collection of respiratory care texts, and quite likely an often-used one.

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Physiology of Sport and Exercise, 3rd edition. Jack H Wilmore PhD and David L Costill PhD. Champaign, Illinois: Human Kinetics. 2004. Hard cover, illustrated, 726 pages, $75.

The third edition of **Physiology of Sport and Exercise**, published in 2004, is improved and expanded over the original 1994 and 1999 editions. Jack Wilmore PhD and David Costill PhD have compiled a comprehensive, large, hardbound textbook that includes 21 chapters in 7 sections. It has 726 pages, with more than 300 color graphs and illustrations that help explain important concepts. The book refers the student to a free, online, self-assessment study guide at http://www.humankinetics.com/physiologyofsportandexercise/osg, which includes interactive activities, feedback, flowcharts, lists of key concepts from each chapter, and self-assessment quizzes. That Web site gives the student a convenient method of self-paced review, skill practice, and interactive knowledge development. The authors also provide a wealth of information and resources for the instructor, in various media. The latest book revisions include the most recent and important findings in research since the previous edition was released.

The authors kept the features that made the original book popular with students, and other attributes were added. Each chapter begins with a chapter overview and an outline that includes page numbers, to assist in locating topics. Other features that promote easy-reading include the highlighted areas, which jump out to catch the reader's eye, impressing the importance of certain facts. Author-designated "Key Points" sections are highlighted in violet colored boxes to thumb through for quick review. "Key Terms" are printed in red, alphabetically listed at the end of each chapter, and included in the book's glossary. Spread throughout the text are green-highlighted review boxes that recap the most important points. Additional blue "fyi" boxes insert interesting facts related to the chapter material. Each chapter provides study questions to allow the student to review for knowledge assessment. Finally, each chapter closes with references and suggested readings. There is also a full glossary and a complete index.

The material is well organized; the text flows well and is easy to read. The pictures and diagrams contribute to further clarity of the material presented. The online access to study materials is an extra bonus that enhances the benefits of this book for the student and teacher. I wish I had this book when I was a student! I found no inaccuracies of facts or typographical errors in the book.

The introduction portion of the book is a comprehensive, 21-page historical review of the science and development of physiology in sport and exercise as they have materialized from other basic sciences. Parts I through III review the physiologic systems and their responses to exercise, both in the acute setting and with long-term training.

Part I, which includes the first 3 chapters, is titled "Essentials of Movements." The focus is on how the muscle and neurologic systems coordinate during movement of the human body, especially with exercise. Part II discusses how the endocrine system regulates metabolism and how the basic energy systems of the body provide the energy that allows movement. Part III (Chapters 7–9) discusses the interaction of the cardiovascular system with the respiratory system to deliver oxygen to the body's systems and remove the metabolic waste by-products and carbon dioxide. The section also elaborates on how the cardiovascular and respiratory systems adapt to aerobic training.

Part IV examines the body's responses and adaptations to unusual environmental conditions. Environmental issues such as thermoregulation and hypobaric, hyperbaric, and microgravity conditions are discussed in detail.

Part V evaluates the ways athletes can best optimize physical performance. Chapters 12–15 discuss the effects of training methods, nutrition balance, and substances reported to improve athletic performance ("ergogenic aids"). Chapter 14 discusses the appropriateness of various body builds and compositions for different sports, and the delicate issue of weight standard in certain sports.

Part VI is titled "Age and Sex Considerations in Sport and Exercise." The 3 chapters in this section explore how the general principles of exercise and sport physiology can be more specifically applied as the athlete grows and develops from child to adolescent to adulthood. The authors discuss how the different life stages affect physiologic capacity and performance, the effects of women's issues on training, and the biological differences between women's and men's response to training and exercise.

Part VII, "Physical Activity for Health and Fitness," puts all the pieces together to apply the information from the previous chapters to suggest ways to prevent and treat various diseases. Chapter 19 discusses the latest in diagnostic techniques for medical clearance prior to starting an exercise program. The final chapters devote a section to exercise for rehabilitation, for various reasons, and prescriptions for maintenance of fitness levels once achieved. The book finishes with an in-depth look at prevention and treatment of cardiovascular diseases, obesity, and diabetes as they relate to physical activity.

The target audience is undergraduate college students, which could include various disciplines, primarily exercise physiology and physical education, but also possibly an advanced 4-year respiratory therapy program. A typical associate's degree respiratory program would not have the time to cover this material to the depth presented in this textbook.

As I read through this comprehensive book, I was very impressed with the depth and scope of knowledge, the excellent presentation style, and the high quality illustrations.

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Fundamentals of Lung and Heart Sounds, 3rd edition. Robert L Wilkins PhD RRT FAARC, John E Hodgkin MD, Brad Lopez EdD RRT. St Louis: Mosby/Elsevier. 2004. Soft cover (with CD-ROM), illustrated, 175 pages. $52.95.

As a nurse educator, one of my most difficult tasks is to help students learn the proper technique of chest auscultation and to correlate the findings with the patient's condition. This text, **Fundamentals of Heart and Lung Sounds**, and its accom-