ancilleray resources

⦁

Understanding the changes of the human body and the impact of nutrition and physical activity on adults (40-59 years)

*This ancillary resource provides suggestions of some of the following resources that are available mainly in open sources. It is aimed at providing an introduction to the key areas and contexts of the module and is not a comprehensive document. The use of other and additional resources to support the appropriate levels and contexts of the programmes and institutional access to resources is recommended.*

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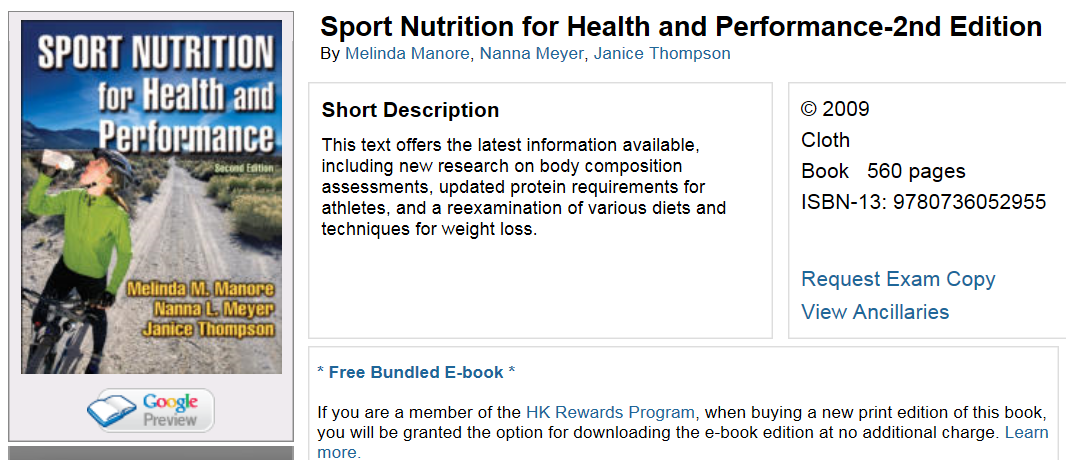


# NUTRITION AND HEALTH ENHANCING PHYSICAL ACTIVITY

***Levels 4-6***

**Manore, M. & Thompson, J. (2009) Sport Nutrition for Health and Performance. Champaign, Illinois: Human Kinetics.**

[**http://www.humankinetics.com/products/all-products/sport-nutrition-for-health-and-performance---2nd-edition**](http://www.humankinetics.com/products/all-products/sport-nutrition-for-health-and-performance---2nd-edition)



Sport Nutrition for Health and Performance, Second Edition, will help students and practitioners understand the function of the nutrients in the body and how these nutrients affect health and athletic performance. The authors present clear, comprehensive, and accurate nutrition information that may be applied to a variety of careers. The text provides students with practical knowledge in exercise and nutrition science, and it keeps practitioners on the cutting edge of current research and practices in the field.

Using the authors’ extensive backgrounds in nutrition, exercise physiology, and fitness, the text combines micronutrients into functional groupings to provide an easy framework for understanding how these nutrients can influence exercise performance and good health for both athletes and active individuals. This unique presentation allows readers to fully understand why proper nutrition helps athletes prevent injury, enhance recovery, improve daily workouts, and maintain optimal health and body weight.

This second edition has been thoroughly revised and updated to reflect the latest issues, guidelines, and recommendations for active individuals. Chapters dealing with macronutrients and micronutrients have been entirely rewritten, and all chapters have been revised to reflect the latest Dietary Reference Intakes, USDA Food Guide Pyramid, Food Pyramid for Athletes, Dietary Guidelines for Americans, and physical activity recommendations from various organizations, including the 2008 Physical Activity Guidelines by DHHS. Following are some of the current topics discussed in the text:

•Carbohydrate recommendations for athletes before, during, and after exercise

•Protein requirements of athletes based on the latest research

•Updated evaluation of the fat needs of athletes and the role of fat loading

•An evidence-based reexamination of various diets and techniques used for weight loss

•New research on body composition assessments and standards

•The latest on controversial nutrition issues such as the role of protein, vitamin D, and energy in bone health and new criteria for assessing bone health in young adults

•New nutrition and fitness assessments, questionnaires, and methods for measuring energy expenditure

•Updated information on various topics such as the issues of the active female, ergogenic aids, energy balance, and fluid balance

Sport Nutrition for Health and Performance, Second Edition, has also been improved with an attractive two-color format, new artwork, and a slimmer design that allows the text to maintain the content while reducing “backpack bulge.” The text also includes an online image bank that instructors may use to create customized PowerPoint presentations using artwork, tables, and figures from each chapter. In addition, a variety of features help readers comprehend the material presented, including chapter objectives, key concepts and key terms, additional information to learn more about a topic, and references. Chapter highlights provide in-depth information on topics and critically evaluate issues regarding myths and controversies in sport nutrition.

This book provides readers with clear, authoritative content that will help them understand the scientific basis of nutrition and make sound recommendations in their careers. With up-to-date content based on current guidelines, Sport Nutrition for Health and Performance, Second Edition, is an outstanding text for both students and practitioners concerned with achieving good health and maximizing performance.

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Essential Nutrients and Dietary Recommendations

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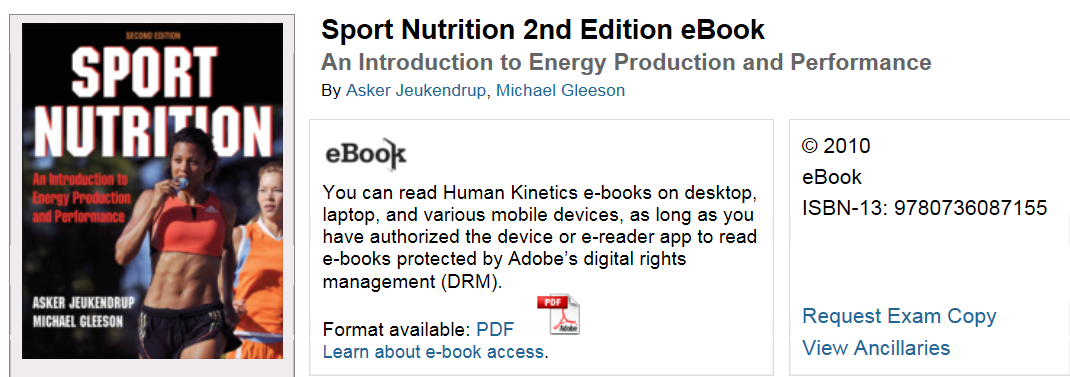
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About the Authors

Audiences

Text for upper-undergraduate or graduate students in nutrition, exercise physiology, and kinesiology programs. Reference for fitness professionals, dietitians, health fitness specialists, and sports medicine specialists.



Product Description

Sport Nutrition, Second Edition, is also available as an e-book. The e-book is available at a reduced price and allows readers to highlight and take notes throughout the text. When purchased through the Human Kinetics site, access to the e-book is immediately granted when the order is received.

The new edition of Sport Nutrition: An Introduction to Energy Production and Performance presents the principles, background, and rationale for current nutrition guidelines specifically for athletes. Using a physiological basis, this text provides an in-depth look at the science behind sport nutrition. Students will come away with a comprehensive understanding of nutrition as it relates to sport and the influence of nutrition on exercise performance, training, and recovery.

The chapters and the material within each chapter are sequenced in a logical order that will help instructors deliver a better course and spend less time in preparing lectures and tutorials. Instructors will also enjoy the completely new ancillaries with this edition, including an online instructor guide, test package, PowerPoint presentation package, and image bank. This text contains updated and expanded information to keep students current on the latest findings in sport nutrition:

•A new chapter on training adaptations, including effects of nutrition on overtraining

•New information on weight management and body composition for athletes

•New research on carbohydrate and new recommendations for carbohydrate intake during training

•An expanded discussion on the role of protein in strength and endurance exercise training

•The latest information on exercise, nutrition, and immune function

The new content complements the strong foundational information that the authors provided in the previous edition, including fuel sources for muscle and exercise metabolism, energy requirements for various sports, and a complete grounding in the macronutrients (carbohydrate, fat, and protein) and the micronutrients (vitamins and minerals). With more than 200 illustrations, new highlight boxes, and tables and sidebars throughout the text, students will be able to more easily grasp the scientific concepts presented in this text. Each chapter also includes learning objectives, key terms, and key points to help readers retain the information. The text presents not only nutrition principles but also the exercise biochemistry involved and the energy needs of athletes. Readers will better understand how supplements may be used in an athlete’s diet, and they will learn how to separate fact from fallacy regarding the claims of the numerous nutritional supplements available today.

More than a simple prescription of recommendations, this second edition of Sport Nutrition features a unique presentation that facilitates readers’ understanding of the science supporting the nutrition recommendations. As a result, students will be prepared for advanced study and future careers, and professionals will gain the knowledge and confidence to provide sound advice to athletes.

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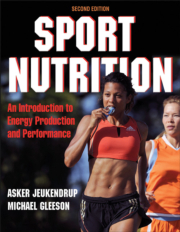
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Audiences

Text for undergraduate introductory sport nutrition, exercise physiology, and sport science courses. Reference for sport nutritionists, dietitians, exercise and sport scientists, health and fitness instructors, physical educators, and coaches.

[**Sport Nutrition, Second Edition**](http://www.humankinetics.com/sportnutrition2e)

[](http://www.humankinetics.com/products/showproduct.cfm?isbn=9780736079624)

Welcome to the ancillary website for ***Sport Nutrition, Second Edition.***

<http://www.humankinetics.com/sportnutrition2e>

Instructor resources are free to course adopters and granted by your sales representative. To request access, [contact your sales rep](http://www.humankinetics.com/salesrepresentatives).

Some of these files are in Microsoft Office® formats. If you do not have software that allows you to open or view these files, free software is available for download at [OpenOffice.org](http://openoffice.org/) that will allow you to do so. Human Kinetics, Inc., is not affiliated with [OpenOffice.org](http://openoffice.org/) in any way.

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**E-Book**

http://www.humankinetics.com/AcuCustom/Sitename/DAM/000/product_tabShadow.jpg

**Test Package**

Make your own tests and quizzes

Choose from hundreds of test questions

**Instructor Guide**

Sample syllabus

Lecture Outlines

Key Points

Lab Activities

Assignments

Readings

See a [sample chapter](http://hk.humankinetics.com/SportNutrition/ig/sample.htm)

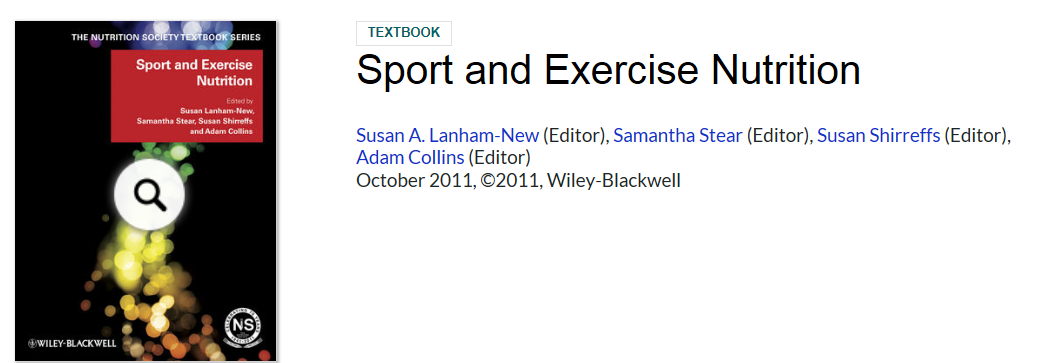
**Image Bank**

The **image bank** includes all of the figures, content photos, and tables from the text, sorted by chapter. Images can be used to develop a customized presentation based on specific course requirements.

Instructors can insert images from the image bank into the **blank PowerPoint template** provided, or into their own presentations.

Duan, Y., Brehm, W., Strobl, H., Tittlbach, S., Huang, Z., Si, G. (2013) Steps to and correlates of health-enhancing physical activity in adulthood: An intercultural study between German and Chinese individuals*Journal of Exercise Science & Fitness 11* ***http://www.sciencedirect.com/science/article/pii/S1728869X1300035X***

***LEVEL 7***



Description

Now widely adopted on courses throughout the world, the prestigious Nutrition Society Textbook series provides students with the scientific basics in nutrition in the context of a systems and disease approach rather than on a nutrient by nutrient basis. In addition books provide a means to enable teachers and students to explore the core principles of nutrition and to apply these throughout their training to foster critical thinking at all times.

This NS Textbook on Sport and Exercise Nutrition has been written to cover the latest information on the science and practice of sport and exercise nutrition. A key concept behind this textbook is that it aims to combine the viewpoints of world leading nutrition experts from both academia/research and a practical stand point. Plus where necessary there are additional practitioner based authors to ensure theory is translated into practice for each chapter in the form of either ‘practice tips' or ‘information sheets' at the end of relevant chapters.

The textbook in essence can be divided into three distinct but integrated parts:

* Part 1: covers the key components of the science that supports the practice of sport and exercise nutrition including comprehensive reviews on: nutrients both in general and as exercise fuels; exercise physiology; hydration, micronutrients; and supplements.
* Part 2: moves into focusing on specific nutrition strategies to support different types of training including: resistance; power/sprint; middle distance/speed endurance; endurance; technical/skill, team; and specific competition nutrition needs. The unique format of this textbook is that it breaks down nutrition support into training specific as opposed to the traditional sport specific support. This reflects the majority of current sport and exercise requirements of the need to undertake concurrent training and therefore facilitating targeted nutrition support to the different training components through the various macro and micro training cycles.
* Part 3: explores some of the practical issues encountered in working in the sport and exercise nutrition field and includes key sport related topics such as: disability sport; weight management; eating disorders; bone and gut health; immunity; injury; travel; and special populations and situations.

READERSHIP: Students of nutrition and dietetics at both undergraduate and postgraduate level. All those working in the field of nutrition and related health sciences.

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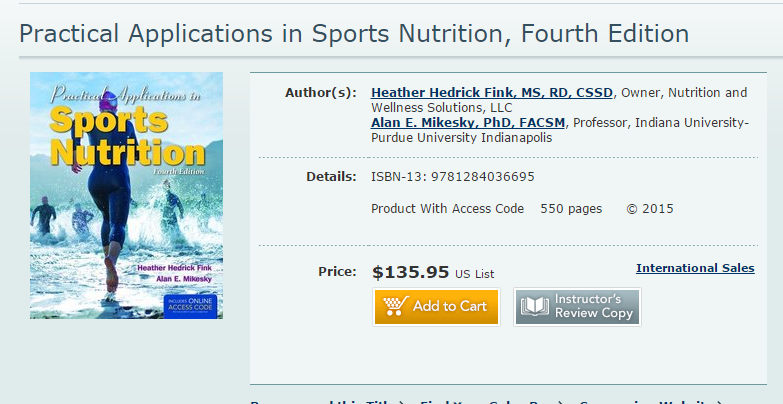
Visit the supporting companion website for this book:

www.wiley.com/go/sport\_and\_exercise\_nutrition

# CHANGES OF THE HUMAN BODY

Fink, H. H., Burgoon, L.A. and Mikesky, A.E. (2009). Practical Applications in Sports Nutrition. Sudbury, Massachusettes, Jones and Bartlett.

<http://www.jblearning.com/catalog/9781284036695/>



Revised and updated to keep pace with changes in the field, the Fourth Edition of Practical Applications in Sports Nutrition provides students and practitioners with the latest sports nutrition information and dietary practices so they can assist athletes and fitness enthusiasts in achieving their personal performance goals. With data and statistics from the latest nutrition research and guidelines, it demonstrates effective ways to communicate sports nutrition messages to athletes and how to motivate individuals to make permanent behavior change.

Early chapters provide an introduction to sports nutrition and give a thorough explanation of macronutrients, micronutrients, and water and their relation to athletic performance. Later chapters focus on the practical and applied aspects of sports nutrition including behavior change through consultations and weight management. Chapter 15 targets the unique nutrition requirements of special populations such as athletes who are pregnant, vegetarian, or have chronic diseases. The text concludes with a chapter dedicated to helping readers discover the pathway to becoming a sports dietitian through education and experience.

The following instructor resources are available to qualified instructors for download

ISBN-13: 9781284036695

Angel ready Test Bank

BlackBoard ready Test Bank

Desire to Learn ready Test Bank

Image Bank

Instructor Manual

Moodle ready Test Bank

Slides in PowerPoint Format

Test Bank

# WEARABLE TECHNOLOGY

**Journals and reports:**

Apps to promote physical activity among adults: a review and content analysis

<https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-014-0097-9>

Health Enhancement Research Organization:

<http://hero-health.org/wp-content/uploads/2015/06/HERO-Wearables-in-Wellness-Report-FINAL1.pdf>



Sensors | Free Full-Text | A Review of Accelerometry-Based Wearable Motion Detectors for Physical Activity Monitoring

<http://www.mdpi.com/1424-8220/10/8/7772/html>

Evaluation of a text supported weight maintenance programme ‘Lighten Up Plus’ following a weight reduction programme: randomised controlled trial | International Journal of Behavioral Nutrition and Physical Activity | Full Text

<http://ijbnpa.biomedcentral.com/articles/10.1186/s12966-016-0346-1>

Promoting physical activity among women using wearable technology and online social connectivity: a feasibility study

<http://www.tandfonline.com/doi/abs/10.1080/21642850.2015.1118350>

Promoting physical activity among women using wearable technology and online social connectivity: a feasibility study



Can Technology Empower Older Adults to Manage Their Health? – ProQuest

<http://search.proquest.com/openview/5a8567726846d6daaf389e2dff3a581f/1?pq-origsite=gscholar>

IEEE Xplore Abstract - Gamification designs in Wearable Enhanced Learning for healthy ageing

<http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7359545&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D7359545>

Wearable Sensor/Device (Fitbit One) and SMS Text-Messaging Prompts to Increase Physical Activity in Overweight and Obese Adults: A Randomized Controlled Trial

<http://online.liebertpub.com/doi/abs/10.1089/tmj.2014.0176>

The validity of consumer-level, activity monitors in healthy adults worn in free-living conditions: a cross-sectional study



JMU-Tracking Health Data Is Not Enough: A Qualitative Exploration of the Role of Healthcare Partnerships and mHealth Technology to Promote Physical Activity and to Sustain Behavior Change | Miyamoto | JMIR mHealth and uHealth <http://mhealth.jmir.org/2016/1/e5/>

The use of wearable technology to measure energy expenditure, physical activity, and sleep patterns in dementia:

<https://secure.jbs.elsevierhealth.com/action/getSharedSiteSession?redirect=http%3A%2F%2Fwww.alzheimersanddementia.com%2Farticle%2FS1552-5260%2815%2902315-8%2Fabstract&rc=0&code=jalz-site>

Wearable devices and smartphones for activity tracking among people with serious mental illness — ScienceDirect:

<http://www.sciencedirect.com/science/article/pii/S1755296615300223>

Feasibility of Behavioral Weight Loss Treatment Enhanced with Peer Support and Mobile Health Technology for Individuals with Serious Mental Illness - Online First – Springer

<http://link.springer.com/article/10.1007/s11126-015-9395-x>

Design and baseline characteristics of participants in the Enhancing Physical Activity and Reducing Obesity through Smartcare and Financial Incentives (EPAROSFI): A pilot randomized controlled trial ☆ — ScienceDirect

<http://www.sciencedirect.com/science/article/pii/S1551714415301518>

The Wild Wild West: A Framework to Integrate mHealth Software Applications and Wearables to Support Physical Activity Assessment, Counseling and Interventions for Cardiovascular Disease Risk Reduction — ScienceDirect

<http://www.sciencedirect.com/science/article/pii/S0033062016300159>

IEEE Xplore Abstract - Wearable Sensors for Human Activity Monitoring: A Review:

<http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6974987&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D6974987>

IEEE Xplore Abstract - Communicating and interpreting wearable sensor data with health coaches

<http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7349402&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D7349402>

Wireless sensor network based wearable smart shirt for ubiquitous health and activity monitoring ☆ — ScienceDirect <http://www.sciencedirect.com/science/article/pii/S0925400509003724>

Healthcare & Digital Apps :<http://www.wearabletechnologyshow.net/healthcare-digital-apps>

Wearable Technology | Advantages and Disadvantages of Wearable Technology and the Future

YouTube: <https://m.youtube.com/watch?v=QoJJ-1VcI7w>

Blog: <http://blog.neongoldfish.com/social-media/the-advantages-and-disadvantages-of-wearable-tech-3>

Blog: <http://blog.bestdoctors.com/wearable-technology-good-or-bad-for-our-health/>

Newsletter: <http://usabilitygeek.com/ways-wearable-technology-can-improve-our-lives/>

Fashion tech: 20 wearables that are more chic than geek <http://www.wareable.com/fashion/wearable-tech-fashion-style>;

Fitness & Big Data: How Wearable Tech Is Changing Exercise Research <http://m.livescience.com/45634-accelerometers-exercise-research.html>

# SAMPLE OF APPLICATIONS

Link to stores for free and paid apps: iTunes; Google Play etc

Link to stores for free and paid apps: Smart phone; ipad; Samsung; Kindle….



C25K® - 5K Trainer FREE - (Go from Couch Potato to Running the 5K)

By Zen Labs

<https://itunes.apple.com/gb/app/c25k-5k-trainer-free-go-from/id485971733?mt=8>

Map My Fitness - GPS Workout Trainer for Fitness, Step and Activity Tracking

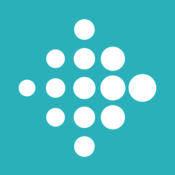
By MapMyFitness

<https://itunes.apple.com/us/app/map-my-fitness-gps-workout/id298903147?mt=8>

Runkeeper - GPS Running, Walk, Cycling, Workout, Pace and Weight Tracker

By FitnessKeeper, Inc.

<https://itunes.apple.com/us/app/runkeeper-gps-running-walk/id300235330?mt=8>



Fitbit

By Fitbit, Inc.

<https://itunes.apple.com/gb/app/fitbit/id462638897?mt=8>



Running and Walking with Endomondo

By [endomondo.com](http://endomondo.com)

<https://itunes.apple.com/gb/app/running-walking-endomondo/id333210180?mt=8>

# PROGRAMME OF HEALTH ENHANCING PHYSICAL ACTIVITY BASED ON WALKING SPORTS

## Scientific journals

(some are open sources)

*American Journal of Health Education*

*American Journal of Preventive Medicine*

*Annual Review of Nutrition*

*Applied Physiology, Nutrition and metabolism*

*Asian Journal of Exercise and Sports Science (AJESS)*

*Asian Journal of Health and Medical Research (AJHMR)*

*Australian and New Zealand Journal of Public Health*

*Australian Journal of Nutrition and Dietetics*

*Baltic Journal of Health and Physical Activity*

*BMC public health-MEDLINE®/PubMed®*

*British Journal of Sports Medicine*

*European Journal of Public Health*

*European review of aging and physical activity*

*International Journal of Behavioral Nutrition and Physical Activity (IJBNPA)* [*https://ijbnpa.biomedcentral.com/*](https://ijbnpa.biomedcentral.com/)

*International Journal of Sports Nutrition*

*Journal of aging and physical activity*

*Journal of Diabetes Science and Technology*

*Journal of Electronic Resources in Medical Libraries*

*Journal of Exercise Science & Fitness*

*Journal of the International Society of Sports Nutrition*

*Journal of medical Internet research*

*Journal of Physical Activity and Health* [*http://journals.humankinetics.com/about-jpah*](http://journals.humankinetics.com/about-jpah)

*Mental Health and Physical Activity*

*Revista internacional de medicina y ciencias de la actividad física y del deporte*

Journals for Physical Education and Sport <http://www.supportrealteachers.org/journals-for-physical-education-and-sport.html>

## Books

Armour, K. (2011) *Sport Pedagogy: An Introduction for Teaching and Coaching.* Abingdon:Taylor and Francis Routledge.

Kidman, L. and Hanrahan, S.J. (2011) *The coaching Process: A practical guide to becoming an effective coach*. Abingdon: Routledge

Martens, R. (2012) *Successful Coaching*. Champaign, Illinois: Human Kinet

Metzler, M.W. (2011) *Instructional models for Physical Education* 3rd ed. Scottsdale, AZ: Holcomb Hathaway

Nash, C (2014) *Practical Sports Coaching*. Abingdon: Routledge

Sports coach UK and Women’s Sport and Fitness Foundation (2011)

‘*Women and Informal Sport: A Report for the Women’s Sport and Fitness Foundation’*,

[www.sportscoachuk.org/women-informal-sport](http://www.sportscoachuk.org/women-informal-sport)

## Walking sports: web pages

* basketball (<http://www.surreysportspark.co.uk/sports/Basketball/Walking%20Basketball/>)
* netball (<http://www.englandnetball.co.uk/my-game/Walking_Netball>)
* rounders (<http://www.roundersengland.co.uk/play/rules/>)
* football (<http://www.walkingfootballunited.co.uk/> ; <http://www.worldamputeefootball.com/rules_i.htm>)
* hockey <https://www.youtube.com/watch?v=HRPYmHzI70s>
* rugby (<http://www.telegraph.co.uk/news/health/elder/11816791/Rugby-as-youve-never-seen-it-before-older-players-give-game-a-more-genteel-pace.html>
* Physical Activity and Adults <http://www.who.int/dietphysicalactivity/factsheet_adults/en/>

