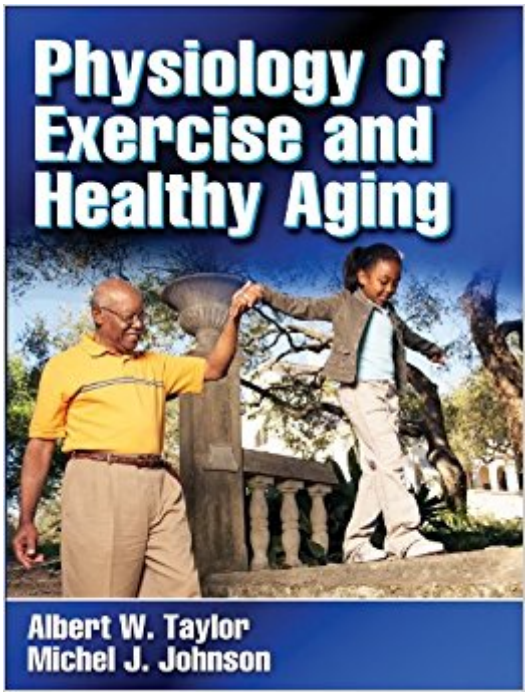
Physiology Of Exercise And Healthy Aging



Synopsis

As life expectancy continues to increase, so does the need to understand the factors that increase health and vitality. Physiology of Exercise and Healthy Aging applies the science of exercise physiology to an analysis of the aging process and identifies the positive effects that regular exercise and physical activity have not only on longevity but also on delaying specific diseases, decreasing morbidity, and increasing quality of life. It presents theories on aging, the aging process, the structural and functional changes that characterize advancing age, exercise programming concerns for the aged, drug use and abuse by seniors, and the benefits of exercise and physical activity. This text offers a more expansive discussion of the particulars of exercise physiology of aging persons than is found in other texts on the subject. With Physiology of Exercise and Healthy Aging, readers will gain a thorough understanding of the role of physical activity on the aging process, the principles of exercise and assessment considerations for elderly adults, and training for special needs of older adults. Information is presented in the context of three groups found in the aging and health spectrum: average aging individuals, frail elderly, and master athletes. This information is organized within a three-part structure: -Part I explores age-related changes in the major physiological systems. The effects of physical activity on these systems, as well as necessary adaptations for those with impaired abilities in each system, are also discussed. -Part II deals with the interactive roles of nutrition; age-related diseases, such as diabetes and osteoporosis; and physical activity. -Part III presents the physiologic adaptability that may be expected with training and physical activity of older adults. It also addresses the practical issues that must be considered when working with this population, including training for aerobic, anerobic, and muscular fitness; exercise adherence and safety measures; and potential substance abuse of commonly used medications.In addition to the presentation of foundational concepts of physiology as they relate to the process of aging, chapters of Physiology of Exercise and Healthy Aging contain exercise regimens related to the chapter topic, other forms of physical activity that have proven beneficial to the aging population, and contraindicated exercises. Physiological responses to acute and chronic exercise perturbations are examined, including studies of cardiorespiratory fitness, muscle metabolism and strength, neurophysiology and the senses, and the effects of exercise on older adults with the diseases of aging, including type 2 diabetes, osteoporosis, arthritis, and cardiovascular disease. Chapter-opening quotes provide the insights of selected thinkers, scientists, and fitness professionals on the topic discussed.Practitioners who work with older adults will find programming recommendations in each chapter to help translate the science into practice. An appendix offers easy access to forms and assessments, including a Three-Day Nutritional

Assessment form and a Client History form. The language used throughout the text embraces the science of exercise physiology but also welcomes practitioners to apply the information presented.For student readers, Physiology of Exercise and Healthy Aging incorporates these helpful features to assist learning and retention: -Chapter-opening outlines offer quick reference to topics. -Chapter-ending Questions to Consider provide tools for self-study and reflection. -Numerous tables and figures reinforce chapter concepts and add visual or statistical information related to the process of aging, fall prevention, international demographics, and theories of aging.-References provide additional opportunities for reading and research with selected books, articles, and Web sites. -Appendixes contain information on specific Web sites and numerous tests and forms that may be photocopied for use with clients or patients or for course projects.Physiology of Exercise and Healthy Aging contains a thorough discussion of the unique effects of aging on the human body and illustrates the power of exercise as a preventive tool to reduce or offset the deleterious effects of aging in order to increase the quality of life enjoyed by our aging population. With this text, both students and professionals will grasp the advantages of appropriate physical activity for the elderly and how to safely administer exercise programs that contribute to the increased health and quality of life for older adults.

Book Information

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Customer Reviews

Ã¢â ¬Å“The book is well written gives readers a proper resource for improving the fitness of older adults.Ã¢â ¬Â• Doody's Book Review

Albert W. Taylor, PhD, DSc, is a professor on the faculties of health sciences, medicine, and dentistry at the University of Western Ontario in London, Ontario, Canada, where he teaches courses on healthy aging and the physiology of aging. He also researches the effects of exercise on the aging processÃ¢â ¬â •in particular, cancer precursors and metabolic enzyme activities. Professor Taylor has honorary appointments at the University of Toronto, Universite de Moncton, the Ukrainian State University of Physical Education and Sport and Semmelweis University of Budapest Medical University.During his career, Taylor has published more than 300 research and professional articles, including 54 books and manuals, and made over 500 presentations to scientific and academic groups in more than 100 countries. He has served as a peer reviewer for some 30 journals and 15 granting agencies and has supervised the research of more than 165 students, many of whom now hold leadership roles as research chairs, senior university administrators, and senior scientists with world-renowned status.In recognition of his research, Taylor has received honorary doctorates from Universite de Sherbrooke (Canada), London Institute for Applied Research (England), Semmelweis University (Hungary), and the Ukrainian State University of Physical Education and Sport (Ukraine). He also has been inducted into five halls of fame and received recognition for his contributions to sport and science. Taylor is a fellow of the American College of Sports Medicine and honorary life member of the Canadian Olympic Association. He has served as president of both the Sports Medicine and Science Council of Canada and Canadian Society of Exercise Physiology. Taylor has received the Honor Award from the Canadian Society of Exercise Physiology, a Certificate of Recognition for Contribution to Sport by the government of Ontario, and the International Wrestling Federation Pin of Merit.Taylor received his PhD from Washington State University in 1967. Previously he was a member of the board of directors and the chair of the Canadian Centre for Activity and Aging, which is affiliated with the University of Western Ontario. He has also served as the director of the Research Institute for Aging at the University of Waterloo in Ontario, Canada.In his free time, Taylor enjoys moose hunting, fishing, and playing duplicate bridge. He and his wife, Catherine, live in Mississauga, Ontario, Canada.Michel J. Johnson, PhD, obtained his PhD from the University of Western Ontario in London, Ontario, Canada, in the area of neurovascular physiology. His current research interests include strength training, skeletal muscle metabolism, and autonomic nervous system regulation in young and older subjects. He is currently an assistant professor of kinesiology and a research member with the Interdisciplinary Research Program on Safe Driving at Lakehead University in Thunder Bay, Ontario, Canada.Johnson is a certified weightlifting coach and personal trainer. He is

a member of both the National Strength and Conditioning Association and the Canadian Society for Exercise Physiology. In addition to teaching and developing exercise prescription and physiology of aging courses at the university level, Johnson has been a course developer in interprofessional education and health. His experience in these areas combined with more than 15 years as a strength-training consultant for national teams and coaching associations has afforded him extensive practical experience in exercise prescription with athletes and nonathletes of all ages. Johnson lives in Thunder Bay, Ontario, with his wife, Nicole, and his son, Patrick, where he spends his free time reading, resistance training, and walking.

As an aging physician, I was looking for scientific information about the aging process and how to address it. This book is based upon science and is well referenced if you want to search further. It is well written, concise and readable for the non-scientist. While not specific on excercise programs, it directs you to where you can get more information. This is an excellent place to start if you want to learn about the biology of aging an what to do to face it successfully.

The book was completely highlighted and underlined but was sold under good condition. I can’t resell it because of this, but it got the job done

This book teaches difficult concepts in a way that is understandable and not intimidating. Is an excellent review book for Kinesiology majors as well as for non Kinesiology majors to understanding difficult concepts.

Aging - E-Book: Human Needs and Nursing Response (TOWARD HEALTHY AGING (EBERSOLE)) Toward Healthy Aging: Human Needs and Nursing Response, 7e (Toward Healthy Aging (Ebersole)) Younger Next Year: The Exercise Program: Use the Power of Exercise to Reverse Aging and Stay Strong, Fit, and Sexy The Isometric Exercise Bible: A Workout Routine For Everyone (abs, building muscle, anti aging, exercise workout, home workout Book 1) Low Calorie & Fat: Healthy Breakfast Recipes! Discover New Healthy Breakfast Ideas. Healthy Muffin Recipes, Healthy Smoothies, Healthy Egg Recipes and ... Only! (Low Calorie & Fat Recipes Book 1) Cellular Physiology and Neurophysiology E-Book: Mosby Physiology Monograph Series (Mosby's Physiology Monograph) Endocrine and Reproductive Physiology: Mosby Physiology Monograph Series (with Student Consult Online Access), 4e (Mosby's Physiology Monograph) Medical Terminology: Medical Terminology Easy Guide for Beginners (Medical Terminology, Anatomy and Physiology, Nursing School, Medical Books, Medical School, Physiology, Physiology) Cardiovascular Physiology: Mosby Physiology Monograph Series (with Student Consult Online Access), 10e (Mosby's Physiology Monograph) Renal Physiology: Mosby Physiology Monograph Series (with Student Consult Online Access), 5e (Mosby's Physiology Monograph) Gastrointestinal Physiology: Mosby Physiology Monograph Series (With STUDENT CONSULT Online Access), 8e (Mosby's Physiology Monograph) Textbook of Age Management Medicine Volume 1: Mastering Healthy Aging Nutrition, Exercise and Hormone Replacement Therapy Happy Feet, Healthy Food: Your Child's First Journal of Exercise and Healthy Eating