

HUMAN KINETICS

Physiology of Sport and Exercise

2015

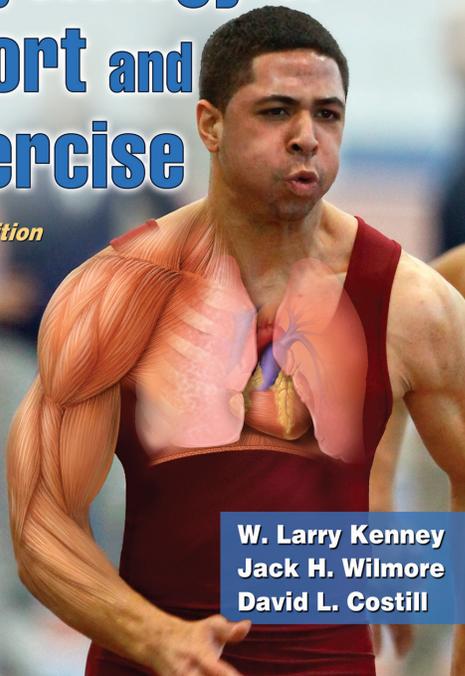


HUMAN KINETICS

The Information Leader in Physical Activity & Health

Physiology of Sport and Exercise

Fifth Edition

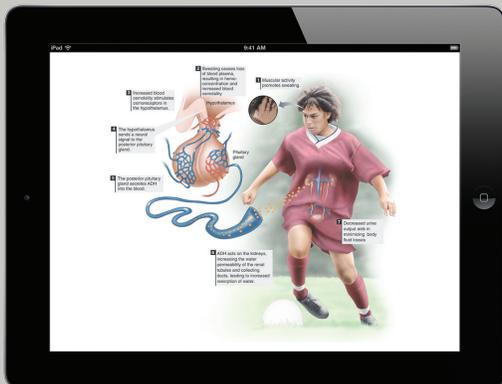


W. Larry Kenney
Jack H. Wilmore
David L. Costill

New edition coming summer 2015

Animations

Physiology of Sport and Exercise, Fifth Edition, has been improved with full-color animations to supplement the text. This upgraded ancillary brings 18 full-color art animations to life to offer a higher level of detail and clarity to better illustrate how the body performs and responds to physical activity. The animations are now available as an ancillary resource, and have been incorporated into the student web study guide. They are also included in the enhanced e-book format, featuring the same trusted content found in the print edition, available from the Apple iBookstore, Amazon, and Barnes & Noble.



Explore the body's response to physical activity

Audiences: Textbook for undergraduate courses in exercise physiology.

Physiology of Sport and Exercise, Fifth Edition With Web Study Guide, delivers superior technical content while maintaining the accessible, reader-friendly format that has made this textbook a favorite of instructors and students alike. Completely revamped photos, illustrations, and medical artwork offer a higher level of detail and clarity to better illustrate how the body performs and responds to physical activity.

Physiology of Sport and Exercise, Fifth Edition, features updated content based on recent research in the field, including the following:

- A complete rewrite of the chapters on resistance training, including updated strength training principles based on the ACSM position stand and new sections on core strength, stability training, and high-intensity interval training (HIIT)
- A full update and reorganization, based on instructors' feedback, of the chapters on metabolism and hormonal control to aid students' comprehension of these complex systems
- New content on lactic acid as a fuel source, muscle cramps, childhood obesity, substrate utilization and endocrine response to exercise, and vascular aging
- Updated coverage of central and peripheral cardiac functions, the female athlete triad, and the menstrual cycle
- New research on effects of physical activity on health, including the addition of international data on the incidence of cardiovascular disease and obesity

Physiology of Sport and Exercise, Fifth Edition With Web Study Guide

W. Larry Kenney, PhD, Jack H. Wilmore, PhD, and David L. Costill, PhD

©2012 • Hardback • 640 pp

Print: ISBN 978-0-7360-9409-2 • \$108.00 (£64.99 UK, €84.50 EURO)

E-book: ISBN 978-1-4504-2108-9 • \$57.00 (£38.99 UK, €50.70 EURO)

HK Rewards members: \$86.40 US (print) • \$45.60 US (e-book)

Ancillaries

Free to course adopters and available at

www.HumanKinetics.com/PhysiologyOfSportAndExercise.

Instructor guide. Includes sample lecture outlines, key points, and student assignments for every chapter in the text, along with sample laboratory exercises, and direct links to a wide range of detailed sources on the Internet.

Test package. Features a bank of more than 1,600 questions, including true-or-false, fill-in-the-blank, essay and short-answer, and multiple-choice. The test package is available for use through multiple formats, including a learning management system, Respondus, and rich text.

Presentation package plus image bank. Includes 1,171 PowerPoint slides of text, photos, and artwork from the book that instructors can use for class discussion and illustration. The image bank features all of the improved illustrations and artwork, content photos, and tables from the text, sorted by chapter.

The presentation package plus image bank is also available for purchase.

ISBN 978-1-4504-1400-5 • \$304.00 (£249.99 UK, €325.00 EURO)

Web study guide. Includes learning activities, a Key Terms activity in each chapter, quizzes, a glossary of terms, and links to professional journals as well as information on organizations and careers. In addition, art animations bring 18 images and figures from the text to life, providing a dynamic new way to experience course material.

The web study guide is also available for purchase separately.

ISBN 978-1-4504-2345-8 • \$30.00 (£9.99 UK, €13.00 EURO)

CLINICAL EXERCISE PHYSIOLOGY

THIRD EDITION

Jonathan K. Ehrman
Paul M. Gordon
Paul S. Visich
Steven J. Keteyian

Investigate the relationship between exercise and chronic disease

Audiences: Text for upper-undergraduate and graduate-level clinical exercise physiology courses; study resource for the ACSM Registered Clinical Exercise Physiologist exam.

Clinical Exercise Physiology, Third Edition, provides a comprehensive look at the clinical aspects of exercise physiology by thoroughly examining the relationship between exercise and chronic disease. It provides students with fundamental knowledge of disease-specific pathology and treatment guidelines while also guiding readers through exercise testing and training principles for patients with chronic diseases.

The third edition builds on information presented in the previous editions with reorganized chapters, updated and revised content, and the latest information on the key practice areas of clinical exercise physiology: endocrinology, the metabolic system, the cardiovascular system, the respiratory system, oncology, the immune system, bone and joint health, and the neuromuscular system.

Updates to this edition include the following:

- Patient case studies allow students to gain additional insight regarding the material and put their knowledge into practice.
- A new chapter on intellectual disability lends evidence to how the field has evolved in considering patients with more widely diagnosed diseases and conditions.
- Practical application boxes offer tips on maintaining a professional environment for client–clinician interaction, a literature review, and a summary of the key components of prescribing exercise.
- Discussion questions highlight important concepts to encourage critical thinking.

Clinical Exercise Physiology, Third Edition

Jonathan K. Ehrman, PhD, Paul M. Gordon, PhD, Paul S. Visich, PhD, and Steven J. Keteyian, PhD

©2013 • Hardback • 776 pp

Print: ISBN 978-1-4504-1280-3 • \$94.00 (£63.99 UK, €83.20 EURO)

E-book: ISBN 978-1-4504-5898-6 • \$52.00 (£35.99 UK, €46.80 EURO)

HK Rewards members: \$75.20 US (print) • \$41.60 US (e-book)

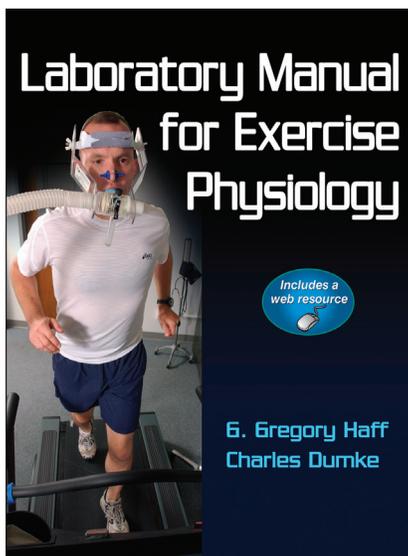
Ancillaries

Free to course adopters and available at www.HumanKinetics.com/ClinicalExercisePhysiology.

Test package • Presentation package plus image bank

The presentation package plus image bank is also available for purchase.

ISBN 978-1-4504-4254-1 • \$295.00 (£238.99 UK, €310.70 EURO)



Hands-on training for exercise physiology testing and data analysis

Audiences: Textbook for undergraduate exercise physiology laboratory courses or other exercise science lab courses covering measurement and evaluation.

Laboratory Manual for Exercise Physiology With Web Resource covers basic testing procedures used in the assessment of human performance, health, and wellness, exposing students to testing that can be applied in a variety of professional settings. The book's 15 labs, encompassing 49 laboratory activities, lead students through a series of learning opportunities that explore the basics of testing and pretest screening as well as methods of evaluating flexibility, blood pressure, oxygen consumption and energy expenditure, aerobic and anaerobic fitness, lactate metabolism, muscular strength, pulmonary function, body composition, and electrocardiogram assessments.

Instructors will find that *Laboratory Manual for Exercise Physiology* offers great flexibility in choosing the activities that suit the needs of their course and their students. The activities can be adapted to specific lab settings, available equipment, and time allotted.

Laboratory Manual for Exercise Physiology: Predictions, Equations, and Test Methods With Web Resource

G. Gregory Haff, PhD, and Charles Dumke, PhD

©2012 • Paperback • 464 pp

Print: ISBN 978-0-7360-8413-0 • \$72.00 (£48.99 UK, €63.70 EURO)

E-book: ISBN 978-1-4504-2119-5 • \$38.00 (£25.99 UK, €33.80 EURO)

HK Rewards members: \$57.60 US (print) • \$30.40 US (e-book)

Ancillaries

Free to course adopters and available at www.HumanKinetics.com/LaboratoryManualForExercisePhysiology.

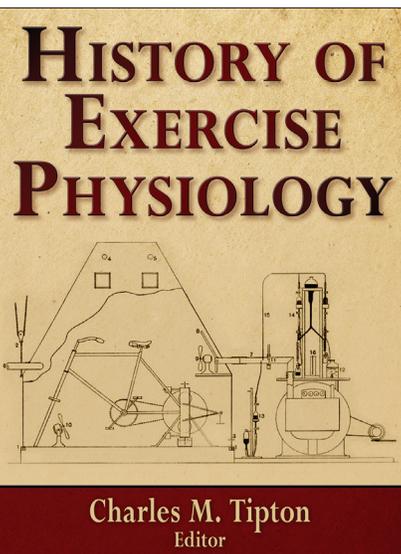
Image bank • Web resource

The image bank is also available for purchase.

ISBN 978-1-4504-1337-4 • \$304.00 (£249.99 UK, €325.00 EURO)

The web resource is also available for purchase separately.

ISBN 978-1-4504-2575-9 • \$20.00 (£9.99 UK, €13.00 EURO)



New!

Access the leading authorities on exercise physiology in a single source

Audiences: A comprehensive reference and textbook primarily for students in upper-level courses on special topics in exercise physiology.

History of Exercise Physiology brings together leading authorities in the profession to present this first-of-its-kind resource that is certain to become an essential reference for exercise physiology researchers and practitioners. The contributing authors were selected based on their significant contributions to the field, including many examples in which they were part of seminal research. The result of this vast undertaking is the most comprehensive resource on exercise physiology research ever compiled.

Exercise physiology research is ongoing, and its knowledge base is stronger than ever. But today's scholars owe much of their success to their predecessors. The contributors to this book believe it is essential for exercise physiologists to understand the past when approaching the future, and they have compiled this reference to aid in that process. The text includes the following features:

- A broad scope of the primary ideas and work done in exercise physiology from antiquity to the present
- A review of early contributions to exercise physiology made by Scandinavian scientists, the Harvard Fatigue Laboratory, German laboratories, and the Copenhagen Muscle Research Centre
- The incorporation of molecular biology into exercise biology and physiology research that paved the way for exercise physiology
- An explanation of the relationship between genomics, genetics, and exercise biology
- An integrative view of the autonomic nervous system in exercise
- An examination of central and peripheral influences on the cardiovascular system
- An in-depth investigation and analysis of how exercise influences the body's primary systems
- A table in most chapters highlighting the significant research milestones

Well illustrated with figures and photos, *History of Exercise Physiology* helps readers understand the research findings and meet the most prominent professionals in the field. From studying great thinkers of antiquity and cutting-edge work done by pioneers at research institutions, to exploring the inner workings of all the body's systems, researchers will gain a precise understanding of what happens when human bodies move—and who influenced and furthered that understanding.

History of Exercise Physiology

Charles M. Tipton, PhD, Editor

©2014 • Hardback • 608 pp

Print: ISBN 978-0-7360-8369-0 • \$119.00 (£80.99 UK, €105.30 EURO)

E-book: ISBN 978-1-4504-8235-6 • \$65.00 (£43.99 UK, €57.20 EURO)

HK Rewards members: \$95.20 US (print) • \$52.00 US (e-book)

Table of Contents

Part I: Antiquity, Early Laboratories, and Entering the 21st Century

Chapter 1. Antiquity to the Early Years of the 20th Century

Charles M. Tipton

Chapter 2. Influence of Scandinavian Scientists in Exercise Physiology

P.-O. Åstrand

Chapter 3. Contributions From the Harvard Fatigue Laboratory

Charles M. Tipton and G. Edgar Folk, Jr.

Chapter 4. Contributions From German Laboratories

Wildor Hollmann

Chapter 5. PhD Specialization and Incorporating Molecular Biology Into Exercise Biology and Physiology Research

P. Darrell Neuffer and Charles M. Tipton

Chapter 6. Contributions From Copenhagen Muscle Research Centre

Peter B. Raven, Michael Kjaer, and Ylva Hellsten

Chapter 7. Genomics, Genetics, and Exercise Biology

Claude Bouchard and Robert M. Malina

Part II: A Century of Discoveries (1910-2010)

Chapter 8. The Sensorimotor Nervous System

Phillip F. Gardiner and V. Reggie Edgerton

Chapter 9. The Autonomic Nervous System in Exercise: An Integrative View

Katarina T. Borer

Chapter 10. The Respiratory System

Brian J. Whipp and Susan A. Ward

Chapter 11. The Oxygen Transport System: Maximal Oxygen Uptake

Peter G. Snell, Benjamin D. Levine, and Jere H. Mitchell

Chapter 12. The Cardiovascular System: Central Influences

Charles M. Tipton

Chapter 13. The Cardiovascular System: Peripheral Circulation

Grant H. Simmons, Bruno Roseguini, Jaume Padilla, and M. Harold Laughlin

Chapter 14. The Muscular System: Muscle Plasticity

Kenneth M. Baldwin, and Fadia Haddad

Chapter 15. The Endocrine System: Actions of Select Hormones

Peter A. Farrell, and Henrik Galbo

Chapter 16. The Gastrointestinal System

G. Patrick Lambert

Chapter 17. Metabolic Systems: Substrate Utilization

Andrew R. Coggan

Chapter 18. Metabolic Systems: The Formation and Utilization of Lactate

George A. Brooks

Chapter 19. The Temperature Regulatory System

Suzanne Schneider and Pope Moseley

Chapter 20. The Renal System

Jacques R. Poortmans and Edward J. Zambraski

Chapter 21. The Immune System

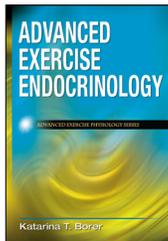
Roy J. Shephard

Chapter 22. The Skeletal System

Sarah L. Manske, Grant C. Goulet, and Ronald F. Zernicke

Advanced Exercise Physiology Series

This series offers books for advanced undergraduate and graduate students as well as professionals in exercise science and kinesiology. The books highlight the complex interaction of the components of the various systems both at rest and during exercise, and offer an explanation of the system and how it is affected by acute exercise and chronic exercise training.



Advanced Exercise Endocrinology

Katarina T. Borer, PhD

©2013 • Hardback • 272 pp

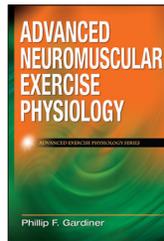
Print: ISBN 978-0-7360-7516-9

\$94.00 (£63.99 UK, €83.20 EURO)

E-book: ISBN 978-1-4504-3666-3

\$67.00 (£45.99 UK, €59.80 EURO)

HK Rewards members: \$75.20 US (print) • \$53.60 US (e-book)



Advanced Neuromuscular Exercise Physiology

Phillip F. Gardiner, PhD

©2011 • Hardback • 248 pp

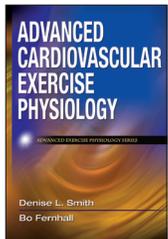
Print: ISBN 978-0-7360-7467-4

\$84.00 (£56.99 UK, €74.10 EURO)

E-book: ISBN 978-1-4504-0721-2

\$59.00 (£39.99 UK, €52.00 EURO)

HK Rewards members: \$67.20 US (print) • \$47.20 US (e-book)



Advanced Cardiovascular Exercise Physiology

Denise L. Smith, PhD, and Bo Fernhall, PhD

©2011 • Hardback • 240 pp

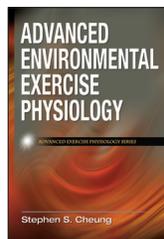
Print: ISBN 978-0-7360-7392-9

\$84.00 (£56.99 UK, €74.10 EURO)

E-book: ISBN 978-0-7360-9161-9

\$59.00 (£39.99 UK, €52.00 EURO)

HK Rewards members: \$67.20 US (print) • \$47.20 US (e-book)



Advanced Environmental Exercise Physiology

Stephen S. Cheung, PhD

©2010 • Hardback • 272 pp

Print: ISBN 978-0-7360-7468-1

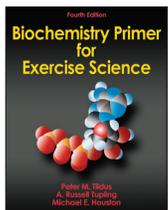
\$84.00 (£56.99 UK, €74.10 EURO)

E-book: ISBN 978-0-7360-8549-6

\$59.00 (£39.99 UK, €52.00 EURO)

HK Rewards members: \$67.20 US (print) • \$47.20 US (e-book)

Primers in Exercise Science



Biochemistry Primer for Exercise Science, Fourth Edition

Peter M. Tiidus, PhD, A. Russell Tupling, PhD, and Michael E. Houston, PhD

©2012 • Paperback • 312 pp

Print: ISBN 978-0-7360-9605-8

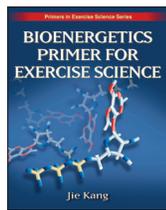
\$49.00 (£33.99 UK, €44.20 EURO)

E-book: ISBN 978-1-4504-3392-1

\$26.00 (£17.99 UK, €23.40 EURO)

HK Rewards members:

\$39.20 US (print) • \$20.80 US (e-book)



Bioenergetics Primer for Exercise Science

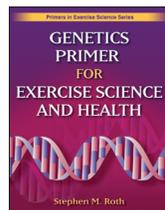
Jie Kang, PhD

©2008 • Paperback • 224 pp

ISBN 978-0-7360-6241-1

\$49.00 (£33.99 UK, €44.20 EURO)

HK Rewards members: \$39.20 US



Genetics Primer for Exercise Science and Health

Stephen M. Roth, PhD

©2007 • Paperback • 192 pp

Print: ISBN 978-0-7360-6343-2

\$49.00 (£33.99 UK, €44.20 EURO)

E-book: ISBN 978-0-7360-9072-8

\$25.00 (£16.99 UK, €22.10 EURO)

HK Rewards members:

\$39.20 US (print) • \$20.00 US (e-book)

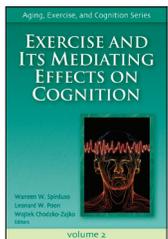
Aging, Exercise, and Cognition Series

The three volumes in this series are essential references for researchers, professionals, and public health administrators interested in scientific evidence demonstrating the beneficial effects of regular physical activity on cognitive functioning and general health during aging.

The books in the series may be ordered as a package.

ISBN 978-0-7360-9393-4 • \$129.00 (£104.99 UK, €136.50 EURO)

HK Rewards members: \$103.20 US



Exercise and Its Mediating Effects on Cognition

Waneen W. Spirduso, EdD, Leonard W. Poon, PhD, and Wojtek Chodzko-Zajko, PhD, Editors

©2008 • Hardback • 296 pp

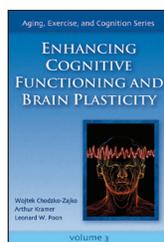
Print: ISBN 978-0-7360-5786-8

\$57.00 (£38.99 UK, €50.70 EURO)

E-book: ISBN 978-0-7360-9286-9

\$41.00 (£27.99 UK, €36.40 EURO)

HK Rewards members: \$45.60 US (print) \$32.80 US (e-book)



Enhancing Cognitive Functioning and Brain Plasticity

Wojtek Chodzko-Zajko, PhD, Arthur Kramer, PhD, and Leonard W. Poon, PhD

©2009 • Hardback • 248 pp

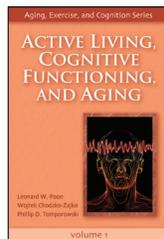
Print: ISBN 978-0-7360-5791-2

\$57.00 (£38.99 UK, €50.70 EURO)

E-book: ISBN 978-0-7360-8542-7

\$41.00 (£27.99 UK, €36.40 EURO)

HK Rewards members: \$45.60 US (print) \$32.80 US (e-book)



Active Living, Cognitive Functioning, and Aging

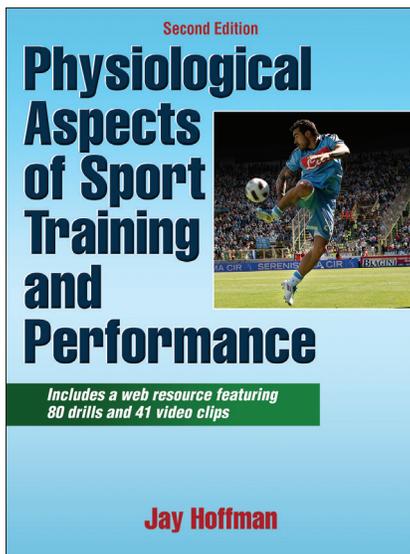
Leonard W. Poon, PhD, Wojtek Chodzko-Zajko, PhD, and Phillip D. Tomporowski, PhD

©2006 • Hardback • 264 pp

ISBN 978-0-7360-5785-1

\$57.00 (£38.99 UK, €50.70 EURO)

HK Rewards members: \$45.60 US



New edition!

Learn how to recognize and avoid overtraining

Audiences: A text for upper-level undergraduate and graduate-level courses in physiology and physical conditioning; a reference for professionals in sport physiology, sports medicine, physical therapy, athletic training, and coaching.

Physiological Aspects of Sport Training and Performance, Second Edition With Web Resource, updates and expands on the popular first edition, providing an in-depth discussion of physiological adaptation to exercise. A range of topics are covered, including environmental influences on performance, hydration status, sport nutrition, sport supplements, and performance-enhancing drugs. The book is focused on physiological adaptation to exercise with a goal of providing practical applications to facilitate exercise prescriptions for a variety of athletes.

Updates in this second edition focus on cutting-edge knowledge in sport science and sports medicine, including the latest information on physiological adaptations to exercise; current trends for training for power, speed, and agility; eye-opening discussions on sport supplementation and performance-enhancing drugs; data on training with medical conditions such as diabetes and exercise-induced bronchospasm; and groundbreaking information on training in heat and cold and at altitude. In addition, new chapters offer a practical approach to the yearly training program and sudden death in sport.

Physiological Aspects of Sport Training and Performance, Second Edition With Web Resource

Jay Hoffman, PhD

©2014 • Hardback • 520 pp

Print: ISBN 978-1-4504-4224-4 • \$89.00 (£60.99 UK, €79.30 EURO)

E-book: ISBN 978-1-4504-6608-0 • \$49.00 (£33.99 UK, €44.20 EURO)

HK Rewards members: \$71.20 US (print) \$39.20 US (e-book)

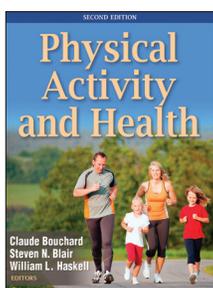
Ancillaries

Free to course adopters and available at www.HumanKinetics.com/PhysiologicalAspectsOfSportTrainingAndPerformance.

Image bank

The image bank is also available for purchase.

ISBN 978-1-4504-6504-5 • \$295.00 (£238.99 UK, €310.70 EURO)



Evidence for the benefits of a physically active lifestyle

Physical Activity and Health, Second Edition, brings together the results of studies on the relationship between physical activity, sedentarism, and various health outcomes. The text identifies sedentary habits and poor fitness as major public health problems and examines the potential of physical activity to prevent

disease and enhance quality of life.

Updates to the second edition include a chapter on the physiology of inactivity and the effects of sedentary behavior even in people who engage in appropriate amounts of physical activity; coverage of physical activity, aging, and the brain, including a new chapter on the relationship between physical activity and brain structures and functions; and a chapter on the development of national and international physical activity and health guidelines, helping students understand how scientific findings are converted into practical recommendations.

Physical Activity and Health, Second Edition

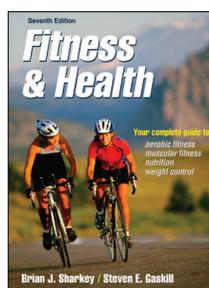
Claude Bouchard, PhD, Steven N. Blair, PED, and William L. Haskell, PhD, Editors

©2012 • Hardback • 456 pp

Print: ISBN 978-0-7360-9541-9 • \$93.00 (£62.99 UK, €81.90 EURO)

E-book: ISBN 978-1-4504-2598-8 • \$67.00 (£45.99 UK, €59.80 EURO)

HK Rewards members: \$74.40 US (print) • \$53.60 US (e-book)



Understand the exercise–health relationship

Fitness & Health, Seventh Edition, offers a comprehensive understanding of the exercise–health relationship and provides a framework for attaining health and fitness goals. This handbook explores the physiology and benefits of fitness while also providing information and tools for improving health and wellness.

Updates to the seventh edition include:

- A new chapter detailing behavior change, helping readers understand the psychology of activity and how to modify individual behaviors
- Proven methods for achieving aerobic and muscular fitness, plus strategies for exercising in extreme conditions
- New information on physical activity and brain health
- A detailed explanation of the Exercise is Medicine movement

Fitness & Health, Seventh Edition

Brian J. Sharkey, PhD, and Steven E. Gaskill, PhD

©2013 • Paperback • 456 pp

Print: ISBN 978-0-7360-9937-0 • \$37.00 (£24.99 UK, €32.50 EURO)

E-book: ISBN 978-1-4504-4825-3 • \$20.00 (£13.99 UK, €18.20 EURO)

HK Rewards members: \$29.60 US (print) • \$16.00 US (e-book)

Ancillaries

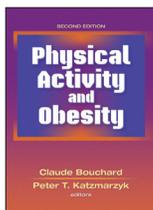
Free to course adopters and available at

www.HumanKinetics.com/FitnessAndHealth.

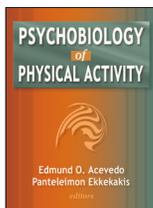
Instructor guide • Test package • Presentation package plus image bank

The presentation package plus image bank is also available for purchase.

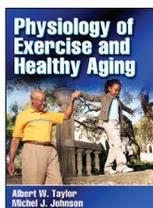
ISBN 978-1-4504-4180-3 • \$295.00 (£239.99 UK, €288.00 EURO)



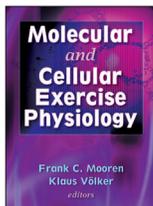
Physical Activity and Obesity, Second Edition
 Claude Bouchard, PhD, and Peter T. Katzmarzyk, PhD, Editors
 ©2010 • Hardback • 432 pp
 Print: ISBN 978-0-7360-7635-7
 \$88.00 (£61.99 UK, €80.60 EURO)
 E-book: ISBN 978-0-7360-8657-8
 \$64.00 (£43.99 UK, €57.20 EURO)
HK Rewards members: \$70.40 US (print) • \$51.20 US (e-book)



Psychobiology of Physical Activity
 Edmund O. Acevedo, PhD, and Panteleimon Ekkekakis, PhD, Editors
 ©2006 • Hardback • 296 pp
 ISBN 978-0-7360-5536-9
 \$88.00 (£59.99 UK, €78.00 EURO)
HK Rewards members: \$70.40 US



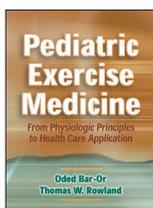
Physiology of Exercise and Healthy Aging
 Albert W. Taylor, PhD, DSc, and Michel J. Johnson, PhD
 ©2008 • Hardback • 304 pp
 ISBN 978-0-7360-5838-4
 \$85.00 (£57.99 UK, €75.40 EURO)
HK Rewards members: \$68.00 US



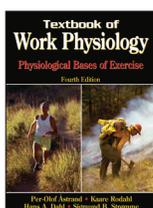
Molecular and Cellular Exercise Physiology
 Frank C. Mooren, MD, and Klaus Völker, MD, Editors
 ©2005 • Hardback • 464 pp
 ISBN 978-0-7360-4518-6
 \$108.00 (£72.99 UK, €94.90 EURO)
HK Rewards members: \$86.40 US



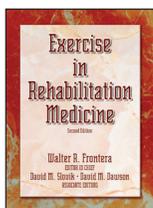
Anatomy & Kinesiology Flashcards
 FMP, LLC
 ©2013 • 200 print flashcards
 ISBN 978-1-4504-2837-8
 \$21.95 (£17.99 UK, €23.40 EURO)
HK Rewards members: \$17.56 US
Anatomy & Kinesiology Flashcards app
 available at the Apple App store



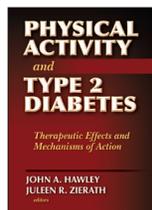
Pediatric Exercise Medicine: From Physiological Principles to Health Care Application
 Oded Bar-Or, MD, and Thomas W. Rowland, MD
 ©2004 • Hardback • 520 pp
 ISBN 978-0-88011-597-1
 \$104.00 (£71.99 UK, €93.60 EURO)
HK Rewards members: \$83.20 US



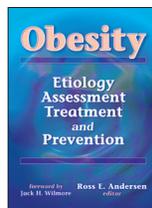
Textbook of Work Physiology: Physiological Bases of Exercise, Fourth Edition
 Per Olof Åstrand, MD, PhD, Kaare Rodahl, MD, PhD,
 Hans A. Dahl, MD, and Sigmund B. Strømme, PhD
 ©2003 • Hardback • 656 pp
 ISBN 978-0-7360-0140-3
 \$108.00 (£72.99 UK, €94.90 EURO)
HK Rewards members: \$86.40 US



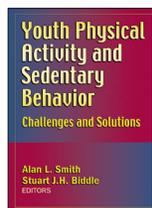
Exercise in Rehabilitation Medicine, Second Edition
 Walter R. Frontera, MD, PhD, David M. Slovik, MD, and
 David M. Dawson, MD, Editors
 ©2006 • Hardback • 464 pp
 ISBN 978-0-7360-5541-3
 \$108.00 (£72.99 UK, €94.90 EURO)
HK Rewards members: \$86.40 US



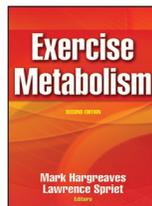
Physical Activity and Type 2 Diabetes: Therapeutic Effects and Mechanisms of Action
 John A. Hawley, PhD, and Juleen R. Zierath, PhD, Editors
 ©2008 • Hardback • 232 pp
 Print: ISBN 978-0-7360-6479-8
 \$89.00 (£61.99 UK, €80.60 EURO)
 E-book: ISBN 978-0-7360-8920-3
 \$65.00 (£43.99 UK, €57.20 EURO)
HK Rewards members: \$71.20 US (print) • \$52.00 US (e-book)



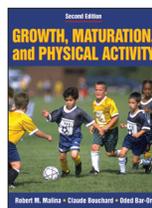
Obesity: Etiology, Assessment, Treatment, and Prevention
 Ross E. Andersen, PhD, Editor
 ©2003 • Hardback • 312 pp
 ISBN 978-0-7360-0328-5
 \$88.00 (£59.99 UK, €78.00 EURO)
HK Rewards members: \$70.40 US



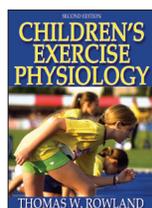
Youth Physical Activity and Sedentary Behavior: Challenges and Solutions
 Alan L. Smith, PhD, and Stuart J.H. Biddle, PhD, Editors
 ©2008 • Hardback • 512 pp
 Print: ISBN 978-0-7360-6509-2
 \$80.00 (£53.99 UK, €70.20 EURO)
 E-book: ISBN 978-0-7360-8770-4
 \$58.00 (£39.99 UK, €52.00 EURO)
HK Rewards members: \$64.00 US (print) • \$46.40 US (e-book)



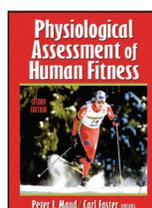
Exercise Metabolism, Second Edition
 Mark Hargreaves, PhD, and Lawrence Spriet, PhD, Editors
 ©2006 • Hardback • 312 pp
 ISBN 978-0-7360-4103-4
 \$78.00 (£52.99 UK, €68.90 EURO)
HK Rewards members: \$62.40 US



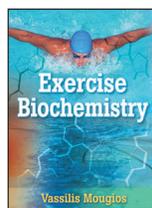
Growth, Maturation, and Physical Activity, Second Edition
 Robert M. Malina, PhD, Claude Bouchard, PhD, and
 Oded Bar-Or, MD
 ©2004 • Hardback • 728 pp
 ISBN 978-0-88011-882-8
 \$96.00 (£64.99 UK, €84.50 EURO)
HK Rewards members: \$76.80 US



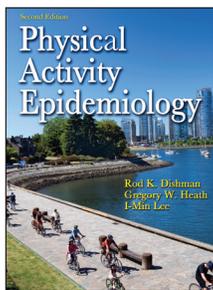
Children's Exercise Physiology, Second Edition
 Thomas W. Rowland, MD
 ©2005 • Hardback • 312 pp
 ISBN 978-0-7360-5144-6
 \$82.00 (£56.99 UK, €74.10 EURO)
HK Rewards members: \$65.60 US



Physiological Assessment of Human Fitness, Second Edition
 Peter J. Maud, PhD, and Carl Foster, PhD, Editors
 ©2006 • Hardback • 328 pp
 ISBN 978-0-7360-4633-6
 \$78.00 (£54.99 UK, €71.50 EURO)
HK Rewards members: \$62.40 US



Exercise Biochemistry
 Vassilis Mougios, PhD
 ©2006 • Hardback • 352 pp
 ISBN 978-0-7360-5638-0
 \$105.00 (£71.99 UK, €93.60 EURO)
HK Rewards members: \$84.00 US



Learn how leisure-time activity can prevent disease

This text provides detailed coverage of all-cause and coronary heart disease mortality as well as new information on physical activity among various racial-ethnic populations and the effects of physical activity on cognitive function, dementia, and HIV/AIDS.

Students will find comprehensive discussion of:

- Evidence that physical activity protects against the development of coronary heart disease, stroke, and premature death from all causes
- Evidence that physical activity and exercise play a role in prevention of mild hypertension, dyslipidemia, and obesity, and reduces the risk of type 2 diabetes
- Considerations in the promotion of a safe, physically active lifestyle among all segments of the population

Physical Activity Epidemiology, Second Edition

Rod K. Dishman, PhD, Gregory W. Heath, DHSc, MPH, and I-Min Lee, MBBS, MPH, ScD
©2013 • Hardback • 608 pp

Print: ISBN 978-0-7360-8286-0 • \$87.00 (£58.99 UK, €76.70 EURO)

E-book: ISBN 978-1-4504-3386-0 • \$63.00 (£42.99 UK, €55.90 EURO)

HK Rewards members: \$69.60 US (print) • \$50.40 US (e-book)

Ancillaries

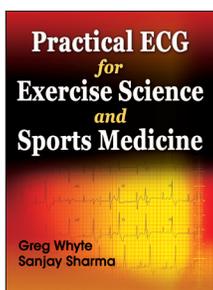
Free to course adopters and available at

www.HumanKinetics.com/PhysicalActivityEpidemiology.

Image bank

The image bank is also available for purchase.

ISBN 978-1-4504-2479-0 • \$295.00 (£244.99 UK, €294.00 EURO)



Sharpen your ECG diagnostic skills

An essential reference for students and practitioners working with exercise electrocardiograms (ECGs), *Practical ECG for Exercise Science and Sports Medicine* guides students from theory to applied interpretation of normal and abnormal exercise electrocardiogram traces. This resource offers clear protocols

for ECGs with an emphasis on athletes. With over 70 ECG readouts to examine, students can practice and refine their ECG interpretation skills and increase their understanding of heart conditions identifiable through ECG testing. Troubleshooting tips throughout provide quick solutions to problems that may occur during ECG testing, and detailed information on interpreting the ECGs is provided for numerous conditions that practitioners are likely to encounter in real-life practice.

Practical ECG for Exercise Science and Sports Medicine

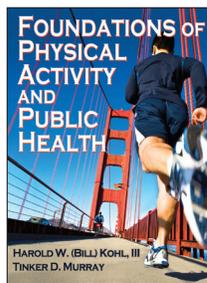
Greg Whyte, PhD, and Sanjay Sharma, MD

©2010 • Paperback • 176 pp

Print: ISBN 978-0-7360-8194-8 • \$35.00 (£24.99 UK, €32.50 EURO)

E-book: ISBN 978-0-7360-9114-5 • \$24.00 (£16.99 UK, €22.10 EURO)

HK Rewards members: \$28.00 US (print) • \$19.20 US (e-book)



Learn how kinesiology can help promote public health

Foundations of Physical Activity and Public Health offers a solid introduction to the concepts of public health and kinesiology, the techniques used to measure physical activity, and the health effects of exercise and physical activity. The scientific findings and applications that led to the emergence of the field of physical activity

and public health are also examined. Students will come away with a greater understanding of how experts from both fields can work together to advance the use of physical activity for the prevention and treatment of chronic disease and other health issues.

Examples of successful programs from various settings, including community-wide and school-based interventions, help students understand how to apply the theory to practice. Students also learn the concepts of evaluation of physical activity programs as well as logic models, evaluation designs, data collection, and analysis.

Foundations of Physical Activity and Public Health

Harold W. (Bill) Kohl, III, PhD, MSPH, and Tinker D. Murray, PhD

©2012 • Hardback • 296 pp

Print: ISBN 978-0-7360-8710-0 • \$76.00 (£51.99 UK, €67.60 EURO)

E-book: ISBN 978-1-4504-2601-5 • \$40.00 (£26.99 UK, €35.10 EURO)

HK Rewards members: \$60.80 US (print) • \$32.00 US (e-book)

Ancillaries

Free to course adopters and available at

www.HumanKinetics.com/FoundationsOfPhysicalActivityAndPublicHealth.

Instructor guide • Test package • Image bank

The image bank is also available for purchase.

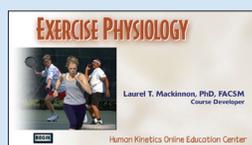
ISBN 978-1-4504-1301-5 • \$304.00 (£238.99 UK, €286.80 EURO)

Enhance learning with online courses

Human Kinetics' online education courses offer an easy-to-use, intuitive interface for those teaching or taking these quality online courses within a college or university class.

Visit www.HumanKinetics.com/Online-Education for more information.

View our top exercise physiology online courses below:



Exercise Physiology

Laurel T. Mackinnon, PhD, FACSM

©2002 • Enhanced online course

ISBN 978-0-7360-4253-6

\$79.00 (£63.99 UK, €83.20 EURO)



ACSM/ACS Certified Cancer Exercise Trainer Specialty Certification Exam Preparation Course

American College of Sports Medicine

©2012 • Enhanced online course

With book: ISBN 978-1-4504-3155-2

\$99.00 (£81.99 UK, €106.60 EURO)

With e-book: ISBN 978-1-4504-4155-1 • \$89.00 (£72.99 UK, €94.90 EURO)

Without book: ISBN 978-1-4504-3156-9 • \$59.00 (£47.99 UK, €62.40 EURO)



ACSM/NPAS Physical Activity in Public Health Specialist Certification Exam Preparation Course

American College of Sports Medicine

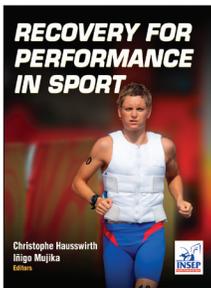
©2012 • Enhanced online course

With book: ISBN 978-0-7360-9840-3

\$99.00 (£81.99 UK, €106.60 EURO)

With e-book: ISBN 978-1-4504-4156-8 • \$89.00 (£72.99 UK, €94.90 EURO)

Without book: ISBN 978-0-7360-9841-0 • \$59.00 (£47.99 UK, €62.40 EURO)



Learn techniques and strategies for optimal recovery

Recovery for Performance in Sport presents techniques and modalities currently used to enhance athletes' recovery, optimize training time, and avoid overtraining. This text encompasses scientific research in the study of recovery and draws from the experience of applied sport scientists working with elite

athletes in leading performance and recovery centers. Students will find proven strategies for enhancing the recovery process and learn the importance of structuring an individualized and evidenced-based recovery plan for improving performance.

Recovery for Performance in Sport

Institut National du Sport, de l'Expertise et de la Performance (INSEP)

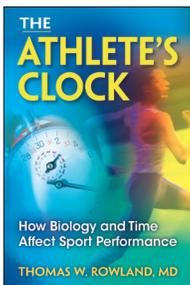
Christophe Hausswirth, PhD, and Inigo Mujika, PhD, Editors

©2013 • Hardback • 296 pp

Print: ISBN 978-1-4504-3434-8 • \$59.00 (£39.99 UK, €52.00 EURO)

E-book: ISBN 978-1-4504-5302-8 • \$44.00 (£29.99 UK, €39.00 EURO)

HK Rewards members: \$47.20 US (print) • \$35.20 US (e-book)



Study the effects of time on sport performance

The Athlete's Clock: How Biology and Time Affect Sport Performance offers an engaging, interdisciplinary consideration of some of the most compelling questions in sport and exercise science. This unique text takes a broad look at the physiological clock, offering students, researchers, coaches, and athletes a unique approach to

understanding how various aspects of time affect sport performance.

The Athlete's Clock explores the ways in which time and its relationship to athletic effort can optimize sport performance, and seeks to provoke thought and further research that look at the relationship between biology, time, and performance as well as an understanding of and appreciation for the intricacies of human potential.

The Athlete's Clock: How Biology and Time Affect Sport Performance

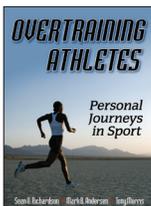
Thomas W. Rowland, MD

©2011 • Paperback • 232 pp

Print: ISBN 978-0-7360-8274-7 • \$19.95 (£13.99 UK, €18.20 EURO)

E-book: ISBN 978-0-7360-8765-0 • \$19.95 (£13.99 UK, €18.20 EURO)

HK Rewards members: \$13.97 US (print) • \$13.97 US (e-book)



Overtraining Athletes: Personal Journeys in Sport

Sean O. Richardson, PhD, Mark B. Andersen, PhD, and Tony Morris, PhD

©2008 • Paperback • 224 pp

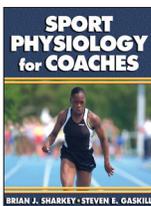
Print: ISBN 978-0-7360-6787-4

\$49.00 (£33.99 UK, €44.20 EURO)

E-book: ISBN 978-0-7360-8673-8

\$35.00 (£23.99 UK, €31.20 EURO)

HK Rewards members: \$39.20 US (print) • \$28.00 US (e-book)



Sport Physiology for Coaches

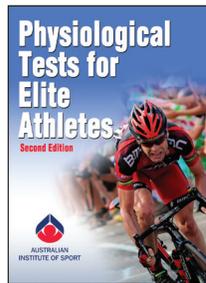
Brian J. Sharkey, PhD, and Steven E. Gaskell, PhD

©2006 • Paperback • 320 pp

ISBN 978-0-7360-5172-9

\$39.00 (£26.99 UK, €35.10 EURO)

HK Rewards members: \$31.20 US



Essential resource for lab and field testing of elite athletes

Physiological Tests for Elite Athletes, Second Edition, presents protocols used for assessing high-level athletes. This text leads students through generalized testing procedures for determining anaerobic capacity, neuromuscular power, blood lactate thresholds, VO_2 max, and more. It also presents principles and protocols

for common lab- and field-based assessments of body composition and physique, agility, strength, and power as well as perceptual and decision-making capabilities. Testing protocols for 18 sports are introduced, and normative data collected from athletes competing at national and international levels serve as excellent reference points for measuring elite athletes.

Physiological Tests for Elite Athletes, Second Edition

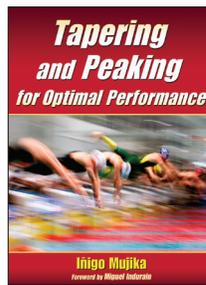
Australian Institute of Sport

©2013 • Hardback • 560 pp

Print: ISBN 978-0-7360-9711-6 • \$93.00 (£62.99 UK, €81.90 EURO)

E-book: ISBN 978-1-4504-3672-4 • \$70.00 (£47.99 UK, €62.40 EURO)

HK Rewards members: \$74.40 US (print) • \$56.00 US (e-book)



Discover the scientific aspects of tapering

Tapering and Peaking for Optimal Performance offers in-depth discussion of the science, strategy, and program design of the tapering phase of training. This first-ever book devoted to the subject presents current scientific data on tapering, its physiological and psychological effects, and how these effects relate to athletic

performance. Featuring various training models and experiential knowledge, this book allows readers to design optimal tapering programs for each athlete. By combining scientific research with real-world examples, *Tapering and Peaking for Optimal Performance* presents the most complete look at tapering available, and it encourages further study of this vital and sometimes elusive aspect of training for success.

Tapering and Peaking for Optimal Performance

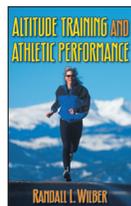
Inigo Mujika, PhD

©2009 • Paperback • 224 pp

Print: ISBN 978-0-7360-7484-1 • \$27.95 (£21.99 UK, €28.60 EURO)

E-book: ISBN 978-0-7360-8545-8 • \$27.95 (£18.99 UK, €24.70 EURO)

HK Rewards members: \$19.56 US (print) • \$19.56 US (e-book)



Altitude Training and Athletic Performance

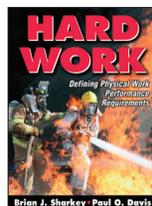
Randall L. Wilbur, PhD

©2004 • Hardback • 264 pp

ISBN 978-0-7360-0157-1

\$51.00 (£34.99 UK, €45.50 EURO)

HK Rewards members: \$40.80 US



Hard Work: Defining Physical Work Performance Requirements

Brian J. Sharkey, PhD, and Paul O. Davis, PhD

©2008 • Hardback • 256 pp

Print: ISBN 978-0-7360-6536-8

\$73.00 (£51.99 UK, €67.60 EURO)

E-book: ISBN 978-0-7360-9287-6

\$53.00 (£35.99 UK, €46.80 EURO)

HK Rewards members: \$58.40 US (print) • \$42.40 US (e-book)



Broad coverage of kinesiology with a unique focus on review articles

Kinesiology Review (KR) provides a forum for discussion and analysis of kinesiology research and its applications. This rigorously peer-reviewed online quarterly journal serves the interests of those in all areas of study related to health and physical activity,

including movement and exercise science, sport and exercise psychology, sports medicine, sport history, sociology of sport and physical activity, physical education pedagogy, athletic training, sport management, and physical and occupational therapy.

Kinesiology Review

Editor: Maureen R. Weiss, PhD

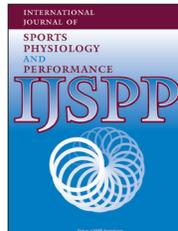
Frequency: Quarterly (February, May, August, November)

Current Volume: 3 (2014)

Online format ISBN: 978-1-4504-2388-5

Online format ISSN: 2161-6035

Visit www.HumanKinetics.com/KR for pricing and submission information.



Authoritative coverage of sports physiology and performance

The *International Journal of Sports Physiology and Performance (IJSPP)* publishes authoritative research in sports physiology and related disciplines that has direct practical application in enhancing sport performance, preventing declines in

performance, and enhancing recovery of athletes. *IJSPP* is an international peer-reviewed journal dedicated to advancing the knowledge of sport and exercise physiologists, sport performance researchers, sport physicians, coaches, students, and other sport scientists.

International Journal of Sports Physiology and Performance

Editor: Ralph Beneke, PhD, MD

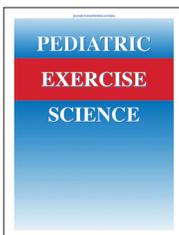
Frequency: Bimonthly (January, March, May, July, September, November)

Current Volume: 9 (2014)

Online format ISBN: 978-0-7360-6172-8

Online format ISSN: 1555-0273

Visit www.HumanKinetics.com/IJSPP for pricing and submission information.



Get the latest research from the pediatric exercise field

Pediatric Exercise Science (PES) focuses on issues concerning exercise in children. Its contents are designed to serve not only as a repository of knowledge in the field but also as a means of presenting challenging new ideas. It thereby strives

to promote physical activity and fitness for health in children, recognize limits and training methods for child athletes, and assess the role of exercise as a therapeutic intervention in children with chronic disease.

Pediatric Exercise Science

Editor: Bareket Falk, PhD

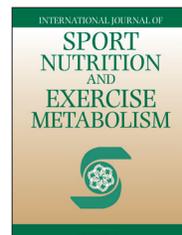
Frequency: Quarterly (February, May, August, November)

Current Volume: 26 (2014)

Online format ISBN: 978-0-7360-5314-3

Online format ISSN: 1543-2920

Visit www.HumanKinetics.com/PES for pricing and submission information.



Explore sport nutrition and exercise metabolism

The *International Journal of Sport Nutrition and Exercise Metabolism (IJSNEM)* is dedicated to providing original research in the fields of sport nutrition and exercise metabolism. *IJSNEM* is both an important outlet for international research and a

vital resource for professionals in the many fields related to nutrition and metabolism. The journal presents research findings and features articles that relate principles from biochemistry and physiology to nutrition in sport and exercise.

International Journal of Sport Nutrition and Exercise Metabolism

Editor: Ronald J. Maughan, PhD

Frequency: Bimonthly (February, April, June, August, October, December)

Current volume: 24 (2014)

Online format ISBN: 978-0-7360-4844-6

Online format ISSN: 1543-2742

Visit www.HumanKinetics.com/IJSNEM for pricing and submission information.



Advancing the role of women in sport and physical activity

Women in Sport and Physical Activity Journal (WSPAJ) is a peer-reviewed scholarly journal devoted to advancing the understanding of women in sport and physical activity. This established journal publishes articles related to women's sport and physical activity across the full range of disciplinary

perspectives. *WSPAJ* aims to facilitate opportunities for girls and women to enjoy and benefit from sports and other physical activities.

Women in Sport and Physical Activity Journal

Editor: Diane L. Gill, PhD

Frequency: Semiannual (April, October)

Current Volume: 22 (2014)

Online format ISBN: 978-1-4925-0178-7

Online format ISSN: 1938-1581

Visit www.HumanKinetics.com/WSPAJ for pricing and submission information.



Sign up to receive the table of contents by e-mail!

Did you know that you can receive notification of new issues of any Human Kinetics journal the moment it is posted to the web? Visit www.HumanKinetics.com/Journals and click on any journal, then

“Subscribe/Renew” and “Receive TOC by e-mail” to get an e-mail update every time a new issue is available.



Join HK Rewards for exclusive discounts!

Sign up and receive rewards for staying connected to the information leader in physical activity and health. You'll receive discounts on most of our products and stay up to date on the latest offerings from Human Kinetics, with news of upcoming webinars, announcements of new products, excerpts of our products, news items of interest, and much more!

www.HumanKinetics.com/Rewards



Attention instructors — request your exam copy today!

The Human Kinetics website offers a higher education center that provides a variety of resources specifically for instructors, including a list of available e-books, sales rep contact information, and downloadable brochures of the latest textbooks in each subject area. The higher education center also offers a convenient means of requesting your exam copies—simply register with the site and fill out the online form. Visit www.HumanKinetics.com/Higher-Education to request an exam copy or ancillary materials for any of our physiology textbooks.

If you have further questions or need assistance in choosing a textbook, please contact your sales representative. We are happy to assist you!

Ben Egan

BenE@hkusa.com
CO, IL, IN, OH, MI, WI

Brad Hauser

BradH@hkusa.com
DC, DE, KY, MD, NC, TN, VA, WV

Neil Hollwedel

NeilH@hkusa.com
AK, HI, ID, MS, MT, ND, NM, NE, NV, OK,
OR, SD, UT, WA, WY, AS*, GU*, PR*, VI*
*Denotes American Territories

Beth Fronczak

BethF@hkusa.com
CT, LA, MA, ME, NH, NJ, NY, PA, RI, VT

Dan Stebel

DanS@hkusa.com
AR, IA, KS, MN, MO, TX

HK@hkeurope.com

UK, Europe, and the Middle East

Bill Dobrik

BillD@hkusa.com
AL, FL, GA, SC

Kari Testory

KariT@hkusa.com
AZ, CA

2 EASY WAYS TO ORDER

BY PHONE

US: (800) 747-4457

Canada: (800) 465-7301

UK: 44 (0) 113-255-5665

Calls outside these regions: (217) 351-5076 (not a toll-free call)

VISIT WWW.HUMANKINETICS.COM

*All prices are subject to change. Prepayment with credit card (MC, Visa, AMEX) is required for all personal orders placed online or by phone. No currency or COD. Orders placed to the U.S. must be paid in U.S. funds drawn on a U.S. bank. Return policy: If not completely satisfied with your purchase, return it within 30 days of purchase in saleable condition, and your money will be refunded except for shipping and handling. Sorry, we do not accept returns on online products, opened software, videos, CD-ROMs, or DVDs.

Promo Code: J547 J548 J549 J550 J551 J552

Project Manager: Jenny Lokshin 9/14
Designer: Thomas Whitaker



HUMAN KINETICS

The Information Leader in Physical Activity & Health

P.O. Box 5076, Champaign, IL 61820-5076

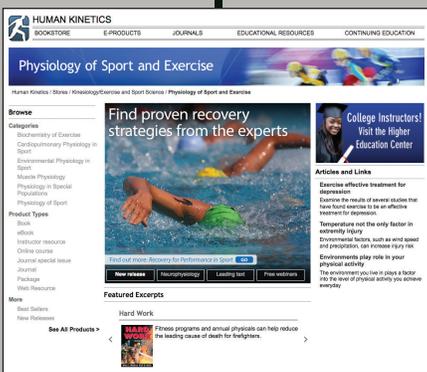
www.HumanKinetics.com

PRSRST STD
U.S. POSTAGE
PAID
HUMAN KINETICS

Promo Code:



CONNECT WITH HUMAN KINETICS



Visit www.HumanKinetics.com

Browse our site to see new releases and best sellers, read excerpts and articles, and view webinars.



Stay up-to-date with **HK Now**

Our free app is the quick and easy way to access excerpts, articles, and news from Human Kinetics while on the go. Download a copy for your iPhone, iPod touch, or iPad from Apple's App Store today.



Join **HK Rewards**

Enjoy discounts on most of our products as well as other special offers. Look inside for details.

Follow us!

