



METADATA

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Abstract

This handbook develops issues related to the assessment of physical condition in individuals involved in sports and presents protocols for assessing the components of their physical fitness. The aim is to provide students of Physical Education and Sports and other related schools with the necessary knowledge and skills for their future involvement in competitive sports and recreation, with a focus on the safety of participants and the valid and reliable collection of data. In summary: Chapter 1 provides a detailed description of the necessary components of the medical examination that is a prerequisite before starting any athletic activity. This is followed by a discussion of possible errors that may occur during the tests and lead to incorrect assessment, ways of evaluating the results, and criteria for selecting the most

appropriate tests (chapter 2). Next (chapter 3), the techniques are developed and the specialized equipment required for the implementation of physical composition and body structure assessment protocols is described. This is followed by a detailed description of the methods for measuring cardiac performance (chapter 4), muscle strength and power (chapter 5), maximum oxygen consumption (chapter 6), lactic acid production (chapter 7), speed (chapter 8), and agility. Since biochemical assessment is also performed in modern ergometric centers, internationally accepted protocols for the assessment of hematological indicators are developed (chapter 10). Chapter 11 discusses health and safety issues. Finally, the handbook concludes by providing typical examples of ergometric testing of athletes from various sports (chapter 12).

