Book review

Malićević, S. (2024). SPORTS MEDICINE – SELECTED CHAPTERS¹

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The book "*Sports Medicine – Selected Chapters*" by Prof. Sead Malićević, PhD is a comprehensive guide covering various aspects of the broad domain of sports medicine. Through six thematic sections, it thoroughly examines key topics essential for athletes, coaches, and medical professionals engaged in safeguarding and improving athletes' health.

In the introductory chapter, the author introduces readers to the fundamental concepts of sports medicine, its historical development, and its significance. Underlining that participation in sports activities has become a subject of serious medical research and practice, the chapter presents historical data on the evolution of this domain of medicine. It also provides information on the establishment of key sports medicine associations at both national and global levels, with special attention given to the development of sports medicine in Serbia.

In the second chapter, titled "*Physical Activity and Its Beneficial Effects on Health*", the author addresses the importance of physical activity in maintaining health. This chapter defines physical activity, exercise, and training—terms that are often used interchangeably but should not be. The author analyzes methods of measuring and expressing the range of physical activity, as well as the principles of physical activity programming. Principles such as individuality, specificity, progressive overload, and disuse are explained in detail, with a particular focus on dosage, monitoring, and evaluation of physical activities.

The chapter "*Physical Fitness*" explores physical fitness through its anthropomorphic, bioenergetic, and functional determinants. The author explains how body height, weight, body mass index, waist-to-hip ratio, body surface area, and body composition influence physical fitness. The functional capacities of the cardiovascular, respiratory, and muscular systems are thoroughly examined, alongside functional ability metabolic factors such as energy sources for ATP resynthesis in muscles and muscle fibre types. Special attention is given to the physical fitness of children, women, the elderly, and individuals with disabilities, highlighting specific needs and tailored approaches.

The fourth chapter, "*Physical Activity in the Prevention and Treatment of Chronic Non-Communicable Dis*eases", provides a comprehensive insight into the role of physical activity and exercise as key factors in preventing and treating chronic non-communicable diseases such as obesity, diabetes, cardiovascular diseases, osteoporosis, etc. Based on contemporary scientific evidence, the author explains the physiological mechanisms through which regular physical activity benefits various organ systems, improves quality of life, and reduces the risk of chronic non-communicable diseases. The effects of regular physical activity are particularly emphasized, along with concrete examples of exercises for preventive and therapeutic purposes across different age groups, including children, adolescents, adults, and seniors. The chapter also scientifically analyzes and presents the issue of physical inactivity, which has become one of the most pressing global public health concerns. Special attention is given to obesity, a major health challenge both today and in the future. The author has extensively researched the relationship between physical activity and childhood obesity in his doctoral dissertation, and this chapter presents the most critical aspects of this significant health issue, which can have severe consequences health-wise.

Engaging in sport and exercise can also lead to adverse effects, as discussed in the chapter "*Negative Impacts of Physical Activity*", which covers topics such as fatigue, overuse, and sports injuries. The author explains different types of fatigue and recovery strategies. The phenomenon of overuse, which poses a risk to every athlete, is analysed in detail, including its prevention and treatment methods. Particular emphasis is placed on sports injuries, their

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epidemiology, first aid, and prevention. The chapter also explores sports injuries beyond the musculoskeletal system and specific measures for their treatment and prevention.

The sixth chapter covers additional areas within the broad field of sports medicine, including *sports nutrition and supplementation, doping, cardiopulmonary resuscitation, regular medical check-ups for athletes, and the role of sports medicine in sports clubs.* The author provides a thorough analysis of the daily energy requirements of physically active individuals, including macronutrient, micronutrient, and water intake, offering practical advice on ensuring optimal sports nutrition. Doping and its health risks, and even life-threatening consequences for an athlete, are examined in depth, alongside the doping control process and organizations responsible for enforcing anti-doping regulations worldwide and in Serbia. Sports medical check-ups are explained in the context of the Law on Sport, emphasizing their importance in assessing athletes' health status and enhancing training processes and sports performance. Another section is dedicated to cardiopulmonary resuscitation and heart defibrillation, providing specific algorithms and instructions for responding to emergencies outside medical facilities, including on sports fields. Finally, the book thoroughly discusses the role of sports medicine doctors in sports clubs, a topic the author is well-qualified to address due to his extensive experience with the Partizan Football Club.

The bibliography used in writing this book is meticulously listed at the end of the book, clearly categorized into original research papers, professional guidelines, monographs, books, and sports-related legal acts. Such organization provides readers with valuable resources for practical application.

The book "*Sports Medicine – Selected Chapters*" by Prof. Sead Malićević, PhD is primarily intended for students at the College of Sports and Health. However, it is also beneficial for anyone seeking to acquire a comprehensive understanding of key aspects of sports medicine. This book is an indispensable guide for those looking for scientifically grounded approaches to health promotion and disease prevention through physical activity, as well as for those who engage in sports on their own, because it provides them with know-how related to enhancing their sports performance while maintaining good health. Therefore, it is recommended not only for students but also for coaches, healthcare professionals, recreational population, and professional athletes.

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