

BOOK REVIEW

**PRINCIPLES OF EXERCISE PRESCRIPTION BY MILIND V. BHUTKAR
ON SPORTS PHYSIOLOGY**

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Prof. Milind V Bhutkar is currently working in the Department of Physiology, MR Medical College, Gulbarga. He is a member of Indian Federation of Sports Medicine (IFSM) and has deep interest in exercise and sports physiology. He has several research publications and presentations to his credit and is an avid writer with many articles published in various newspapers and magazines.

In the recent times, more and more people are becoming aware of the requirement of physical activity for maintenance of health. In this electronic age, keeping fit has become a universal concern. With a link between regular exercise and good health being established, exercise physiology is assuming an increasingly important role in health set up. India's win at Beijing Olympics has also created a lot of interest in exercise and sports among Indian masses. This book is a timely publication to meet this growing interest. The author in his preface highlights the dilemma faced by a person who seriously takes up exercise for example which exercise, how often, how long, at what intensity and with what precautions. The author asserts that this book has answers to most of such questions and helps in dispelling many unfounded misconceptions. The simple format and writing style aids in

this understanding. The specially designed logos to highlight critical points in the text are a delight to the reader (e.g. 'zoom in the concept', 'why box explanations' and 'myth busters').

In the history section, the author has appropriately exemplified the fact that history of exercise in the form of sports is as old as our existence. The book describes history from the Indian mythology figure "Hanuman" to Greek mythological figure "Hercules". The author has stressed that wrestling was a popular sport in many parts of India and wrestlers were supported by many princely states. Thus history of sports can be traced back to ancient days, but development of exercise as a science is a recent phenomenon. The author has also busted the common myth that only athletes need to know about exercise physiology. The fact is, that all of us should be aware of the principles of exercise physiology. The concept of 'Use it or lose it' has been beautifully quoted in this regard.

The concept of exercise, fitness and exercise programme is explained in the first few chapters. The question that 'why people approach an exercise consultant' is also addressed in details. Although in our society awareness about exercise practices is still in its infancy, it is slowly on a rise. Media

coverage has caused health awakening and resulted in springing up of health clubs, gymnasiums and spas. The chapters on basic physiology of heart and skeletal muscles at rest and during exercise are explicit. These chapters also cover the relevant aspect of energy metabolism and are loaded with information. Readers need to consult reference books for real understanding of the physiological and biochemical aspects. I feel that the author should have restricted to general principles rather than packing all details in the limited space, especially, to be congruent with the section of readers he targeted.

Principles and methods of fitness development are explained in details. The benefits of exercise in terms of improvement in the functions of cardiovascular system, respiratory system, functions of muscles, bones and joints are also dealt with. The tangential benefits like antidepressant and sedative effect, anti aging effect, cure for insomnia and obesity are well explained in the text. There are separate chapters on aerobic and resistive training. Various adaptations, attributes of such programmes and its benefits are also discussed. The theory of development and assessment of muscular fitness is described minutely. Guidelines for evaluations of muscular fitness are also listed. Apart from discussing the principles of exercise physiology, the book also covers burning topic such as Obesity and Life style change. A chapter on 'Body composition' is aptly followed by a

chapter on perceptions, facts and possible solutions to obesity.

Health assessment strategies before starting an exercise programme has been highlighted and various precautions during exercise have been listed. It has also been emphasised that exercise prescription is a process whereby a person's physical activity regimen is formulated in a systematic and individualised manner, taking into account present fitness status and goal of training. The author at the end of the book has given some standard specimen exercise prescriptions. He has concluded with 'The mind over body' concept and has described steps to train the mind with tools like mental change, maintaining the motivational state and acceptance of self.

The book has been written based on intensive research by the author and many relevant references. Anyone seriously interested in understanding basics of exercise physiology and scientific rationale behind formulation of exercise programmes will enjoy reading this book. The author has endeavoured to explain too many concepts. The reader should read slowly and consult text books wherever necessary. The author has given the references but without the year of publication in most of them. Furthermore the style of writing references is not uniform. The book is concise and shall be a great help for exercise physiology students, fitness instructors, health promotion counsellors, students in sports sciences and health educators.

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