loads (dummy throws over the shoulder). This work presents the results of scientific research on the problems of physical and functional training of female wrestlers. The monograph is presented in two parts. On the basis of the improved method for determining the heart rate "intervalometry", the authors have developed an original method for determining the relative indices of physical performance PWC<sub>170</sub> (V) and the maximum

oxygen consumption MOC/kg with the use of specific loads.

The first part includes the results of studies of special physical training and a method for determining physical working capacity, the second part - the relative indices of the maximum oxygen consumption of female judokas. Each of the parts contains special tables (nomograms) allow to determine the relative indices of physical performance  $PWC_{170}$  (V)/kg maximum and oxygen consumption MOC/kg and get accurate information about the functional state of the athlete, as well as make timely adjustments to the training process. The materials and results of the research, presented in the monograph, were registered in AGEPI and confirmed by certificates for Copyright.

Using the previously method developed by I.D. Mrut for determining the heart rate -"intervalometry", which allows with great accuracy, compared with the usual method of measuring heart rate in 6, 10 or 15 seconds. (the error is 10 - 15% lower) to palpate the heart rate of the subjects, the authors have developed and offer an original and, at the same time, a simple method for determining the relative indices of the maximum oxygen consumption of female judokas.

With the help of special tables nomograms, for judokas of various weight categories and qualifications, tables have been developed that greatly simplify computational procedures and make it possible to speed up the process of obtaining urgent information

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about the functional of the state cardiorespiratory system of the subjects' body.

It should be noted that the innovations and transformations of mathematical formulas and equations applied by the authors are performed correctly.

This monograph can be used both as a methodological guide and as a reference for coaches, teachers, students, undergraduates and PhD students in their pedagogical and research activities, receiving urgent information.

The Monograph prepared by Manolachi Victor, Mrut Ivan and Manolachi Veaceslav recommended for publication in print.

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