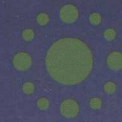


Total Fitness and Wellness

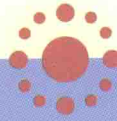


FOURTH
EDITION

SCOTT K. POWERS
STEPHEN L. DODD
VIRGINIA J. NOLAND



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FOURTH EDITION

Total Fitness and Wellness

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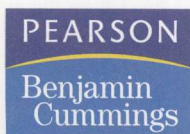
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Behavior Change Contract

Choose a health behavior that you would like to change, starting this quarter or semester. Sign the contract at the bottom to affirm your commitment to making a healthy change and ask a friend to witness it.

My behavior change will be:

My long-term goal for this behavior change is:

Barriers that I must overcome to make this behavior change are (things that I am currently doing or situations that contribute to this behavior or make it harder to change):

1. _____
2. _____
3. _____

The strategies I will use to overcome these barriers are:

1. _____
2. _____
3. _____

Resources I will use to help me change this behavior include:

- a friend/partner/relative: _____
- a school-based resource: _____
- a community-based resource: _____
- a book or reputable website: _____

In order to make my goal more attainable, I have devised these short-term goals

short-term goal	target date	reward
short-term goal	target date	reward
short-term goal	target date	reward

When I make the long-term behavior change described above, my reward will be:

_____ target date: _____

I intend to make the behavior change described above. I will use the strategies and rewards to achieve the goals that will contribute to a healthy behavior change.

Signed: _____ Witness: _____

☀ To Jen, Haney, and Will. Your love and encouragement have always meant more than you will ever know.

Stephen L. Dodd

☀ To my mother who encouraged me to pursue academic endeavors.

Scott K. Powers

☀ To my husband and children for making my life complete. And to my parents for your ever-present love and support.

Virginia J. Noland

Preface

Good health is our most precious possession. Although it is usually only in times of illness or injury that we really appreciate good health, more and more people are realizing that health is not simply the lack of disease. Indeed, there are degrees of health, or wellness, on which lifestyle can have a major impact.

Intended for an introductory college course in physical fitness and wellness, *Total Fitness and Wellness* focuses on how lifestyle can be altered to achieve a high degree of physical fitness and wellness. Two major aspects of daily life that most affect our level of wellness are exercise and diet. Hence, the interaction of exercise and diet and the essential role of regular exercise and good nutrition in achieving total fitness and wellness are major themes of the text.

Total Fitness and Wellness, Fourth Edition, was built on a strong foundation of both exercise physiology and nutrition. The text provides clear and objective research-based information to college students during their first course in physical fitness and wellness. By offering a research-based text, we hope to dispel many myths associated with exercise, nutrition, weight loss, and wellness. For the evaluation of various wellness components such as fitness levels and nutritional status, a how-to approach is used. Ways to change your lifestyle that will improve wellness (e.g., designing a fitness program, altering food choices) are described. Indeed, the title of the book, “Total Fitness and Wellness,” reflects our goals.

Numerous physical fitness and wellness texts are available today. Our motivation in writing *Total Fitness and Wellness*, Fourth Edition, was to create a unique physical fitness and well balanced text, one that not only covers primary concepts of physical fitness and wellness but also addresses important issues such as behavior change, exercise-related injuries, exercise and the environment, and exercise for special populations.

FOUNDATION IN EXERCISE PHYSIOLOGY

We believe it is imperative that students develop an understanding of the basic physiological adaptations that occur in response to both acute exercise and regular exercise training. Without this understanding, it is impossible to plan, modify, and properly execute a lifetime exercise program.

STRONG EMPHASIS ON NUTRITION

Because we feel so strongly about the important interaction between nutrition and exercise, a nutritional theme is incorporated throughout the text. Each chapter includes Nutritional Links to Fitness boxes, which

explain how nutrition affects health and wellness in areas such as cardiorespiratory fitness, muscular strength and endurance, and prevention of cardiovascular disease. We put major emphasis on and provide comprehensive coverage of basic nutrition and weight control by dedicating separate chapters to each topic: Chapter 7, Nutrition, Health, and Fitness (includes new information on popular “low-carb” diets) and Chapter 8, Exercise, Diet, and Weight Control.

COVERAGE OF THE LATEST SCIENTIFIC RESEARCH ON PHYSICAL FITNESS, NUTRITION, AND WELLNESS

We firmly believe that college physical fitness and wellness texts should contain the latest scientific information and include references for scientific studies to support key information about physical fitness, nutrition, and wellness. Our approach is to provide current scientific references that document the validity of facts presented. Accordingly, source information and suggested readings are placed at the end of each chapter.

The most current research in the arena of fitness and wellness is offered in *Total Fitness and Wellness*, Fourth Edition. For example, it is now clear that exercise plays a role in reducing the risk of some cancers and can contribute to a longer life. While there has long been speculation about the health benefits of exercise, evidence that supports the exercise and wellness connection has only recently become available. In the area of nutrition, scientific data now suggest that vitamins may play a new role in preventing certain diseases and combating the aging process. In addition, while it is well accepted that fat in the diet increases our risk of heart disease, it has just lately been shown that dietary fat plays a greater role than other nutrients in weight gain.

With any attempt to present the most current information, there is always the danger of presenting ideas that are not fully substantiated by good research. We have made a concerted effort to avoid such a risk by using information from the most highly respected scientific journals and consulting with experts in the field.

Layout and Features

While many topic and organization options have to be considered when developing a text, the best way to determine content and order is to ask instructors. Therefore, with input from instructors across the country, we have included the following coverage, layout, and features:

- **Coverage:** By design, *Total Fitness and Wellness*, Fourth Edition contains more material than can be covered in a typical 15-week semester. The text is comprehensive in order to afford instructors a large degree of freedom in selecting concepts to be covered in their course. (The text is also available in a Brief Edition, which contains Chapters 1–10 and 17.)
- **Unique Topics:** Several unique chapters are offered in the fourth edition, which are not contained in other introductory fitness and wellness texts. For example, this book includes chapters on exercise and the environment, exercise for special populations, and prevention and rehabilitation of exercise-related injuries. Further, in several chapters we have incorporated an elementary discussion of the physiology of exercise to improve students' knowledge of how the body operates and responds to regular exercise.
- **Informational Boxes:** Each chapter contains informational boxes. **A Closer Look** boxes offer extended coverage of concepts discussed in the body of the text with suggestions for practical application. **Nutritional Links to Health and Fitness** boxes emphasize the importance of nutrition to physical fitness. **Ask an Expert** boxes provide the latest information from internationally known experts in the fields of resistance training, exercise and nutrition, obesity and weight loss, exercise and the environment, and adherence to regular exercise. **Fitness and Wellness for All** boxes contain fitness, wellness, and nutritional information with respect to diversity. **Fitness-Wellness Consumer** boxes provide exercise and wellness information related to consumer issues.
- **Lab Exercises:** Most chapters contain easy-to-follow, application-based lab exercises such as fitness testing, nutritional evaluation, and cardiovascular risk assessment.
- **Healthy People 2010 Objectives:** National health promotion and disease prevention initiatives are reflected in selected Healthy People 2010 goals listed in Appendix A.
- **Food Appendices:** To assist students in tracking and modifying food intake, caloric and nutrient content of common foods and fast foods is offered in Appendices B and C.
- **Pedagogical Aids:** To stimulate students' interest and alert them to the significance of the material to be covered, Learning Objectives open each chapter. In Summary lists, found throughout the text, recapitulate the more difficult sections, prompting students to recall and process main concepts covered. To emphasize and support understanding of material, important terms are boldfaced in the text

and defined in a running glossary at the bottom of text pages. Also, several features are offered at the end of each chapter to reinforce learning. For students' review, the Chapter Summary sections succinctly restate the most significant ideas presented in the chapter. Study Questions encourage analysis of chapter discussions and prepare students for tests. Suggested Readings and References offer quality information sources for further study of fitness and wellness.

Instructor Supplements

A complete resource package accompanies *Total Fitness and Wellness* to assist the instructor with classroom preparation and presentation.

INSTRUCTOR'S GUIDE AND TEST BANK

The Instructor's Guide and Test Bank supplement includes suggestions for class discussion, student activities, readings, lecture outlines, learning objectives, chapter summaries, web references, and media resources. The Test Bank includes over 1,000 multiple choice, true or false, short answer, and matching questions to use for student review or testing.

COMPUTERIZED TEST BANK

This cross-platform CD-ROM includes over 1,000 multiple choice, true or false, short answer, and matching questions in a format that allows instructors to incorporate these questions into their exams.

MyHealthLab

This online standard course management system is loaded with valuable free teaching resources that make giving assignments and tracking student progress easy. With the convenience of all the resources for the course in one location, MyHealthLab, powered by CourseCompass™, features a wealth of preloaded content for instructors, including PowerPoint® slides, an interactive e-book, Test Bank questions, Instructor's Manual material, and more. URL: <http://www.aw-bc.com/myhealthlab>

DISCOVERY HEALTH CHANNEL HEALTH AND WELLNESS LECTURE LAUNCHER VIDEOS AND CD-ROM

(VOLUME 1, 0-8053-5369-0; VOLUME II, 0-8053-6001-8; CD-ROM, 0-8053-7830-8)

Created in partnership between Discovery Health Channel and Benjamin Cummings, these VHS tapes and

CD-ROM feature a series of quick lecture-launcher clips on topics from nutrition and stress management to substance abuse. There are 24 clips in all, each one 5–10 minutes in length. An excellent way to engage your students and enliven your lectures.

BENJAMIN CUMMINGS HEALTH VIDEO SERIES

In addition to the Discovery Lecture Launcher series, additional videos are available to qualified adopters on a variety of topics. Contact your local Benjamin Cummings Sales Representative for a complete list of videos.

FILMS FOR THE HUMANITIES

More than 80 videos from respected sources available for qualified adopters. For ordering information, sales representatives should contact Linda Gallegos at (415) 402-2366.

INSTRUCTOR RESOURCE CD-ROM

This multi-platform CD-ROM includes PowerPoint® Presentation Slides to provide instructors with a multimedia presentation for their classroom or a lecture hall. Presented on a CD-ROM, the presentation is easily run and allows instructors to download lecture notes and images from over 200 slides. New to this edition is all of the art and tables from the text.

TRANSPARENCY ACETATES

Over 140 transparency acetates contain all figures, graphs, and tables from the main text. The transparencies are excellent for presentation of information in a clear manner consistent with that of the text.

Student Supplements

BEHAVIOR CHANGE LOG BOOK AND WELLNESS JOURNAL

This assessment tool helps students track daily exercise and nutritional intake and create a long-term nutritional and fitness prescription plan. It also includes a Behavior Change Contract and topics for journal-based activities. Packaged with each new copy of the text.

STAND-ALONE EvaluEat WINDOWS-ONLY CD-ROM

EvaluEat diet analysis software helps students track their eating habits and evaluate the nutritional content of their diets. Available for individual purchase or packaged with the alternate edition of the text, this software features a database of more than 6,200 food items

and can report on dozens of different nutrients. Students can do a single or multi-day diet analysis, create a variety of reports, and determine whether they are meeting the DRIs for various vitamins and minerals. This program also allows users to input their activity levels to create expenditure reports.

MyHealthLab

MyHealthLab features online access to a selection of the print and media supplements for students, and makes studying convenient and fun. The preloaded content on this interactive Website includes an interactive e-book, self-assessment worksheets, Behavior Change Log Book and Wellness Journal, Research Navigator™, the Discovery Channel Lecture Launcher clips, links to e-themes from the *New York Times*, and more.

COMPANION WEBSITE

This student resource site offers approximately 500 practice quiz questions, interactive activities, web links to sites for further information, and e-themes from the *New York Times* containing 17 *New York Times* articles reporting on the latest in health and wellness news and research. For the instructor, the site includes PowerPoint® presentations and lecture outlines.

Changes in the Fourth Edition

Each chapter of the fourth edition has been revised to include the newest research developments in exercise, wellness, and health-related nutrition. In addition to the changes listed in the paragraphs above, several other features have been added. These include

- expanded wellness and behavior change coverage and the addition of a third author who brings an expertise in the area of behavior change practices and stress management;
- new and improved art and photos throughout the text;
- new and updated references in every chapter;
- coverage of sexually transmitted infections and addictive substances (drug abuse) now split into two new chapters.

Acknowledgments

The publication of this edition of *Total Fitness and Wellness* was accomplished by an enormous number of people at Benjamin Cummings. From the campus sales representatives to the president of the company, they are

truly "first rate" and our interaction with them is always delightful.

There were several key people in the process. Our Acquisitions Editor, Deirdre Espinoza, has worked with us for the last two editions and her insight and organization continue to be key to the success of the text. Several new additions to the team have been important in both the revisions of the text as well as the production process. Christina Pierson coordinated reviews for this edition and organized the original editorial schedule. Alison Rodal has been a major contributor, as she took over the editorial process from Christina. Alison has truly played a significant role in the production of this edition. Sharon Montooth, Production Editor, expertly guided the manuscript through each stage of production. Finally, Linda Jupiter coordinated the artwork for this edition. Her efforts certainly added to the "look" but more importantly, helped convey a message.

Melissa Deering and Jenna Jones at the University of Florida have made major contributions to both the text and ancillaries. Their technical and editing work was important but their personal interest in fitness and wellness has made their contributions even greater.

Finally, there is a long list of professionals whose reviews of the content and style or participation in a fitness and wellness forum have helped to shape this book. We owe these individuals a tremendous debt of gratitude:

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