Biochemical Basis of Sports Performance

A superb introduction for students, coaches, and athletes

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Some understanding of the biochemistry of exercise is fundamental to any study of the factors that contribute to sports performance. It is the physical, chemical and biochemical properties of cells and tissues that determine the physiological responses to exercise, and yet the teaching of exercise biochemistry is poorly developed compared with exercise physiology. Where the subject is taught at all, the student often finds the approach somewhat daunting, with its focus on thermodynamics, chemical structures and metabolic pathways.

The aim of this book is to introduce the student of sports science or exercise physiology to the biochemical processes that underpin exercise performance and the adaptations that occur with training. The focus is on skeletal muscle metabolism and the provision of energy for working muscles.

- Examine the underlying principles of biochemistry
- Explore numerous links between biochemistry and physiology, which closely reflect the way sport science should be taught
- Get valuable insight into the relevance of metabolism to performance in different sports
- Learn the science of recovery and the biochemical processes that influence recovery and restoration of performance capacity
- Explore the role of diet in fuel provision
- See how heredity shapes sporting talent

Broad and Specific Subjects:
- Clinical Medicine
  - Sports Medicine
- Life & Biomedical Sciences
  - Biochemistry & Biophysics; Cell Biology; Immunology

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