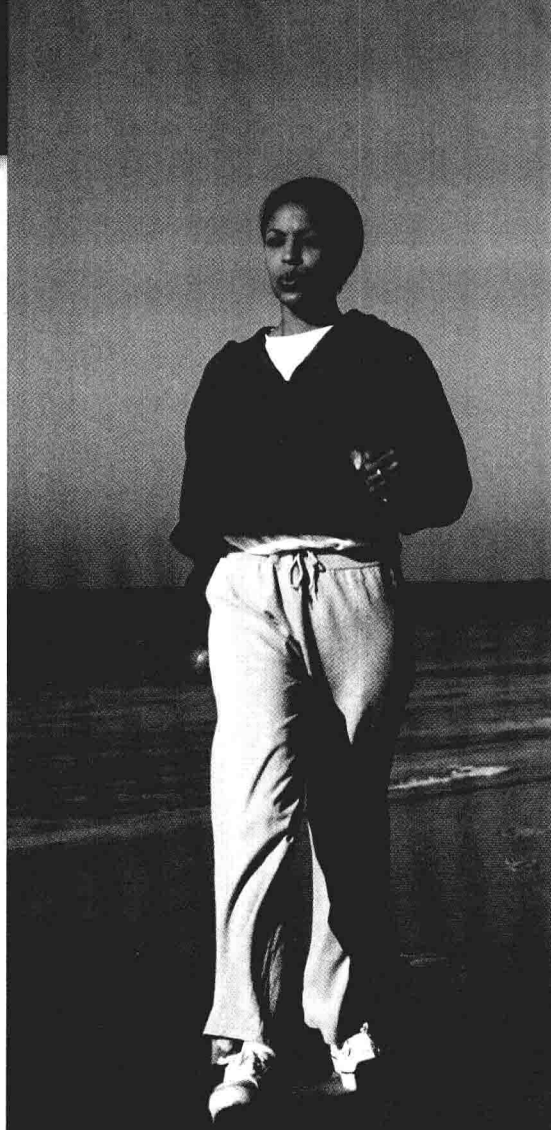
THOMAS D. FAHEY • PAUL M. INSEL • WALTON T. ROTH

SIXTH EDITION

FIT & WELL

CORE CONCEPTS AND LABS IN PHYSICAL FITNESS AND WELLNESS



Fit & Well

SIXTH EDITION

Core Concepts and Labs in Physical Fitness and Wellness

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Preface

For today's fitness-conscious student, *Fit and Well* combines the best of two worlds. In the area of physical fitness, *Fit and Well* offers expert knowledge based on the latest findings in exercise physiology and sports medicine, along with tools for self-assessment and guidelines for becoming fit. In the area of wellness, it offers accurate, current information on today's most important health-related topics and issues, again with self-tests and guidelines for achieving wellness. To create this book, we have drawn on our combined expertise and experience in exercise physiology, athletic training, personal health, scientific research, and teaching.

OUR AIMS

Our aims in writing this book can be stated simply:

- To show students that becoming fit and well greatly improves the quality of their lives
- To show students how they can become fit and well
- To motivate students to make healthy choices and to provide them with tools for change

The first of these aims means helping students see how their lives can be enhanced by a fit and well lifestyle. This book offers convincing evidence of a simple truth: To look and feel our best, to protect ourselves from degenerative diseases, and to enjoy the highest quality of life, we need to place fitness and wellness among our top priorities. *Fit and Well* makes clear both the imprudence of our modern, sedentary lifestyle and the benefits of a wellness lifestyle.

Our second aim is to give students the tools and information they need to become fit and well. This book provides students with everything they need to create their own personal fitness programs, including instructions for fitness tests, explanations of the components of fitness and guidelines for developing them, descriptions and illustrations of exercises, sample programs, and more. In addition, *Fit and Well* provides accurate, up-to-date, scientifically based information about other key topics in wellness, including nutrition, weight management, stress, cardiovascular health, cancer, drugs, alcohol, STDs, and a multitude of others.

In providing this material, we have pooled our efforts. Thomas Fahey has contributed his knowledge as an exercise physiologist, teacher, and author of numerous exercise science textbooks. Paul M. Insel and Walton T. Roth have contributed their knowledge of current topics in health as the authors of the leading personal health textbook, *Core Concepts in Health*.

Because we know this expert knowledge can be overwhelming, we have balanced the coverage of complex topics with student-friendly features designed to make the book accessible. Written in a straightforward, easy-to-read style and presented in a colorful, open format, *Fit and Well* invites the student to read, learn, and remember. Boxes, labs, tables, figures, artwork, photographs, and other features add interest to the text and highlight areas of special importance.

Our third aim is to involve students in taking responsibility for their health. *Fit and Well* makes use of interactive features to get students thinking about their own levels of physical fitness and wellness. We offer students assessment tools and laboratory activities to evaluate themselves in terms of each component of physical fitness and each major wellness area, ranging from cardiorespiratory endurance and muscular strength to heart disease, cancer, and STDs.

We also show students how they can make difficult lifestyle changes by using the principles of behavior change. Chapter 1 contains a step-by-step description of this simple but powerful tool for change. The chapter not only explains the five-step process but also offers a wealth of tips for ensuring success. Behavior management aids, including personal contracts, behavior checklists, and self-tests, appear throughout the book. *Fit and Well*'s combined emphasis on self-assessment, self-development in each area of wellness, and behavior change ensures that students not only are inspired to become fit and well but also have the tools to do so.

When students use these tools to make significant lifestyle changes, they begin to realize that they are in charge of their health—and their lives. From this realization comes a sense of competence and personal power. Perhaps our overriding aim in writing *Fit and Well* is to convey the fact that virtually everyone has the ability to

understand, monitor, and make changes in his or her own level of fitness and wellness. By making healthy choices from an early age, individuals can minimize the amount of professional medical care they will ever require. Our hope is that *Fit and Well* will help people make this exciting discovery: that they have the power to shape their own futures.

CONTENT AND ORGANIZATION OF THE SIXTH EDITION

The basic content of *Fit and Well* remains unchanged in the sixth edition. Chapter 1 provides an introduction to fitness and wellness and explains the principles of behavior change. Chapters 2–7 focus on the various areas of fitness. Chapter 2 provides an overview, discussing the components of fitness, the principles of physical training, and the factors involved in designing a well-rounded, personalized exercise program. Chapter 3 provides basic information on how the cardiorespiratory system functions, how the body produces energy for exercise, and how individuals can create successful cardiorespiratory fitness programs. Chapters 4, 5, and 6 look at muscular strength and endurance, flexibility and low-back health, and body composition, respectively. Chapter 7 "puts it all together," describing the nature of a complete program that develops all the components of fitness. This chapter also includes complete sample exercise programs.

Chapters 8, 9, and 10 treat three key areas of wellness promotion: nutrition, weight management, and stress management, respectively. It is in these areas that individuals have some of the greatest opportunities for positive change. Chapters 11 and 12 focus on two of the most important reasons for making lifestyle changes: cardiovascular disease and cancer. Students learn the basic mechanisms of these diseases, how they are related to lifestyle, and what individuals can do to prevent them. Chapters 13 and 14 focus on other important wellness issues: addictive behaviors, including the use and abuse of tobacco, alcohol, and other drugs (Chapter 13) and sexually transmitted diseases (Chapter 14). Finally, Chapter 15 looks at four additional wellness topics: interpersonal relationships, aging, the health care system, and environmental health.

For the sixth edition, each chapter was carefully reviewed, revised, and updated. The latest information from scientific and wellness-related research is incorporated in the text, and newly emerging topics are discussed. The following list gives a sample of some of the new and updated material included in the sixth edition of *Fit and Well:*

- New research on links between lifestyle and quality of life
- Physical activity recommendations from the Institute of Medicine, World Health Organization, and other organizations
- Dietary Reference Intakes for vitamins, minerals, energy macronutrients, water, and electrolytes
- New and alternative food pyramids and new food labeling requirements for trans fats
- Gender differences in cardiovascular disease
- Research on low-carbohydrate and low-fat diets
- Metabolic syndrome, C-reactive protein, and other new risk factors for cardiovascular disease
- Tobacco cessation products
- Performance aids and dietary supplement safety and labeling issues
- Body image and eating disorders
- Preventing and managing low-back pain
- Nutrition for athletes
- Diabetes and pre-diabetes
- College stressors and coping methods
- Cholesterol and blood pressure testing and treatment recommendations, including the new category of prehypertension
- Binge drinking and alcohol emergencies
- Ecstasy, GHB, and other club drugs
- Spiritual wellness
- Complementary and alternative medicine
- Health fraud and quackery

Research in the areas of health and wellness is ongoing, with new discoveries, advances, trends, and theories reported nearly every week. For this reason, no wellness book can claim to have the final word on every topic. Yet, within these limits, *Fit and Well* does present the latest available information and scientific thinking on important wellness topics. Taken together, the chapters of the book provide students with a complete, up-to-date guide to maximizing their well-being, now and through their entire lives.

To help students obtain the most current wellness information, each chapter in the sixth edition is also closely tied to the Web site developed as a companion to the text. Boxes, illustrations, tables, labs, terms, and sections of text marked with the special World Wide Web icon have corresponding links and activities on the *Fit and Well* Online Learning Center (www.mhhe.com/fahey).

FEATURES OF THE SIXTH EDITION

This edition of *Fit and Well* builds on the features that attracted and held our readers' interest in previous editions. These features are designed to help students increase their understanding of the key concepts of wellness and to make better use of the book.

Laboratory Activities

To help students apply the principles of fitness and wellness to their own lives, *Fit and Well* includes **laboratory activities** for classroom use. These hands-on activities

give students the opportunity to assess their current level of fitness and wellness, to create plans for changing their lifestyle to reach wellness, and to monitor their progress. They can assess their daily physical activity, for example, or their level of cardiorespiratory endurance; they can design a program to improve muscular strength or meet weight-loss goals; they can explore their risk of developing cardiovascular disease or cancer; and they can examine their attitudes and behaviors in relation to alcohol use and STDs. Many labs end with a section labeled "Using Your Results," which guides students in evaluating their scores, setting goals for change, and moving forward. Labs are found at the end of each chapter; they are perforated for easy use.

The laboratory activities are also found in an interactive format on the *Fit and Well* Online Learning Center. For a complete list of laboratory activities, see p. xvi in the table of contents.

Illustrated Exercise Sections

To ensure that students understand how to perform important exercises and stretches, *Fit and Well* includes three **illustrated exercise sections,** one in Chapter 4 and two in Chapter 5. The section in Chapter 4 covers exercises for developing muscular strength and endurance, as performed both with free weights and on weight machines. One section in Chapter 5 presents stretches for flexibility, and the other presents exercises to stretch and strengthen the lower back. Each exercise is illustrated with one or more full-color photographs showing proper technique.

New to the sixth edition, digital video clips of the exercises from the text and key lab activities are found on the *Fit and Well* Online Learning Center. Look for the special video icon in the text to find out when to look online for corresponding video clips.

Sample Programs

To help students get started, Chapter 7 offers seven complete **sample programs** designed to develop overall fitness. The programs are built around four popular cardiorespiratory endurance activities: walking/jogging/running, bicycling, swimming, and in-line skating. They also include strength training and stretching exercises. Each one includes detailed information and guidelines on equipment and technique; target intensity, duration, and frequency; calorie cost of the activity; record keeping; and adjustments to make as fitness improves. The chapter also includes general guidelines for putting together a personal fitness program: setting goals; selecting activities; setting targets for intensity, duration, and frequency; maintaining a commitment; and recording and assessing progress.

Boxes

Boxes are used in *Fit and Well* to explore a wide range of current topics in greater detail than is possible in the text itself. Boxes fall into five different categories, each marked with a special icon and label.

Take Charge boxes distill from the text the practical advice students need to apply information to their own lives. By referring to these boxes, students can easily find information about such topics as becoming more active, rehabilitating athletic injuries, exercising in hot weather, adding whole-grain foods to the diet, judging serving sizes, helping a friend who has an eating disorder, managing anger, dealing with an alcohol emergency, enhancing support in interpersonal relationships, and many others.

Critical Consumer boxes are designed to help students develop and apply critical thinking skills, thereby enabling them to make sound choices related to health and well-being. Critical Consumer boxes provide specific guidelines for choosing a fitness center and exercise footwear and equipment; for evaluating health information, diet pills and aids, supplements, and smoking cessation products; and for using food labels and dietary supplement labels to make informed dietary choices.

Dimensions of Diversity boxes focus on the important theme of diversity. Most wellness issues are universal; we all need to exercise and eat well, for example. However, certain differences among people—based on gender, educational attainment, socioeconomic status, ethnicity, age, and other factors—do have important implications for wellness. Dimensions of Diversity boxes give students opportunities to identify special wellness concerns that affect them because of who they are, as individuals or as members of a group. Topics of Dimensions of Diversity boxes include fitness for people with disabilities, gender differences in the effects of smoking, gender and ethnic differences in body image, ethnic foods, and complementary and alternative medicine.

Wellness Connection boxes highlight important links among the different dimensions of wellness—physical, emotional, social/interpersonal, intellectual, spiritual, and environmental—and emphasize that all the dimensions must be developed in order for an individual to achieve optimal health and well-well-being. Topics include the effects of exercise on mental functioning, paths to spiritual wellness, expressive writing, hostility and heart disease, coping with cancer, and the benefits of volunteering.

In Focus boxes highlight current topics and issues of particular interest to students. These boxes focus on such topics as the importance of lifestyle for young adults, exercise safety, exercise machines versus free weights, diabetes, fitness and fatness, low-fat versus low-carbohydrate diets, glycemic index, the benefits of quitting smoking, and many others.

Vital Statistics

Vital Statistics tables and figures highlight important facts and figures in an accessible format. From tables and figures marked with the Vital Statistics label, students learn about such matters as the leading causes of death for Americans and the factors that play a part in each one; the relationship between lifestyle and quality of life; public health achievements of the twentieth century; the most popular fitness activities; drug use in the United States; the effects of binge drinking on college students; routes of HIV infection; and a wealth of other information. For students who learn best when material is displayed graphically or numerically, Vital Statistics tables and figures offer a way to grasp information quickly and directly.

Common Questions Answered

Sections called **Common Questions Answered** appear at the ends of Chapters 2–14. In these student-friendly sections, the answers to frequently asked questions are presented in easy-to-understand terms. Included are such questions as, Do I need more protein in my diet when I train with weights? How can I safely increase exercise intensity? What is core strength training? Can a workout with an exercise ball be useful in preventing and managing low-back pain? How can I tell if I'm allergic to a food? and, Is it true that marijuana can be used medically?

Motivation for Change

New to the sixth edition, **Motivation for Change** sections provide strategies for beginning a behavior change program and maintaining healthy new habits over time. Motivation for Change strategies focus on such key aspects of behavior change as building self-efficacy, finding role models and social support, overcoming obstacles and lapses, changing environmental cues, giving rewards, and tracking program progress. These sections appear at appropriate points throughout each chapter.

Tips for Today

Chapter-ending **Tips for Today** sections provide a very brief distillation of the major message of each chapter, followed by suggestions for a few simple things that students can try right away. Tips for Today are designed to encourage students and to build their confidence by giving them easy steps they can take immediately to improve their wellness.

Quick-Reference Appendixes

Included at the end of the book are four appendixes containing vital information in an easy-to-use format. **Appendix A, Injury Prevention and Personal Safety,** is a reference guide to preventing common injuries, whether at home, at work, at play, or on the road. It also provides information on giving emergency care when someone else's life is in danger.

Appendix B, Nutritional Content of Common Foods, allows students to assess their daily diet in terms of 11 nutrient categories, including protein, fat, saturated fat, fiber, cholesterol, and sodium. **Appendix C, Nutritional Content of Popular Items from Fast-Food Restaurants,** provides a breakdown of the nutritional content of the most commonly ordered menu items at popular fast-food restaurants.

Appendix D, Monitoring Your Progress, is a log that enables students to record and summarize the results of the assessment tests they complete as part of the laboratory activities. With space for preprogram and postprogram assessment results, the log provides an easy way to track the progress of a behavior change program.

Built-in Behavior Change Workbook

The built-in Behavior Change Workbook contains 15 separate activities that complement the lifestyle management model presented in Chapter 1. The workbook guides students in developing a successful program by walking them through each of the steps of behavior change—from choosing a target behavior to completing and signing a contract. It also includes activities to help students overcome common obstacles to behavior change. The workbook is also found on the Online Learning Center.

OTHER FEATURES AND LEARNING AIDS

At the beginning of each chapter, under the heading **Looking Ahead,** five or six statements preview the main points of the chapter for the student and serve as learning objectives. Each chapter also opens with **Test Your Knowledge**—a series of three multiple choice and true-false questions, with answers. These self-quizzes facilitate learning by emphasizing key points, highlighting common misconceptions, and sparking debate. Within each chapter, important terms appear in boldface type and are defined on the same or facing page of text in a **running glossary,** helping students handle new vocabulary.

Other features and learning aids are found at the end of each chapter. **For Further Exploration** sections offer suggestions for using the free student supplements that accompany the text—the Online Learning Center, the Daily Fitness and Nutrition Journal, and the HealthQuest CD-ROM—to build fitness and wellness. These sections also list recommended books, newsletters, organizations, hotlines, and Web sites. Finally, **chapter summaries** offer students a concise review and a way to make sure they have grasped the most important concepts in the chapter.

For more on the features of the book, refer to the illustrated **User's Guide to *Fit and Well,*** found on pp. xvii–xx.

TEACHING TOOLS

Available with the sixth edition of *Fit and Well* is a comprehensive package of supplementary materials designed to enhance teaching and learning.

can be linked to elements in the Online Learning Center, Web links, online discussion areas, an online grade book, and much more. The Online Learning Center can also be customized to work with products like WebCT and Blackboard.

For more information about McGraw-Hill's digital resources, including how to obtain passwords for PageOut and PowerWeb, contact your local representative and visit McGraw-Hill on the World Wide Web (www.mhhe.com/solutions).

Student Resources Available with *Fit and Well*

In addition to the materials on the Online Learning Center, there are many resources available with *Fit and Well* designed to help students learn and apply key concepts.

- The **Daily Fitness and Nutrition Journal** (ISBN 0-07-284432-9) is a handy booklet that guides students in planning and tracking their fitness programs. It also helps students assess their current diet and make appropriate changes. It is packaged free with each copy of the text.
- **HealthQuest 4.2** (ISBN 0-07-295116-8) is an interactive CD-ROM that helps students explore their wellness behavior. It includes tutorials, assessments, and behavior change guidance in such key areas as stress, fitness, nutrition, communicable diseases, cardiovascular disease, cancer, tobacco, alcohol, and other drugs. It is packaged free with each copy of the text.
- **NutritionCalc Plus** (ISBN 0-07-292084-X) is a dietary analysis program with an easy-to-use interface that allows users to track their nutrient and food group intakes, energy expenditures, and weight control goals. It generates a variety of reports and graphs for analysis, including comparisons with the Food Guide Pyramid and the Dietary Reference Intakes. The ESHA database includes thousands of ethnic foods, supplements, fast foods, and convenience foods; users can also add their own foods to the database. NutritionCalc Plus is available on CD-ROM (Windows only) or in an Internet version.
- The **Quick View Guide to the Internet for Students of Health, Physical Education, and Exercise Science, Version 2.0** (ISBN 0-7674-2062-4) provides step-by-step instructions on how to access the Internet; how to find, evaluate, and use online information about fitness and wellness; and many other topics.

Additional supplements and many packaging options are available; check with your local sales representative.

A NOTE OF THANKS

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Instructor's Resource CD-ROM (ISBN 0-07-284425-6)

The Instructor's Resource CD-ROM combines all the major electronic resources offered with the sixth edition of *Fit and Well.*

- The **Course Integrator Guide** includes learning objectives, extended chapter outlines, lists of additional resources, and many other teaching tools. It also describes all the print and electronic supplements available with the text and shows how to integrate them into lectures and assignments for each chapter. For the sixth edition, the guide was prepared by Julie Lombardi, Millersville University.
- One hundred **Additional Laboratory Activities** supplement the labs that are included in the text. These additional labs are also available to students on the Online Learning Center.
- The **test bank** includes more than 1500 true-false, multiple choice, and essay questions. The questions are available as Word files and with the Brownstone **computerized testing software.** Brownstone provides a powerful, easy-to-use test maker to create a print version, a computer lab version, or an Internet version of each test. The Interactive Instructor CD-ROM includes the Diploma program for Windows users and Exam VI for Macintosh users; the Diploma program also includes a built-in gradebook.
- The **PowerPoint slides,** expanded for the sixth edition, provide a lecture tool that you can alter or expand to meet the needs of your course. The slides include key lecture points and images from the text and other sources.

Printed versions of key supplements—the Course Integrator Guide, Additional Labs, and test bank—are also available (ISBN 0-07-302495-3). The printed supplements are loose-leaf and three-hole-punched, ready to be placed in a binder.

Video Resources

A variety of video resources is available for use with the sixth edition of *Fit and Well.* The Online Learning Center described below includes brief digital video clips of key exercises and labs featured in the text. Other video resources include the following:

- The **McGraw-Hill Custom Video for Health** (ISBN 0-7674-2567-7) includes brief video segments with additional information on wellness topics such as nutrition, exercise, and heart disease.
- **Students on Health Custom Video** (ISBN 0-7674-0022-4) features students from college campuses across the country discussing how their daily lives are affected by their choices in such wellness areas as exercise, nutrition, and stress.
- The **Healthy Living Video Clips CD-ROM** (ISBN 0-07-238808-0) contains a collection of brief, digitized video clips that can be used to introduce a lecture or to spark classroom discussion. The segments are 2–4 minutes long.

Videos from Films for Humanities and from the award-winning series *Healthy Living: Road to Wellness* are also available.

Digital Solutions

The ***Fit and Well* Online Learning Center (www.mhhe.com/fahey)** provides many resources for both instructors and students. Instructor tools include downloadable versions of the Course Integrator Guide and the PowerPoint slides, links to professional resources, and a guide to using the Internet. For students, there are learning objectives, self-quizzes and glossary flashcards for review, interactive Internet activities, and extensive links. The Online Learning Center also includes many tools for wellness behavior change, including interactive versions of the Behavior Change Workbook as well as lab activities from the text and additional labs from the Course Integrator Guide. Through the Online Learning Center, students can also access **PowerWeb** (www.dushkin.com/online) resources, including articles on key wellness topics, study tips, and a daily news feed.

The **Online Lab Manual and Workbook,** developed in collaboration with Quia™, offers an electronic version of labs, assessments, and quizzes compiled from the text and its main supplements. This new online supplement provides students with interactive labs and assessments, self-scoring quizzes, and instant feedback. Benefits for instructors include a grade book that automatically scores, tracks, and records students' results; it also offers instructors the opportunity to review individual and class performance and customize activities for their course. To find out more about the Quia™ Online Lab Manual and Workbook, including how you can package it with *Fit and Well*, contact your local sales representative.

Classroom Performance System (CPS) brings interactivity into the classroom or lecture hall. CPS is a wireless response system that gives instructors and students immediate feedback from the entire class. Each student uses a wireless response pad similar to a television remote to instantly respond to polling or quiz questions. Contact your local sales representative for more information about using CPS with *Fit and Well.*

The **Health and Human Performance Web Site (www.mhhe.com/hhp)** provides monthly articles about current issues, downloadable supplements for instructors, a "how-to" technology guide, self-assessments, study tips, exam-preparation materials, and a wealth of other tools and resources for instructors and students. It also includes information about professional organizations, scholarship opportunities, conventions, and careers.

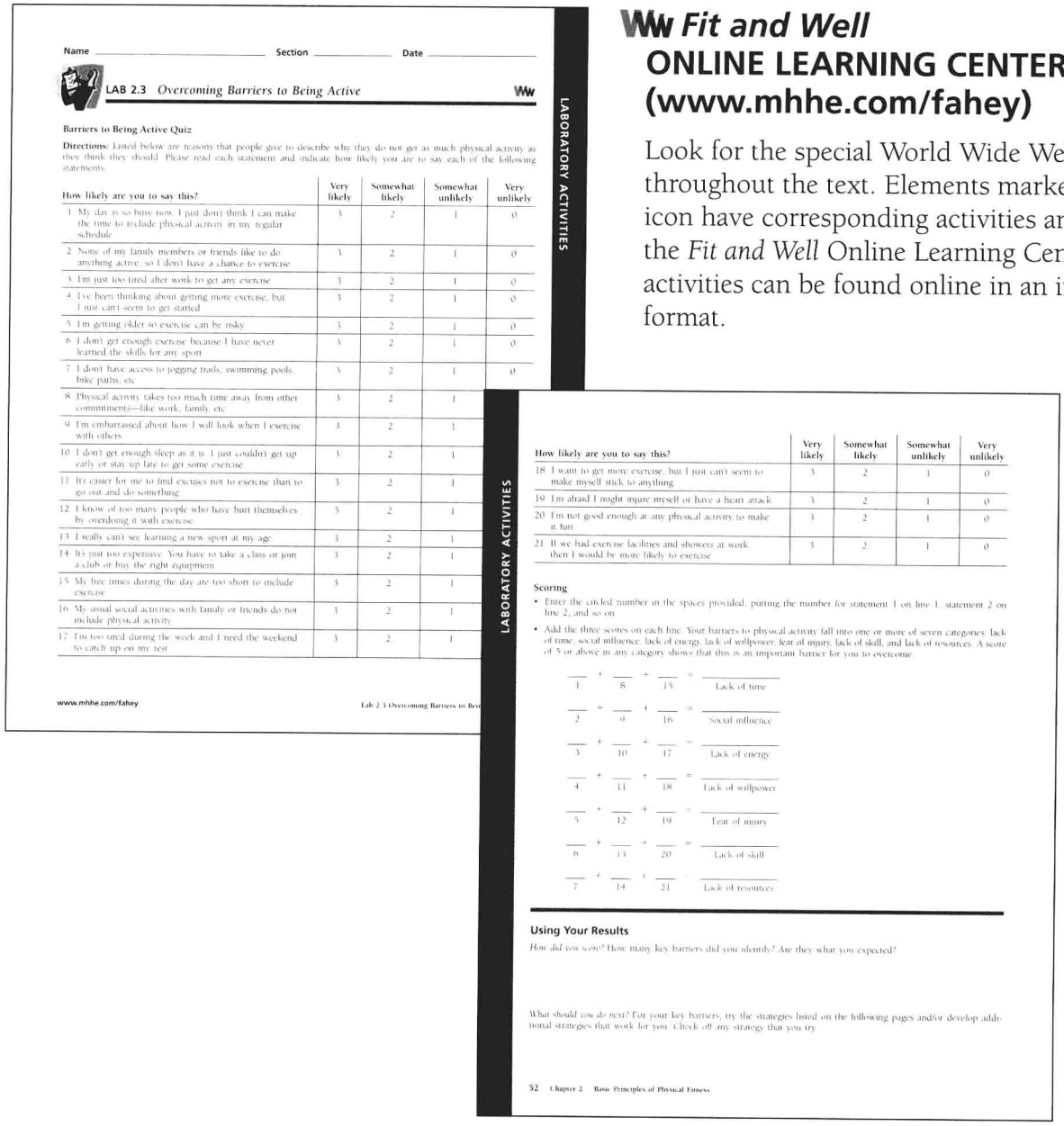
PageOut (www.pageout.net) is a free, easy-to-use program that enables instructors to quickly develop Web sites for their courses. PageOut can be used to create a course home page, an instructor home page, an interactive syllabus that

A User's Guide to *Fit and Well*

Are you looking for ways to improve your lifestyle and become fit and well? Do you need help finding reliable wellness resources online? Would you like to boost your grade? *Fit and Well* can help you do all this and much more!

LABORATORY ACTIVITIES

These hands-on self-assessments help you determine your current level of wellness and create plans for making positive changes in your lifestyle. The Using Your Results sections guide you in setting goals and moving forward based on the results of the assessments. Lab activities are included at the end of every chapter on easy-to-use perforated pages.



Name _____ Section _____ Date _____

LAB 2.3 *Overcoming Barriers to Being Active* WW

LABORATORY ACTIVITIES

Barriers to Being Active Quiz

Directions: Listed below are reasons that people give to describe why they do not get as much physical activity as they think they should. Please read each statement and indicate how likely you are to say each of the following statements.

How likely are you to say this?	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely
1. My day is so busy now, I just don't think I can make the time to include physical activity in my regular schedule	3	2	1	0
2. None of my family members or friends like to do anything active, so I don't have a chance to exercise	3	2	1	0
3. I'm just too tired after work to get any exercise	3	2	1	0
4. I've been thinking about getting more exercise, but I just can't seem to get started	3	2	1	0
5. I'm getting older so exercise can be risky	3	2	1	0
6. I don't get enough exercise because I have never learned the skills for any sport	3	2	1	0
7. I don't have access to jogging trails, swimming pools, bike paths, etc.	3	2	1	0
8. Physical activity takes too much time away from other commitments—like work, family, etc.	3	2	1	
9. I'm embarrassed about how I will look when I exercise with others	3	2	1	
10. I don't get enough sleep as it is. I just couldn't get up early or stay up late to get some exercise	3	2	1	
11. It's easier for me to find excuses not to exercise than to go out and do something	3	2	1	
12. I know of too many people who have hurt themselves by overdoing it with exercise	3	2	1	
13. I really can't see learning a new sport at my age	3	2	1	
14. It's just too expensive. You have to take a class or join a club or buy the right equipment	3	2	1	
15. My free times during the day are too short to include exercise	3	2	1	
16. My usual social activities with family or friends do not include physical activity	3	2	1	
17. I'm too tired during the week and I need the weekend to catch up on my rest	3	2	1	

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Lab 2.3 Overcoming Barriers to Bei

LABORATORY ACTIVITIES

How likely are you to say this?	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely
18. I want to get more exercise, but I just can't seem to make myself stick to anything	3	2	1	0
19. I'm afraid I might injure myself or have a heart attack	3	2	1	0
20. I'm not good enough at any physical activity to make it fun	3	2	1	0
21. If we had exercise facilities and showers at work, then I would be more likely to exercise	3	2	1	0

Scoring

- Enter the circled number in the spaces provided, putting the number for statement 1 on line 1, statement 2 on line 2, and so on.
- Add the three scores on each line. Your barriers to physical activity fall into one or more of seven categories: lack of time, social influence, lack of energy, lack of willpower, fear of injury, lack of skill, and lack of resources. A score of 5 or above in any category shows that this is an important barrier for you to overcome.

___ + ___ + ___ = ___ Lack of time (1, 8, 15)

___ + ___ + ___ = ___ Social influence (2, 9, 16)

___ + ___ + ___ = ___ Lack of energy (3, 10, 17)

___ + ___ + ___ = ___ Lack of willpower (4, 11, 18)

___ + ___ + ___ = ___ Fear of injury (5, 12, 19)

___ + ___ + ___ = ___ Lack of skill (6, 13, 20)

___ + ___ + ___ = ___ Lack of resources (7, 14, 21)

Using Your Results

How did you score? How many key barriers did you identify? Are they what you expected?

What should you do next? For your key barriers, try the strategies listed on the following pages and/or develop additional strategies that work for you. Check off any strategy that you try.

52 Chapter 2 Basic Principles of Physical Fitness

WW *Fit and Well* ONLINE LEARNING CENTER (www.mhhe.com/fahey)

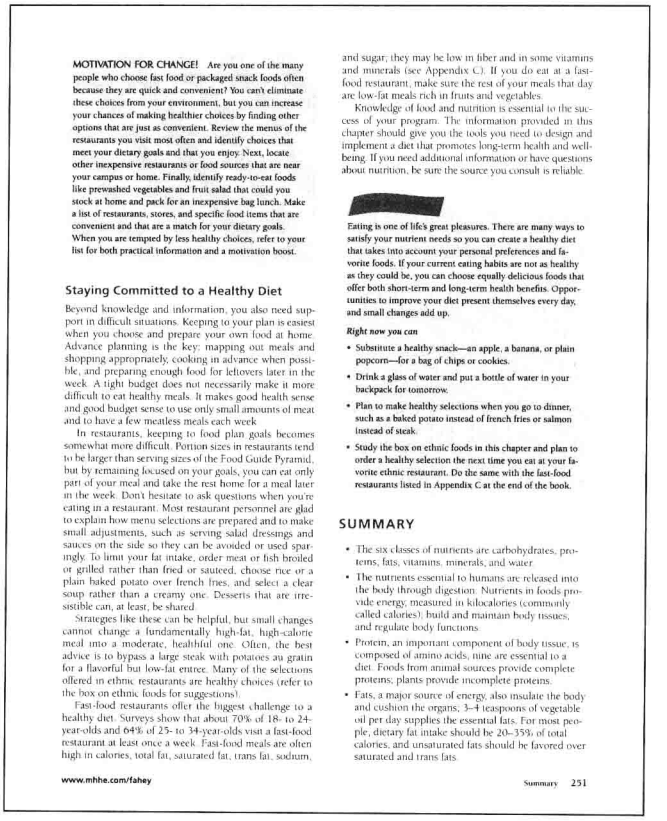
Look for the special World Wide Web icon throughout the text. Elements marked with the icon have corresponding activities and links on the *Fit and Well* Online Learning Center. The lab activities can be found online in an interactive format.

MOTIVATION FOR CHANGE

New to the sixth edition, Motivation for Change sections provide strategies for beginning a behavior change program and maintaining new healthy habits over time.

TIPS FOR TODAY

Tips for Today sections, found at the end of each chapter, provide a brief summary of the major message of the chapter, followed by suggestions for a few easy steps you can try right away to improve your level of wellness.



MOTIVATION FOR CHANGE! Are you one of the many people who choose fast food or packaged snack foods often because they are quick and convenient? You can't eliminate these choices from your environment, but you can increase your chances of making healthier choices by finding other options that are just as convenient. Review the menus of the restaurants you visit most often and identify choices that meet your dietary goals and that you enjoy. Next, locate other inexpensive restaurants or food sources that are near your campus or home. Finally, identify ready-to-eat foods like prewashed vegetables and fruit salad that could you stock at home and pack for an inexpensive bag lunch. Make a list of restaurants, stores, and specific food items that are convenient and that are a match for your dietary goals. When you are tempted by less healthy choices, refer to your list for both practical information and a motivation boost.

Staying Committed to a Healthy Diet

Beyond knowledge and information, you also need support in difficult situations. Keeping to your plan is easiest when you choose and prepare your own food at home. Advance planning is the key: mapping out meals and shopping appropriately, cooking in advance when possible, and preparing enough food for leftovers later in the week. A tight budget does not necessarily make it more difficult to eat healthy meals. It makes good health sense and good budget sense to use only small amounts of meat and to have a few meatless meals each week.

In restaurants, keeping to food plan goals becomes somewhat more difficult. Portion sizes in restaurants tend to be larger than serving sizes of the Food Guide Pyramid, but by remaining focused on your goals, you can eat only part of your meal and take the rest home for a meal later in the week. Don't hesitate to ask questions when you're eating in a restaurant. Most restaurant personnel are glad to explain how menu selections are prepared and to make small adjustments, such as serving salad dressings and sauces on the side so they can be avoided or used sparingly. To limit your fat intake, order meat or fish broiled or grilled rather than fried or sauteed, choose rice or a plain baked potato over french fries, and select a clear soup rather than a creamy one. Desserts that are irresistible can, at least, be shared.

Strategies like these can be helpful, but small changes cannot change a fundamentally high-fat, high-calorie meal into a moderate, healthful one. Often, the best advice is to bypass a large steak with potatoes au gratin for a flavorful but low-fat entree. Many of the selections offered in ethnic restaurants are healthy choices (refer to the box on ethnic foods for suggestions).

Fast-food restaurants offer the biggest challenge to a healthy diet. Surveys show that about 70% of 18- to 24-year-olds and 64% of 25- to 34-year-olds visit a fast-food restaurant at least once a week. Fast-food meals are often high in calories, total fat, saturated fat, trans fat, sodium, and sugar; they may be low in fiber and in some vitamins and minerals (see Appendix C). If you do eat at a fast-food restaurant, make sure the rest of your meals that day are low-fat meals rich in fruits and vegetables.

Knowledge of food and nutrition is essential to the success of your program. The information provided in this chapter should give you the tools you need to design and implement a diet that promotes long-term health and well-being. If you need additional information or have questions about nutrition, be sure the source you consult is reliable.

Eating is one of life's great pleasures. There are many ways to satisfy your nutrient needs so you can create a healthy diet that takes into account your personal preferences and favorite foods. If your current eating habits are not as healthy as they could be, you can choose equally delicious foods that offer both short-term and long-term health benefits. Opportunities to improve your diet present themselves every day, and small changes add up.

Right now you can

- **Substitute a healthy snack—an apple, a banana, or plain popcorn—for a bag of chips or cookies.**
- **Drink a glass of water and put a bottle of water in your backpack for tomorrow.**
- **Plan to make healthy selections when you go to dinner, such as a baked potato instead of french fries or salmon instead of steak.**
- **Study the box on ethnic foods in this chapter and plan to order a healthy selection the next time you eat at your favorite ethnic restaurant. Do the same with the fast-food restaurants listed in Appendix C at the end of the book.**

SUMMARY

- The six classes of nutrients are carbohydrates, proteins, fats, vitamins, minerals, and water.
- The nutrients essential to humans are released into the body through digestion. Nutrients in foods provide energy, measured in kilocalories (commonly called calories); build and maintain body tissues; and regulate body functions.
- Protein, an important component of body tissue, is composed of amino acids, nine are essential to a diet. Foods from animal sources provide complete proteins; plants provide incomplete proteins.
- Fats, a major source of energy, also insulate the body and cushion the organs; 3–4 teaspoons of vegetable oil per day supplies the essential fats. For most people, dietary fat intake should be 20–35% of total calories, and unsaturated fats should be favored over saturated and trans fats.

TAKE CHARGE Exercise in Hot Weather

Following a few simple principles can minimize the problems associated with exercising in the heat. To help alert people about weather conditions that could increase the risk of heat illness, the U.S. Weather Service developed the **heat index**—a measure that incorporates both temperature and relative humidity. For example, a temperature of 95 degrees combined with a relative humidity of 50% has a heat index of 107. Prolonged exposure or physical activity when the heat index is 80–90 can cause fatigue; at a heat index of 90 or above, heat cramps, heat exhaustion, and heat stroke become more likely. Reduce and avoid exercise when the heat index is 90 or above. A complete chart of heat index values can be found on the *Fit and Well* Online Learning Center. Local heat index information is available from the National Weather Service (http://www.weather.gov). Additional strategies to help avoid the risk of heat illness include the following:

- Be in good physical condition. Exercise training can help the body adapt to heat by increasing the sweat rate.
- Use caution when exercising in extreme heat or humidity (over 80°F and/or 60% humidity).
- Slow exercise or add rest breaks to maintain your prescribed target heart rate; as you become acclimatized, you can gradually increase intensity and duration.
- Exercise in the early morning or evening, when temperatures are lowest.
- Drink 2 cups of fluids 2 hours before you begin exercising, and drink 4–8 ounces of fluid every 10–15 minutes during exercise (more frequently during high-intensity activities). Plan for regular water breaks.
- During a period of hot weather, weigh yourself every day before exercising. If your weight has decreased by 3% or more from the previous day, don't exercise without first rehydrating.
- Avoid supplements and beverages containing stimulants like ephedra and caffeine when exercising in the heat. Do not use salt pills.
- Wear clothing that "breathes," allowing air to circulate and cool the body. Wearing white or light colors will help by reflecting, rather than absorbing, heat. A hat can help keep direct sun off your face. Do not wear rubber, plastic, or other nonporous clothing. "Sauna suits" cause loss of body water, not fat, and don't improve body composition.
- Rest frequently in the shade.
- Slow down or stop if you begin to feel uncomfortable. Watch for the signs of heat disorders listed below; if they occur, act appropriately.

Problem	Symptoms	Treatment
Heat cramps	Muscle cramps, usually in the muscles most used during exercise.	Stop exercising, drink fluids, and massage or stretch cramped muscles.
Heat exhaustion	Weakness, dizziness, headache, rapid pulse, profuse sweating, pale face, normal or slightly elevated temperature.	Cool the body. Stop exercising, get out of the heat, remove excess clothing, drink cold fluids, and apply cool and/or damp towels to the body.
Heat stroke	Hot, flushed skin (may be dry or sweaty), red face, chills, shivering, disorientation, erratic behavior, high body temperature, unconsciousness, convulsions.	*Get immediate medical attention*, and try to lower body temperature. Get out of the heat, remove excess clothing, drink cold fluids, and apply cool and/or damp towels to the body or immerse it in cold water.

When to Call a Physician Some injuries require medical attention. Consult a physician for head and eye injuries, possible ligament injuries, broken bones, and internal disorders such as chest pain, fainting, elevated body temperature, and intolerance to hot weather. Also seek medical attention for ostensibly minor injuries that do not get better within a reasonable amount of time. You may need to modify your exercise program for a few weeks to allow an injury to heal.

Managing Minor Exercise Injuries For minor cuts and scrapes, stop the bleeding and clean the wound. Treat injuries to soft tissue (muscles and joints) with the R-I-C-E principle: rest, ice, compression, and elevation. Immediately following the injury, rest the affected area and apply ice. Elevate the affected part of the body, and

Terms

heat stroke A severe and often fatal heat illness produced by exposure to very high temperatures, especially when combined with intense exercise; characterized by significantly elevated core body temperature.

hypothermia Low body temperature due to exposure to cold conditions.

frostbite Freezing of body tissues characterized by pallor, numbness, and a loss of cold sensation.

wind chill A measure of how cold it feels based on the rate of heat loss from exposed skin caused by cold and wind, the temperature that would have the same cooling effect on a person as a given combination of temperature and wind speed.

heat index A measure of how hot it feels; the temperature that would have the same heating effect on a person as a given combination of temperature and relative humidity.

TAKE CHARGE BOXES

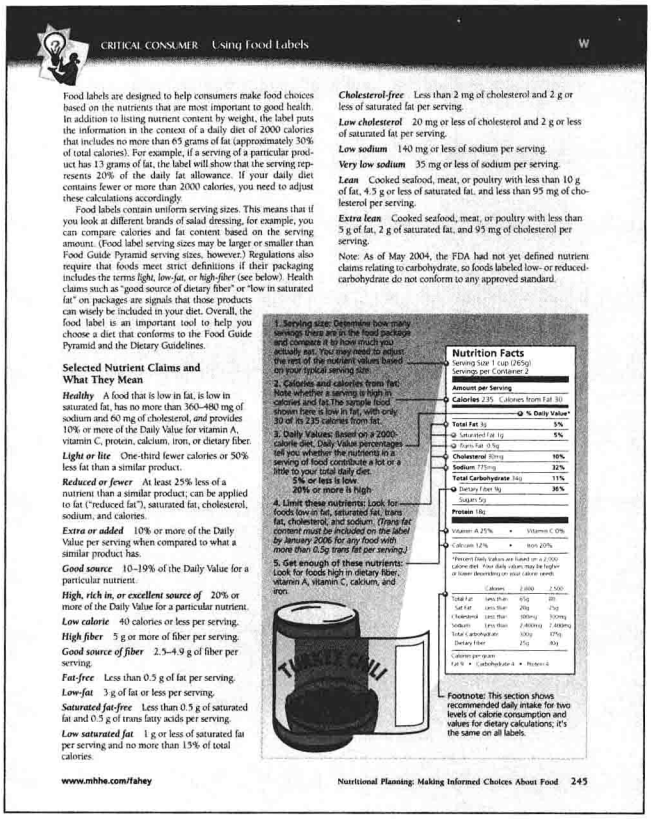
Take Charge boxes, found throughout the text, provide practical advice that you can apply to your everyday life.

RUNNING GLOSSARY

Important terms appear in boldface type in the text and are defined in a running glossary on the same or facing page. A pronunciation guide to the glossary terms is found on the Online Learning Center.

CRITICAL CONSUMER BOXES

Critical Consumer boxes help you develop and apply critical thinking skills so you can make sound choices related to wellness. Additional resources for each Critical Consumer topic are found on the *Fit and Well* Online Learning Center.



CRITICAL CONSUMER Using Food Labels W

Food labels are designed to help consumers make food choices based on the nutrients that are most important to good health. In addition to listing nutrient content by weight, the label puts the information in the context of a daily diet of 2000 calories that includes no more than 65 grams of fat (approximately 30% of total calories). For example, if a serving of a particular product has 13 grams of fat, the label will show that the serving represents 20% of the daily fat allowance. If your daily diet contains fewer or more than 2000 calories, you need to adjust these calculations accordingly.

Food labels contain uniform serving sizes. This means that if you look at different brands of salad dressing, for example, you can compare calories and fat content based on the serving amount. (Food label serving sizes may be larger or smaller than Food Guide Pyramid serving sizes, however.) Regulations also require that foods meet strict definitions if their packaging includes the terms *light, low-fat,* or *high-fiber* (see below). Health claims such as "good source of dietary fiber" or "low in saturated fat" on packages are signals that those products can wisely be included in your diet. Overall, the food label is an important tool to help you choose a diet that conforms to the Food Guide Pyramid and the Dietary Guidelines.

Selected Nutrient Claims and What They Mean

Healthy A food that is low in fat, is low in saturated fat, has no more than 360–480 mg of sodium and 60 mg of cholesterol, *and* provides 10% or more of the Daily Value for vitamin A, vitamin C, protein, calcium, iron, or dietary fiber.

Light or lite One-third fewer calories or 50% less fat than a similar product.

Reduced or fewer At least 25% less of a nutrient than a similar product; can be applied to fat ("reduced fat"), saturated fat, cholesterol, sodium, and calories.

Extra or added 10% or more of the Daily Value per serving when compared to what a similar product has.

Good source 10–19% of the Daily Value for a particular nutrient.

High, rich in, or excellent source of 20% or more of the Daily Value for a particular nutrient.

Low calorie 40 calories or less per serving.

High fiber 5 g or more of fiber per serving.

Good source of fiber 2.5–4.9 g of fiber per serving.

Fat-free Less than 0.5 g of fat per serving.

Low-fat 3 g of fat or less per serving.

Saturated fat-free Less than 0.5 g of saturated fat and 0.5 g of trans fatty acids per serving.

Low saturated fat 1 g or less of saturated fat per serving and no more than 15% of total calories.

Cholesterol-free Less than 2 mg of cholesterol and 2 g or less of saturated fat per serving.

Low cholesterol 20 mg or less of cholesterol and 2 g or less of saturated fat per serving.

Low sodium 140 mg or less of sodium per serving.

Very low sodium 35 mg or less of sodium per serving.

Lean Cooked seafood, meat, or poultry with less than 10 g of fat, 4.5 g or less of saturated fat, and less than 95 mg of cholesterol per serving.

Extra lean Cooked seafood, meat, or poultry with less than 5 g of fat, 2 g of saturated fat, and 95 mg of cholesterol per serving.

Note: As of May 2004, the FDA had not yet defined nutrient claims relating to carbohydrate, so foods labeled low- or reduced-carbohydrate do not conform to any approved standard.

1. Serving size: Determine how many servings there are in the food package and compare it to how much you actually eat. You may need to adjust the rest of the nutrient values based on your typical serving size.
2. Calories and calories from fat: Note whether a serving is high in calories and fat. The sample food shown here is low in fat, with only 30 of its 235 calories from fat.
3. Daily Values: Based on a 2000-calorie diet, Daily Value percentages tell you whether the nutrients in a serving of food contribute a lot or a little to your total daily diet.
   5% or less is low
   20% or more is high
4. Limit these nutrients: Look for foods low in fat, saturated fat, trans fat, cholesterol, and sodium. *(Trans fat content must be included on the label by January 2006 for any food with more than 0.5g trans fat per serving.)*
5. Get enough of these nutrients: Look for foods high in dietary fiber, vitamin A, vitamin C, calcium, and iron.

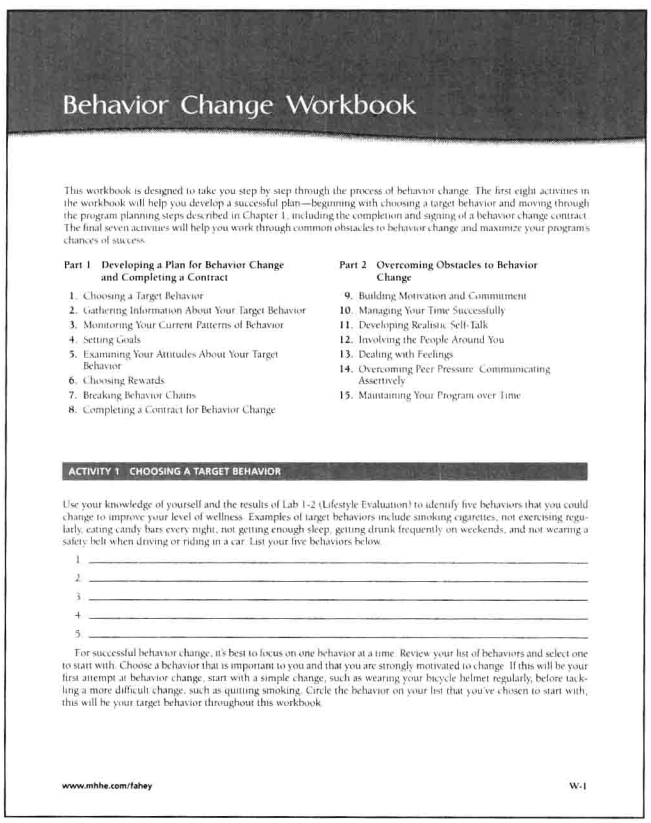
Nutrition Facts
Serving Size 1 cup (265g)
Servings per Container 2
Amount per Serving
Calories 235 Calories from Fat 30
% Daily Value*
Total Fat 3g 5%
Saturated Fat 1g 5%
Trans Fat 0.5g
Cholesterol 80mg 10%
Sodium 775mg 32%
Total Carbohydrate 34g 11%
Dietary Fiber 9g 36%
Sugars 5g
Protein 18g
Vitamin A 25% • Vitamin C 0%
Calcium 12% • Iron 20%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

Footnote: This section shows recommended daily intake for two levels of calorie consumption and values for dietary calculations; it's the same on all labels.

www.mhhe.com/fahey Nutritional Planning: Making Informed Choices About Food 245



Behavior Change Workbook

This workbook is designed to take you step by step through the process of behavior change. The first eight activities in the workbook will help you develop a successful plan—beginning with choosing a target behavior and moving through the program planning steps described in Chapter 1, including the completion and signing of a behavior change contract. The final seven activities will help you work through common obstacles to behavior change and maximize your program's chances of success.

Part 1 Developing a Plan for Behavior Change and Completing a Contract

1. Choosing a Target Behavior
2. Gathering Information About Your Target Behavior
3. Monitoring Your Current Patterns of Behavior
4. Setting Goals
5. Examining Your Attitudes About Your Target Behavior
6. Choosing Rewards
7. Breaking Behavior Chains
8. Completing a Contract for Behavior Change

Part 2 Overcoming Obstacles to Behavior Change

9. Building Motivation and Commitment
10. Managing Your Time Successfully
11. Developing Realistic Self-Talk
12. Involving the People Around You
13. Dealing with Feelings
14. Overcoming Peer Pressure: Communicating Assertively
15. Maintaining Your Program over Time

ACTIVITY 1 CHOOSING A TARGET BEHAVIOR

Use your knowledge of yourself and the results of Lab 1-2 (Lifestyle Evaluation) to identify five behaviors that you could change to improve your level of wellness. Examples of target behaviors include smoking cigarettes, not exercising regularly, eating candy bars every night, not getting enough sleep, getting drunk frequently on weekends, and not wearing a safety belt when driving or riding in a car. List your five behaviors below.

1. _____
2. _____
3. _____
4. _____
5. _____

For successful behavior change, it's best to focus on one behavior at a time. Review your list of behaviors and select one to start with. Choose a behavior that is important to you and that you are strongly motivated to change. If this will be your first attempt at behavior change, start with a simple change, such as wearing your bicycle helmet regularly, before tackling a more difficult change, such as quitting smoking. Circle the behavior on your list that you've chosen to start with; this will be your target behavior throughout this workbook.

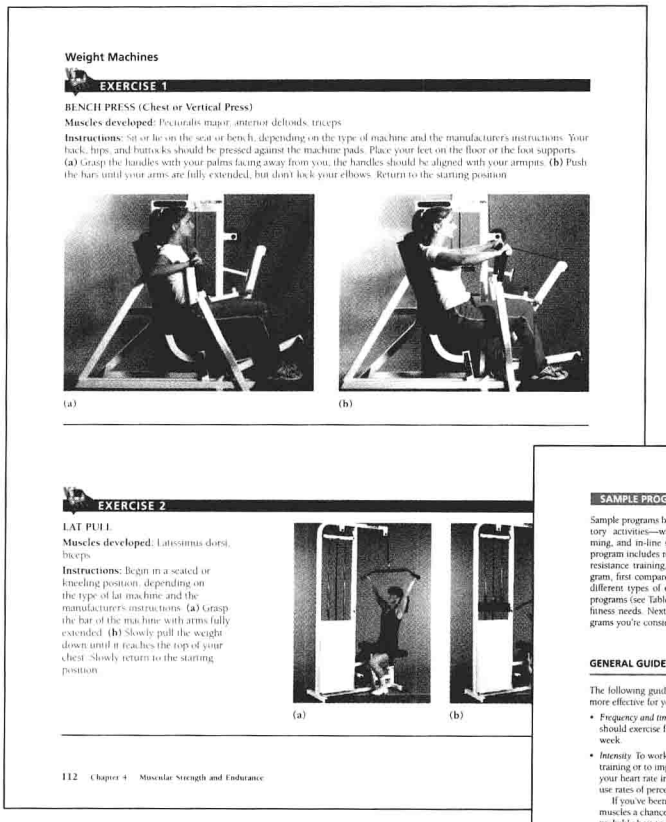
www.mhhe.com/fahey W-1

BEHAVIOR CHANGE WORKBOOK

The Behavior Change Workbook takes you step by step through the process of behavior change. It helps you target a specific behavior, set goals, create a plan, and overcome common obstacles to change. The Workbook is available in an interactive format on the Online Learning Center, and a printed copy is included in the full and alternate editions of the text.

SAMPLE EXERCISE PROGRAMS

Illustrated exercise programs in Chapters 4 and 5 show proper technique for exercises and stretches that develop muscular strength and endurance, flexibility, and low-back health; video clips of the exercises can be found on the Online Learning Center. The complete sample fitness programs in Chapter 7 are built around popular endurance activities such as walking, jogging, cycling, and swimming.



Weight Machines

EXERCISE 1

BENCH PRESS (Chest or Vertical Press)

Muscles developed: Pectoralis major, anterior deltoids, triceps

Instructions: Sit or lie on the seat or bench, depending on the type of machine and the manufacturer's instructions. Your back, hips, and buttocks should be pressed against the machine pads. Place your feet on the floor or the foot supports. **(a)** Grasp the handles with your palms facing away from you, the handles should be aligned with your armpits. **(b)** Push the bars until your arms are fully extended, but don't lock your elbows. Return to the starting position.

(a) (b)

EXERCISE 2

LAT PULL

Muscles developed: Latissimus dorsi, biceps

Instructions: Begin in a seated or kneeling position, depending on the type of lat machine and the manufacturer's instructions. **(a)** Grasp the bar of the machine with arms fully extended. **(b)** Slowly pull the weight down until it reaches the top of your chest. Slowly return to the starting position.

(a) (b)

112 Chapter 4 Muscular Strength and Endurance

SAMPLE PROGRAMS FOR POPULAR ACTIVITIES

Sample programs based on four different types of cardiorespiratory activities—walking/jogging/running, bicycling, swimming, and in-line skating—are presented below. Each sample program includes regular cardiorespiratory endurance exercise, resistance training, and stretching. To choose a sample program, first compare your fitness goals with the benefits of the different types of endurance exercise featured in the sample programs (see Table 7.1). Identify the programs that meet your fitness needs. Next, read through the descriptions of the programs you're considering, and decide which will work best for you based on your present routine, the potential for enjoyment, and adaptability to your lifestyle. If you choose one of these programs, complete the personal fitness program plan in Lab 7.1, just as if you had created a program from scratch.

No program will produce enormous changes in your fitness level in the first few weeks. Give your program a good chance. Follow the specifics of the program for 3–4 weeks. Then if the exercise program doesn't seem suitable, make adjustments to adapt it to your particular needs. But retain the basic elements of the program that make it effective for developing fitness.

GENERAL GUIDELINES

The following guidelines can help make the activity programs more effective for you.

- *Frequency and time.* To experience training effects, you should exercise for 20–60 minutes at least three times a week.
- *Intensity.* To work effectively for cardiorespiratory endurance training or to improve body composition, you must raise your heart rate into its target zone. Monitor your pulse or use rates of perceived exertion to monitor your intensity.

  If you've been sedentary, begin very slowly. Give your muscles a chance to adjust to their increased workload. It's probably best to keep your heart rate below target until your body has had time to adjust to new demands. At first you may not need to work very hard to keep your heart rate in its target zone, but as your cardiorespiratory endurance improves, you will probably need to increase intensity.
- *Interval training.* Some of the sample programs involve continuous activity. Others rely on interval training, which calls for alternating a relief interval with exercise (walking after jogging, for example, or coasting after biking uphill). Interval training is an effective way to achieve progressive overload: When your heart rate gets too high, slow down to lower your pulse rate until you're at the low end of your target zone. Interval training can also prolong the total time you spend in exercise and delay the onset of fatigue.
- *Warm-up and cool-down.* Begin each exercise session with a 10-minute warm-up. Begin your activity at a slow pace and work up gradually to your target heart rate. Always slow down gradually at the end of your exercise session to bring your system back to its normal state. It's a good idea to do stretching exercises to increase your flexibility after cardiorespiratory exercise or strength training because your muscles will be warm and ready to stretch.
- *Record keeping.* After each exercise session, record your daily distance or time on a progress chart.

WALKING/JOGGING/RUNNING SAMPLE PROGRAM

Walking, jogging, and running are the most popular forms of training for people who want to improve cardiorespiratory endurance; they also improve body composition and muscular endurance of the legs. It's not always easy to distinguish among these three endurance activit
we'll consider walking to be
5 miles per hour, jogging any
hour, and running any pace
walking, jogging, and running
sped (in both miles per hou
ric costs for each. The faster
cise, the more calories you
calories burned, the higher th
activities. Tables 2 and 3 con
grams by time and distance.

Equipment and Techniqu

These activities require no sp
or unusual facilities. Comfort
or running shoes, and a stopw
ond hand are all you need.

Developing Cardiorespiratory Endurance

The four variations of the basic walking/jogging/running sample program that follow are designed to help you regulate the

204 Chapter 7 Putting To

FOR FURTHER EXPLORATION

For Further Exploration sections at the end of each chapter describe books, newsletters, organizations, hotlines, and Web sites that you can turn to for additional advice and information. These sections also suggest ways to use the free tools available with *Fit and Well:*

- The Daily Fitness and Nutrition Journal gives you an easy way to plan and track a fitness program and a program for dietary improvement.
- The HealthQuest CD-ROM includes interactive tutorials, self-assessments, review questions, and many other resources.
- The *Fit and Well* Online Learning Center (www.mhhe.com/fahey) provides interactive study guide questions, learning objectives, chapter outlines, glossary flashcards, Internet activities, links, and other useful study aids.

- The stages of change model describes six stages that people may move through as they try to change their behavior: precontemplation, contemplation, preparation, action, maintenance, and termination.
- A specific plan for change can be developed by: (1) collecting data on your behavior and recording it in a journal; (2) analyzing the recorded data; (3) setting specific goals; (4) devising strategies for obtaining information, modifying the environment, rewarding yourself, involving others, and planning ahead; and (5) making a personal contract.
- To start and maintain a behavior change program you need commitment, a well-developed and manageable plan, social support, and strong stress management techniques. It is also important to monitor the progress of your program, revising it as necessary.

FOR FURTHER EXPLORATION

Fit and Well Online Learning Center (www.mhhe.com/fahey)

Visit the *Fit and Well* Online Learning Center and familiarize yourself with the resources available at the site. You can use the learning objectives, study guide questions, and glossary flashcards to review key terms and concepts for this chapter and prepare for exams. You can extend your knowledge of wellness and gain experience in using the Internet as a resource by completing the activities and checking out the Web links for the topics in Chapter 1 marked with the World Wide Web icon. For this chapter, there are activities relating to *Healthy People 2010* objectives, online assessments, and evaluation of online resources; there are Web links for the Vital Statistics tables and figures, the Critical Consumer box, and the chapter as a whole. Behavior change resources and tools include an online version of the Behavior Change Workbook, sample logs for a variety of target behaviors, and sample behavior change plans.

Daily Fitness and Nutrition Journal

Have you chosen a target behavior related to physical activity or diet? If so, begin reviewing the behavior change planning and monitoring tools available in the log. If you've chosen a target behavior in another area, the fitness and nutrition examples can provide a good model for the type of program plan and log you should create for your behavior change program. Visit the Online Learning Center for some blank sample logs that you can print and use.

HealthQuest

Take a closer look at your health risks and current lifestyle by completing the Wellbound activity on the HealthQuest CD-ROM. In addition to estimating your life expectancy based on your lifestyle and the health history of you and your family, this assessment will also give you scores in eight areas and provide tips for improvement. Your scores may help you identify a target behavior for behavior change. You may also want to print and save your complete Wellbound report for later comparison—you can improve your scores and your estimated life expectancy by adopting a wellness lifestyle.

www.mhhe.com/fahey

Books

Beers, M. H. 2004. *The Merck Manual of Medical Information*, 2nd Home Edition. New York: Pocket Books. *Provides consumer-oriented advice for the prevention and treatment of common health concerns.*

Prochaska, J. O., J. C. Norcross, and C. C. DiClemente. 1994. *Changing for Good: The Revolutionary Program That Explains the Six Stages of Change and Teaches You How to Free Yourself from Bad Habits.* New York: Morrow. *Outlines the authors' model of behavior change and offers suggestions and advice for each stage of change.*

Smith, P. B., M. MacFarlane, and E. Kalinsky. 2002. *The Complete Idiot's Guide to Wellness.* Indianapolis, In.: Alpha Books. *A concise guide to healthy habits, including physical activity, nutrition, and stress management.*

Newsletters

Consumer Reports on Health. (800) 234-2188. http://www.ConsumerReports.org/

Harvard Health Letter. (800) 829-9045. http://www.health.harvard.edu/

Harvard Men's Health Watch (800) 829-3341)

Harvard Women's Health Watch (800) 829-3421)

HealthNews (781) 893-3800

Mayo Clinic Health Letter (800) 333-9037)

University of California at Berkeley Wellness Letter 1 (866) 447-9329. http://www.wellnessletter.com)

Organizations, Hotlines, and Web Sites

The Internet addresses (also called uniform resource locators, or URLs) listed here were accurate at the time of publication. Up-to-date links to these and many other wellness-oriented Web sites are provided on the links page of the *Fit and Well* Online Learning Center (http://www.mhhe.com/fahey).

Centers for Disease Control and Prevention. Through phone, fax, and the Internet, the CDC provides a wide variety of health information.
800-311-3435, 888-CDC-FAXX (CDC FAX)
http://www.cdc.gov

Many other government Web sites provide access to health-related materials.
Federal Trade Commission: http://www.ftc.gov
FirstGov for Consumers—Health: http://www.consumer.gov/health.htm
National Institutes of Health: http://www.nih.gov
National Library of Medicine, MedlinePlus: http://www.medlineplus.gov

Go Ask Alice. Sponsored by the Columbia University Health Service, this site provides answers to student questions about stress, sexuality, fitness, and many other wellness topics.
http://www.goaskalice.columbia.edu

Healthfinder. A gateway to online publications, Web sites, support and self-help groups, and agencies and organizations that produce reliable health information.
http://www.healthfinder.gov

Healthy People 2010. Provides information on Healthy People objectives and priority areas.
202-205-8503
http://www.healthypeople.gov

www.mhhe.com/fahey For Further Exploration 21

Brief Contents

Contents