

A vibrant, stylized illustration of various people engaged in different activities within a colorful, abstract landscape. In the top left, a person in a green shirt and black pants is climbing a yellow structure. In the top right, a person with blue hair is holding a red candle. In the center, a man and a woman are walking, with a baby in a stroller between them. To the right, a man is holding a glass of water, and a bottle of 'Spring' water sits on a green surface next to a plate of food. In the bottom left, a woman is holding a red apple, and a shopping basket is visible. In the bottom center, two people in orange life vests are in a boat. In the bottom right, a man and a woman are sitting together. The background consists of large, flowing shapes in shades of purple, green, and orange.

FOURTH EDITION

HEALTH

THE BASICS

REBECCA J. DONATELLE



Health The Basics

FOURTH EDITION



REBECCA J. DONATELLE

Oregon State University

ALLYN AND BACON

Boston • London • Toronto • Sydney • Tokyo • Singapore

Publisher: *Joseph E. Burns*
Vice President and Editor-in-Chief: *Paul Smith*
Senior Developmental Editor: *Mary Kriener*
Marketing Manager: *Richard Muhr*
Production Administrator: *Deborah Brown*
Series Editorial Assistant: *Annemarie Kennedy*
Editorial-Production Service: *Colophon*
Composition and Prepress Buyer: *Linda Cox*
Manufacturing Buyer: *Megan Cochran*
Photo Researcher: *Iquest*
Text Design: *The Davis Group, Inc.*
Electronic Composition: *Omegatype Typography, Inc.*
Cover Administrator: *Linda Knowles*



Copyright © 2001, 1999, 1997
A Pearson Education Company
Needham Heights, MA 02494
Internet: www.abacon.com
First edition copyrighted 1995 by Prentice Hall.

All rights reserved. No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the copyright owner.

Portions of this material appeared in *Access to Health*, 6th edition, by Rebecca J. Donatelle and Lorraine G. Davis, copyright © 2000 by Allyn & Bacon.

Between the time website information is gathered and then published, it is not unusual for some sites to have been closed. Also, the transcription of URLs can result in unintended typographical errors. The publisher would appreciate being notified of any problems with URLs so that they may be corrected in subsequent editions. Thank you.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 WC 04 03 02 01 00

Library of Congress Cataloging-in-Publication Data

Donatelle, Rebecca J., 1950–

Health: The Basics / Rebecca J. Donatelle. —
4th ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-205-32215-8 (alk. paper)

1. Health. II. Title.

RA776.D663 2000

613—dc21

99-32285

CIP

Photo Credits

Chapter 1 1: Corbis/Digital Stock; 3: Hugh Rogers/Monkmeyer; 8: Bob Daemmerich/The Image Works; 23: Bill Bachmann/The Image Works.

Chapter 2 27: “In the Mirror” by Linda Clave, © Linda Clave; 31: C. J. Allen/Stock Boston; 35: Dana White/PhotoEdit; 42: Dion Ogust/The Image Works; 45: Myrleen Ferguson/PhotoEdit.

Chapter 3 51: Corbis/Digital Stock; 55: Mike Greenlar/The Image Works; 61: Bob Daemmerich/Stock Boston; 66: Myrleen Ferguson Cate/PhotoEdit.

Chapter 4 71: “Through the Fire” by Ray, Gayle Ray/Superstock; 77: AP/Wide World Photos; 79: Steven D. Starr/Stock Boston; 84: Zed Nelson/IPG/Matrix.

Chapter 5 95: “Man and Woman Embracing with House” by Alexandra Maldonado, © Alexandra Maldonado/Stock Illustration Source; 97: Jeff Greenburg/Stock Boston; 100: Lori Adamski Peek/Stone; 122: T. J. Florian/Rainbow.

Chapter 6 125: “Mother and Child (digital)” by Jose Ortega, © Jose Ortega/Stock Illustration Source; 141: Will Hart; 147: Myrleen Ferguson Cate/PhotoEdit.

Chapter 7 155: “Bigma” 1998 by Robert Chambers (c) Robert Chambers/Museum of Contemporary Art, N. Miami, FL; 160: Tony Freeman/PhotoEdit; 171: Michael Newman/PhotoEdit; 179: AP/Wide World Photos.

Chapter 8 185: Corbis/Digital Stock; 195: Judy Gelles/Stock Boston; 198: Richard Hutchings/Photo Researchers; 207: Bob Daemmerich/Stock Boston; 213: David Weintraub/Stock Boston.

Chapter 9 217: “Falling Fruits” by Mary Lou Nye, © Mary Lou Nye; 235: PhotoDisc.

Chapter 10 247: Corbis/Digital Stock; 248: AP/Wide World Photos; 257: Charles Guppton/Stock Boston.

Chapter 11 265: “Party People” by Ong, Diana Ong/Superstock; 269: Topham/The Image Works; 275: Mitch Wojnarowicz/The Image Works; 280: Gary A. Connor/PhotoEdit.

Chapter 12 285: Corbis/Digital Stock; 292: Fotopic/Omni—Photo Communications, Inc.; 307: American Academy of Dermatology; 309: Courtesy of the Dana Farber Institute.

Chapter 13 315: “People Shaking Hands” by Campbell Laird, Campbell Laird/Stock Illustration Source; 317: Mary Kate Denny/PhotoEdit; 335: Dan McCoy/Rainbow; 338: Stone; 345: Bonnie Kamin.

Chapter 14 351: “Women Laughing” by Michael Collier, © Michael Collier/Stock Illustration Source; 353: Robert Harbison; 362: Merritt Vincent/PhotoEdit; 367: Mark Reinstein/The Image Works; 370: AP/Wide World Photos.

Chapter 15 375: “Ebben’s Eden” by Saira Elizabeth Austin, © Saira Elizabeth Austin; 377: AP/Wide World Photos; 386: Bonnie Kamin/PhotoEdit; 391: Kaz Chiba/Stone.

Chapter 16 395: “Laughter is the Best Medicine” by Mary Lou Nye, © Mary Lou Nye; 397: © Esbin/Anderson/The Image Works; 404: Nick Lammers/Liaison Agency; 406: Andy Levin/Photo Researchers.

Health Resource Guide

This guide is designed to provide you with information sources on a variety of health and wellness topics. Many of these numbers are toll free; some represent national clearinghouses that may direct you in your information search. Your best one-stop source for information about groups, journals, and health data is through the National Library of Medicine, which provides the MEDLINE, MEDLINEplus, and DIRLINE databases, to name a few, for your ready access to information.

National Library of Medicine
888-FIND-NLM
www.nlm.nih.gov

GENERAL HEALTH CONTACTS
American Health Care Association
202-842-4444
www.ahca.org

American Medical Association
312-464-5000
www.ama-assn.org

National Center for Health Statistics
301-436-8500
www.cdc.gov/nchs/default.htm

U.S. Department of Health and Human Services
301-827-4420
www.hhs.gov

World Health Organization
www.who.org

ALLERGY AND ASTHMA
American Academy of Allergy Asthma and Immunology
414-272-6071
www.aaaai.org

Asthma and Allergy Foundation of America
800-7-ASTHMA
www.aafa.org

BLOOD DISORDERS
Sickle Cell Disease Association of America
800-421-8453
www.sicklecelldisease.org

CANCER
American Cancer Society
800-ACS-2345
www.cancer.org

National Cancer Institute
800-4-CANCER
www.nci.nih.gov

CHILDREN'S SERVICES
Children's Defense Fund
202-628-8787
www.childrensdefense.org

National Institute of Child Health and Human Development
301-496-5133
www.nichd.nih.gov

CONSUMER ISSUES
Federal Consumer Information Center
800-424-9393
www.pueblo.gsa.gov

National Council for Reliable Health Information
909-824-4690
www.ncahf.org

DEATH AND DYING
The Living Bank
800-528-2971
www.livingbank.org

National Hospice and Palliative Care Organization
703-243-5900
www.nho.org

SUBSTANCE ABUSE PREVENTION
Alcoholics Anonymous
800-5870-3400
www.aa.org

Alcohol HOTLINE
800-ALCOHOL

BACCHUS and GAMMA Peer Education Network
303-871-0901
www.bacchusgamma.org

National Clearinghouse for Alcohol and Drug Information
800-729-6686
www.health.org

EATING DISORDERS
American Anorexia/Bulimia Association
212-575-6200
www.aabainc.org

ENVIRONMENTAL ISSUES
Center for Health, Environment, and Justice
703-237-2249
www.chej.org

Environmental Protection Agency (EPA)
202-260-2080
www.epa.gov

SAFETY
National Safety Council
800-621-7619
www.nsc.org

GAY AND LESBIAN SERVICES
Federation of Parents and Friends of Lesbians and Gays (Parents FLAG)
202-638-4200
www.pflag.org

National Gay and Lesbian Task Force
202-332-6483
www.nglft.org

HEART AND LUNG DISEASES
American Heart Association
800-242-8721
www.americanheart.org

National Heart, Lung, and Blood Institute
301-496-4236
www.nhlbi.nih.gov/index.htm

American Lung Association
212-315-8700
www.lungusa.org

PHYSICAL FITNESS
Women's Sports Foundation
800-227-3988
www.girlsandsports.net/

PREGNANCY AND SEXUALITY
Alan Guttmacher Institute
212-248-1111
www.agi-usa.org

Birthright
800-550-4900
www.birthright.org

Planned Parenthood Federation of America
800-829-7732
www.plannedparenthood.org

PSYCHOLOGICAL HEALTH
National Clearinghouse for Mental Health Information
301-443-4513

National Institutes of Mental Health
301-443-4513
www.nimh.nih.gov

SEXUALLY TRANSMITTED INFECTIONS, HIV DISEASE AND AIDS
National AIDS Hotline
800-342-AIDS
800-342-SIDA (Spanish)
800-AIDS-TTY (hearing impaired)

National STD Hotline
800-227-8922

Centers for Disease Control and Prevention (CDC)
404-639-3534
www.cdc.gov

VIOLENCE AND ABUSE
National Child Abuse Hotline
800-422-4453

National Center for Missing and Exploited Children
800-843-5678

National Coalition Against Sexual Assault
717-232-7460

National Crisis Prevention Institute
800-558-8976

Preface

As we enter a new millennium, health challenges once considered unimaginable to our ancestors have emerged. Try to imagine what the greatest health challenges were to your parents when they were your age. Or your grandparents. Or even your great-grandparents. We live in an ever-changing world and nowhere is this more evident than in public and personal health. Today brings with it issues of violence, new threats from emerging infectious diseases, remarkable insights into chronic diseases, and concerns over global health and the degradation of the environment.

Juxtaposed against the threats to health, are new knowledge, opportunities, policies, and strategies for promoting health and preventing premature disease and disability. The new millennium also brings with it increased longevity and greater understanding of psychological stressors, mental health, and all forms of addictions. Advancing technologies will continue to change the face of health care diagnosis and treatment, groundbreaking research will overturn many of the “truths” that we take for granted today, and each of us will become increasingly more responsible for our own health and well-being. Already today an astounding, contradictory, and confusing array of health information is available to us through the simple click of a “mouse.” Each new class of college students offers health instructors a more savvy group of health “connoisseurs.” With that added arsenal of information, students should be better prepared to examine, to think, and to make health decisions. Using yesterday’s information to stimulate tomorrow’s student is no longer appropriate in today’s techno-driven, health conscious world.

Needless to say, writing an introductory health text presents an interesting challenge. As quickly as the last words are written for one edition, a new discovery is announced that probably should have been included in the book. So today’s texts have gone high tech, linking you to the latest developments in disease prevention, health promotion, and policy

change. There is no better evidence of this than the companion website for *Health: The Basics* on the Allyn and Bacon website (<http://www.abacon.com>) and the special PIN-coded Interactive Companion website linked to this text. Each allows us the opportunity to provide new information as it occurs.

Trying to keep up with the emerging health market and health news in general can be frustrating; but as health educators and practitioners, it also can be very exciting. We have the opportunity to assist a new generation of students to become future “change” agents for health—not just in the arena of personal health behaviors, but in the larger realm of policy changes that can assist the global population as a whole. In short, this text is designed not just to help teach you health facts, but to help you think of health as a much broader concept, *desired by all and deserved by all*. Each of you provides a starting place for a better health future. By understanding the factors that contribute to your health risk and the health risks of those around you, exploring concepts provided in this text and contemplating action plans that might serve to reduce risk, and by utilizing the technological tools that we’ve provided, you take the first step in *accessing* better health. The decisions you make today become the building blocks for your future health as well as the health of future generations.

NEW TO THIS EDITION

This edition of *Health: The Basics* maintains many of the strong features it is known for while focusing on new trends and concepts that make *Health: The Basics* one of the most contemporary books for the 21st century. The 4th edition includes a major update of all pertinent information as well as the following specific changes:

- The special focus on consumer health issues is broadened with a **special appendix, entitled *Complementary and Alternative Medicine: New Choices, New Responsibilities***, that is dedicated to understanding complementary and alternative medicine, its practical uses, and its appeal to the masses.
- With unintentional injuries one of the leading causes of premature death among young people, **Chapter 4 on violence has been reorganized** to explore both intentional and unintentional injuries.
- A broadened look at diversity that is more global in nature recognizes that the understanding of health and health concepts can no longer be limited to the influences of cultures inside American borders but rather to those that are greatly affected by international occurrences. This perspective is emphasized in a **NEW box, “Health in a Diverse World,”** which appears in every chapter.
- **NEW Health Headline boxes** allow for in-depth looks at pertinent health issues prominent in today’s news.
- **NEW Reality Check boxes** offer students data about trends on campus and about health issues that affect them personally and immediately.
- A **minor reorganization** of the book now places the Substance Abuse part earlier.
- **NEW PIN-protected Interactive Companion** website linked free with each text represents an exciting new study tool that uses the latest in multimedia to review, enrich, and expand upon key concepts presented in its companion textbook.

Maintaining a Standard of Excellence

In addition to the major changes noted above, this edition of *Health: The Basics* maintains and builds off the solid pedagogical standards established in previous editions:

- Chapter 1 establishes a strong decision-making strand that weaves its way throughout the book, **incorporating the best-known models in behavior change**. Decision making through critical thinking continues to form the cornerstone of every chapter, from the “What Do You Think?” scenarios and reflective questions throughout the chapter to the boxed features and the “Taking Charge” section at the end of the chapter.
- **The role of community in disease prevention and health promotion** is integrated throughout the text and in a special “Checklist for Change: Making Community Decisions” section within the “Taking Charge” wrap-up feature at the end of each chapter.
- **Expanded coverage of multicultural and global issues** will enhance your understanding of the diversity of the human experience and will help you to realize the interconnectedness of people throughout the world and the impact that has upon personal health.
- With a **strong pedagogical framework**, emphasis on building health skills is integrated consistently throughout

the text. You’ll learn specific applications in every chapter through “Skills for Behavior Change” boxes, “Consumer Health” boxes, and in the “Taking Charge” section at the end of the chapter.

SPECIAL FEATURES

Each chapter of *Health: The Basics* includes the following special feature boxes designed to help you build health behavior skills as well as think about and apply the concepts. Three boxes complement the chapter information by providing further depth to specific topics. These include:

- **“Health Headlines”** boxes look at health “In the News.” Health is an ever-changing field that makes the news in one way or another each and every day. Health Headlines boxes take a look at some of these hot discussions.
- **“Reality Check”** boxes focus attention on potential risks and safety issues, often as they relate to college-age students. Statistical information and occurrence rates help you recognize your own risks as they relate to particular subjects.
- **“Health in a Diverse World”** boxes promote acceptance of diversity on college campuses and assist you in adjusting to an increasingly diverse world. These boxes encourage an understanding of the global perspectives on health as they relate to current health issues.

In addition to these three conceptual boxes, two boxes focus on the development of skills necessary in obtaining optimum health. These include:

- **“Consumer Health”** boxes appear in each chapter and focus on health issues as they relate to consumer skills. This feature broadens the scope of awareness about consumer health while focusing on contemporary consumer issues.
- **“Skills for Behavior Change”** boxes offer specific skills that you can use in improving your health behavior. Topics include self-esteem building, cutting fat from your diet, and the positive relationship between diet and exercise, to name a few.

LEARNING AIDS

► **Chapter Objectives** Each chapter begins with a list of objectives tied to the major sections of the chapter to emphasize important topics. These objectives can serve as a helpful tool for you to use when learning the key concepts presented in the chapter.

► **“What Do You Think?” chapter opening scenarios** These scenarios prompt stimulating discussions that quickly involve you in the concepts to be presented in the chapters.

- ▶ **“What Do You Think?” reflective questions** These questions appear in major sections of every chapter to encourage you to think critically about important concepts as you read through the chapter.
- ▶ **Margin Glossary of Key Terms** For convenience and added emphasis, key terms are boldfaced in the text and defined in the margin close to the page where they are first introduced.
- ▶ **“Accessing Health on the Internet”** This special feature provides listings and addresses of Internet websites related to the subject matter of each chapter. Link directly into major health sites from around the world, such as the World Health Organization, the Centers for Disease Control and Prevention, and the National Institutes for Health, and discover what these major organizations are currently working on. A link to such sources brings you the latest information in a matter of seconds. Hundreds of additional links can be found on the Interactive Companion website, as well as on the *Health: The Basics* website.
- ▶ **“Taking Charge”** This special feature at the end of each chapter serves as a “wrap-up” to the entire chapter. This highly acclaimed feature directs you to review your personal attitudes and offers *Checklists for Change*, which outline specific actions you can take to change unhealthy behaviors, on both a personal and community level. In addition, this end-of-chapter section provides you with the opportunity to explore key concepts with the following study tools:
 - ▶ **Chapter Summary** Linked to the chapter opening learning objectives, these summaries provide a quick, at-a-glance review of key points presented in each chapter.
 - ▶ **Discussion Questions** Tied to major sections of the chapter, these questions encourage you to consider important concepts from varying angles.
 - ▶ **Application Exercises** These exercises are linked to the chapter opening “What Do You Think?” scenarios and expand class discussion on these points.
- ▶ **References** Extensive listings of major sources used in researching each chapter are provided in the Reference section at the end of the text.

STUDENT SUPPLEMENTS

Available with *Health: The Basics, Fourth Edition*, is a comprehensive set of ancillary materials designed to enhance your learning.

- ▶ **Health: The Basics Interactive Companion Website** Using chapter highlights as the organizing structure of the website,

the IC encourages you to apply what you have learned by presenting you with hundreds of links to audio and video clips, web sites, activities, and practice tests. These links are annotated with brief descriptions that help you understand the value and purpose of each media asset in the context of the chapter. The IC makes use of proven pedagogical techniques to guide you through your studies and help you reach beyond the covers of the printed text. This site can only be accessed by using the specially-assigned PIN code provided on the inside front cover.

- ▶ **Thinking About Health: A Student Resource Manual** This study guide includes language-enrichment sections for those of you who need special language assistance or who have difficulty with health vocabulary. A valuable study tool, it also provides a wealth of learning objectives, critical thinking exercises and activities, chapter summaries, key terms, review questions, and practice tests.

- ▶ **Newly Revised! Take Charge of Your Health! Self-Assessment Workbook with Practice and Review Tests** Using this self-assessment workbook along with *Health: The Basics* will assist you in acquiring a broader understanding of health issues, evaluating your attitudes and behaviors, and gaining a clearer picture of your overall health. Also included are general review questions and two practice tests for each chapter.

- ▶ **Health Assessment Website** You can further assess your individual health behaviors and plan a risk-reduction program by visiting this special site linked directly to the *Health: The Basics* website at www.abacon.com. This special assessment site link provides a number of customized assessment tools as well as links to numerous other health assessments provided by agencies from around the world.

- ▶ **Health: The Basics Companion Website** Log onto the *Health: The Basics* website at <http://www.abacon.com> to read about changing events in health and to test your knowledge further as you study for class using the Online Study Guide, containing numerous essay, multiple choice, matching, and true/false items for each chapter.

INSTRUCTOR SUPPLEMENTS

A full resource package accompanies *Health: The Basics* to assist the instructor with classroom preparation and presentation. The package includes an Instructor's Resource Manual with an array of suggested resources for enhancing learning. A Test Item File containing over 1,600 items, all of which are also available in its computerized version. The Allyn and Bacon Test Manager is an integrated suite of testing and assessment tools for Windows and Macintosh. You can use Test Manager to create professional-looking exams in just minutes by building tests from the existing database of

questions, editing questions, or writing your own. Course management features include a class roster, gradebook, and item analysis. Test Manager also has everything you need to create and administer online tests. For first-time users, there is a guided tour of the entire Test Manager system, and screen wizards to walk you through each area.

Classroom presentations can be enhanced using Powerpoint outline for instruction, the Digital Image Archive CD-ROM containing 200 images that can be incorporated into any electronic presentation program or onto overheads, the Digital Media Archive of digitized images and audio and video clips. The teaching package also includes a revised Health Transparency package containing over 180 images, many of which are NEW for this package.

In addition, instructors can obtain copies of individual videos or the entire set of the Allyn and Bacon *Total Health: Achieving Your Personal Best* video series that provides interactive critical thinking opportunities within the health classroom. This multidimensional package allows for distance learning, classroom discussion, remedial instruction, and tutorials for students.

ACKNOWLEDGMENTS

After writing four editions of *Health: The Basics*, there is only one thing we are certain of . . . it NEVER gets any easier. The complexities and considerations of publishing a book are too numerous to detail here. Fortunately, we've always had wonderful and competent people with whom we've worked on each book. From the excellent initial efforts of Joe Heider and Ted Bolen of Prentice Hall to continued professionalism of Allyn and Bacon editors Suzy Spivey and Joe Burns, I have always been pleased and grateful for the efforts of our publishing teams. As with any such work, the expertise of many are necessary to pull off a finished work that represents the best available health information source for college level students. In particular, we would like to thank Mary Kriener, senior developmental editor with the Allyn and Bacon group. It is somewhat unusual to have someone working in this capacity who has actual expertise in the area, and who is so enthusiastic about putting together a book that surpasses the competition. Her patience, wisdom, and painstaking attention to detail provided the foundation that ensures the continued success of *Health: The Basics* in the marketplace. To Mary and the countless other Allyn and Bacon staff members who worked overtime to help us meet ever-pressing deadlines without sacrificing the quality that readers have come to expect . . . thank you. With your help and direction, *Health: The Basics* continues to be among the leading texts in the health market today!

In addition to the Allyn and Bacon staff, many colleagues, students, and staff members have provided the feedback, reviews, extra time and assistance, and encouragement that have helped meet the demands of rigorous publishing dead-

lines over the years. With each edition of the book, your assistance has helped my vision for *Health: The Basics* become a reality. Rather than just being an up-scale version of a high school text, I have worked diligently to provide a text that is "alive" for readers. With each edition, I could not have developed a book like this one without the outstanding contributions of several key people. Whether acting as reviewers, generating new ideas, providing expert commentary, or writing chapters, these professionals have added their skills to a collective endeavor.

Contributors to the Fourth Edition

Dr. Patricia Ketcham (*University of Iowa*) for her work on Part III on substance abuse and the First Aid appendix since the inception of this project.

Sarah Hansen (*University of Iowa*)—Addictions and Addictive Behavior

Dr. Peggy Pederson (*University of Northern Illinois*)—Sexuality
Donna Champeau (*Oregon State University*)—Death and Dying

Dr. Rod Harter (*Oregon State University*)—Personal Fitness

Dr. Susan Prows (*Oregon State University*)—Consumerism

In addition, Jessica Henderson provided much needed updating of the environmental health chapter and the HIV/AIDS section of the Infectious Disease material in this edition.

We would also be remiss in not thanking Chris Eisenbarth, a doctoral student at Oregon State who has provided exceptional levels of assistance with library research, organization of key concepts, and materials acquisition in writing this text.

Individuals who have provided their expertise and assistance with previous editions include Cathy Barnett, University of Iowa; Cheryl Graham, Oregon State University; Chris Hafner-Eaton, the RAND Corporation; Tomina Torey, Western Oregon State University; Tom Thomas, University of Missouri; Marion Micke, Illinois State University; Anna Harding, Oregon State University; and Carolyn Hoover, Alaska Public Schools.

Clearly, *Health: The Basics* continues to be an evolving "work in progress." With each new edition, we have built on the combined expertise of many colleagues throughout the country who are dedicated to the education and behavioral changes of students. Reviewers who have helped us with this fine tradition of excellence include:

Reviewers for the Fourth Edition of Health: The Basics

Judy B. Baker, East Carolina University; Robert Bensley, Western Michigan University; Susan Butler, Emory University; Kim Clark, California State University-San Bernadino; Carl Fertman, University of Pittsburgh; Matthew Garrett, Blackburn College; Marty Mahieu, Augustana College; Jack Osman, Towson University; Mike Perko, University of North Carolina-Wilmington; Marianne Zeanah, University of Montevallo

Reviewers and Focus Group Members of Previous Editions

O. Matthew Adeyanju, University of Kansas; Wes Alles, Pennsylvania State University; Judith Ary, North Dakota State University; Charles Baffi, Virginia Tech; Danny Ballard, Texas A & M University; Rick Barnes, East Carolina University; W. Henry Baughman, Western Kentucky University; Ken Becker, University of Wisconsin, LaCrosse; Gerald Benn, Northeastern State University; Christine Beyer, Southern Illinois University; Fay Biles, Kent State University; Jill Black, Cleveland State University; John Bonugaro, Ohio University; Robert Bowers, Tallahassee Community College; Jerry Braza, University of Utah; Andrew Brennan, Metropolitan Life Corporation; Herman Bush, Eastern Kentucky University; Jean Byrne, Kent State University; Donald L. Calitri, Eastern Kentucky University; Vivien Carver, University of Southern Mississippi; Carol Cates, Cerritos College; Donna Champeau, Boise State University; Carol Christensen, San Jose State University; Susanne Christopher, Portland Community College; Bethann Cinelli, West Chester University; Barbara Cole, Texas Tech University; Joseph S. Darden, Jr., Kean College; Jerry Davoli, University of Massachusetts; Lori DeWald, Shippensburg University; Steve M. Dorman, University of Florida; Margaret Dosch, University of Wisconsin, LaCrosse; Judy Drolet, Southern Illinois University; Ruth Engs, Indiana University; William Faraclas, Southern Connecticut University; Aaron F. Felman, Southern Carolina State University; Jeff Forman, DeAnza College; Emogene Fox, University of Central Arkansas; Erika Friedman, Brooklyn College of CUNY; Bob Fries, Fresno State University; Michelle Gallant, Syracuse University; J. Frederick Garman, Kutztown University; Julie A. Gast, Southern Illinois University; Nancy Geha, Columbia, Missouri; Stephen Germeroth, Catonsville Community College; Ray Goldberg, SUNY College at Cortland; Susan Graham-Kresge, University of Southern Mississippi; Lee Green, University of Alabama; William C. Gross, Western Michigan University; Rick Guyton, University of Arkansas; Steven B. Hafen, Catonsville Community College; James Herauf, Northwest Missouri State; Dickie Hill, Abilene Christian University; Marsha Hoagland, Modesto Junior College; Bonnie Hodges, SUNY-Cortland; Kathleen J. Hunter, Southern Illinois University; Phil Huntsinger, University of Kansas; John Janowiak, Appalachian State University; Jim Johnson, Northwest Missouri State; Jack A. Jordan, University of Wisconsin, LaCrosse; Arnold W. Joyce, Virginia Military Institute; Sally D. Klein, Dutchess Community College;

Alfred Kouneski, Montgomery College; Nancy LaCursia, Southern Illinois University; Rebecca Leas, Clarion University; Charles LeRoy, Eastern Montana College; John Leavy, SUNY College at Cortland; Michael Lee, Joliet Junior College; Barbara Day Lockhart, Brigham Young University; Brad Lopez, Fresno City College; Judith Luebke, Mankato State University; Robert McDermott, Southern Illinois University; Richard T. Mackey, Miami University of Ohio; Richard E. Madson, Palm Beach Community College; Marilyn Massey, Texas Tech University; Mickey McCowan, John A. Logan College; Patrick Moffitt, University of Northern Iowa; Karen Mondrone, M.S., R.D.; L. Mike Morris, Idaho State University; Louis Munch, Ithaca College; Bikash R. Nandy, Mankato State University; Judith Nelson, Burlington Community College; Boyd L. Newman, University of North Carolina; Ian Newman, University of Nebraska, Lincoln; George Niva, Bowling Green State University; Larry Olsen, Pennsylvania State University; Gaye Osborne, Morehead State University; Jacqueline Palmer, Mt. Ida College; Carol Parker, University of Central Oklahoma; Robert D. Patton, East Tennessee State University; Jeanine Paz, Chabot College; Carl J. Peter, Western Illinois University; Henry Petracki, Palm Beach Community College; Judy Phillips, Valdosta State College; Valerie Pinhas, Nassau Community College; James Price, University of Toledo; Bruce M. Ragon, Indiana University, Bloomington; Kerry Redican, Virginia Tech University; Harold F. Risk, St. Cloud State University; Kim Roberts, Eastern Kentucky University; Stephen Roberts, Eastern Kentucky University; James Robinson, Texas A&M; Norma Schira, Western Kentucky University; John Sciacca, Northern Arizona University; Delores Seemayer, Palm Beach Junior College; Warren Smith, University of Oregon; Sherman Sowby, California State University, Fresno; Donald B. Stone, University of Illinois; S. Carol Theisen, Weber State University; Merita Lee Thompson, Eastern Kentucky University; Connie Thorngren, Boise State University; Cheryl Tucker, Northeast Missouri State; Martin S. Turnauer, Radford University; James Tryniechi, Southern Louisiana University; J. Dale Wagoner, Chabot College; Alex Waigandt, University of Missouri, Columbia; Rita Ward, Central Michigan University; Parris R. Watts, University of Missouri, Columbia; Terry Wesel, James Madison University; David White, East Carolina University; Patti Williams, Longwood College; Mark G. Wilson, University of Georgia; Janice Clark Young, Iowa State University; Lynne Young, University of District of Columbia; Verne Zellner, American River College

Brief Contents



Chapter 1	Promoting Healthy Behavior Change	1	Chapter 10	Managing Your Weight: Finding a Healthy Balance	247
PART I	FINDING THE RIGHT BALANCE		Chapter 11	Personal Fitness: Improving Your Health through Exercise	265
Chapter 2	Psychosocial Health: Being Mentally, Emotionally, Socially, and Spiritually Well	27	PART V	PREVENTING AND FIGHTING DISEASE	
Chapter 3	Managing Stress: Coping with Life's Challenges	51	Chapter 12	Cardiovascular Disease and Cancer: Reducing Your Risks	285
Chapter 4	Intentional and Unintentional Injuries: Staying Safe in a Violent World	71	Chapter 13	Infectious and Noninfectious Conditions: Risks and Responsibilities	315
PART II	CREATING HEALTHY AND CARING RELATIONSHIPS		PART VI	FACING LIFE'S CHALLENGES	
Chapter 5	Healthy Relationships and Sexuality: Making Commitments	95	Chapter 14	Life's Transitions: The Aging Process	351
Chapter 6	Birth Control, Pregnancy, and Childbirth: Managing Your Fertility	125	Chapter 15	Environmental Health: Thinking Globally, Acting Locally	375
PART III	AVOIDING OR OVERCOMING HARMFUL HABITS		Chapter 16	Consumerism: Selecting Health-Care Products and Services	395
Chapter 7	Licit and Illicit Drug Use: Understanding Addictions	155	Appendix A	Injury Prevention and Emergency Care	413
Chapter 8	Alcohol, Tobacco, and Caffeine: Unacknowledged Addictions	185	Appendix B	Complementary and Alternative Medicine: New Choices, New Responsibilities	421
PART IV	BUILDING HEALTHY LIFESTYLES		References		439
Chapter 9	Nutrition: Eating for Optimum Health	217	Index		452

Contents

PREFACE xi

Chapter 1

PROMOTING HEALTHY

BEHAVIOR CHANGE 1

<i>Putting Health in Perspective</i>	3
Health: Yesterday and Today	3
The Evolution Toward Wellness	6
<i>New Directions for Health</i>	7
Healthy People 2000 and 2010	7
Health Promotion	7
Disease Prevention	8
Preparing for the Future	9
<i>Gender Differences and Health Status</i>	10
<i>Improving Your Health: Benefits of Optimal Health</i>	11
Health Behaviors	11
<i>Preparing for Behavior Change</i>	12
Factors Influencing Behavior Change	13
Motivation	14
Your Beliefs and Attitudes	14
Do Beliefs and Attitudes Influence Behavior?	16
Your Intentions to Change	17
Significant Others as Change Agents	18
<i>Choosing a Behavior Change Strategy</i>	19
Shaping	19
Visualization	19
Modeling	20
Controlling the Situation	20
Reinforcement	20
Changing Self-Talk	20
<i>Making Behavior Change</i>	21
Self-Assessment: Antecedents and Consequences	21
Analyzing Personal Behavior	21
Decision Making: Choices for Change	22
Setting Realistic Goals	22
<i>TAKING CHARGE: MANAGING YOUR BEHAVIOR CHANGE STRATEGIES</i>	24
CHECKLIST FOR CHANGE	24
SUMMARY	24

DISCUSSION QUESTIONS	25
APPLICATION EXERCISE	25

PART I

FINDING THE RIGHT BALANCE

Chapter 2

PSYCHOSOCIAL HEALTH: BEING MENTALLY, EMOTIONALLY, SOCIAL, AND SPIRITUALLY WELL 27

<i>Defining Psychosocial Health</i>	28
Mental Health: The Thinking You	29
Emotional Health: The Feeling You	30
Social Health: Interactions with Others	30
Spiritual Health	31
<i>Factors Influencing Psychosocial Health</i>	33
External Factors	33
Internal Factors	34
<i>Enhancing Psychosocial Health</i>	35
Self-Esteem and Self-Efficacy	35
Sleep: Nature's Remedy	36
<i>The Mind-Body Connection</i>	36
Evidence of Support	36
Laughter: Medicine for the Soul?	37
<i>Common Psychosocial Problems</i>	38
Depression	38
Obsessive-Compulsive Disorders	40
Anxiety Disorders	41
Seasonal Affective Disorder	42
Schizophrenia	42
Gender Issues in Psychosocial Health	43
<i>Suicide: Giving Up on Life</i>	43
Warning Signs	43
Taking Action	44

<i>Seeking Professional Help</i>	45
Mental Health Professionals	45
What to Expect in Therapy	48
TAKING CHARGE: MANAGING YOUR PSYCHOSOCIAL HEALTH	48
CHECKLIST FOR CHANGE	48
SUMMARY	49
DISCUSSION QUESTIONS	49
APPLICATION EXERCISE	49

DISCUSSION QUESTIONS	93
APPLICATION EXERCISE	93

PART II CREATING HEALTHY AND CARING RELATIONSHIPS

Chapter 3

MANAGING STRESS: COPING WITH LIFE'S CHALLENGES 51

<i>What Is Stress?</i>	52
<i>Stress and Your Body</i>	53
The General Adaptation Syndrome	53
<i>Stress and Your Health</i>	56
Stress and CVD Risks	56
Stress and Impaired Immunity	57
Stress and Your Mind	57
<i>Sources of Stress</i>	57
Psychosocial Sources of Stress	58
Environmental Stress	59
Self-Imposed Stress	59
<i>Stress and the College Student</i>	62
<i>Stress Management</i>	63
Dealing with Stress	63
Managing Emotional Responses	66
Taking Mental Action	66
Taking Physical Action	67
Managing Time	68
Making the Most of Support Groups	68
Alternative Stress Management Techniques	68
TAKING CHARGE: MANAGING STRESS BEHAVIORS	69
CHECKLIST FOR CHANGE	69
SUMMARY	70
DISCUSSION QUESTIONS	70
APPLICATION EXERCISE	70

Chapter 4

INTENTIONAL AND UNINTENTIONAL INJURIES: STAYING SAFE IN A VIOLENT WORLD 71

<i>Violence in the United States</i>	72
<i>Personal Precipitators of Violence</i>	74
Anger	74
Substance Abuse	74
<i>Intentional Injuries</i>	76
Gratuitous Violence	76
Domestic Violence	79
Sexual Victimization	81
Campus Crime	84
<i>Reducing Risks</i>	85
Self-Defense against Rape	85
Dealing with Campus Violence	88
Community Strategies for Preventing Violence	88
<i>Unintentional Injuries</i>	90
Residential Safety	90
Workplace Safety	91
TAKING CHARGE: MANAGING CAMPUS SAFETY	92
CHECKLIST FOR CHANGE	92
SUMMARY	93

Chapter 5

HEALTHY RELATIONSHIPS AND SEXUALITY: MAKING COMMITMENTS 95

<i>Characteristics of Intimate Relationships</i>	96
<i>Forming Intimate Relationships</i>	97
Families: The Ties that Bind	97
Today's Family Unit	98
Establishing Friendships	98
Significant Others, Partners, Couples	99
This Thing Called Love	99
<i>Gender Issues</i>	100
Why the Differences?	100
Picking Partners	101
<i>Barriers to Intimacy</i>	102
Dysfunctional Families	102
Jealousy in Relationships	102
<i>Committed Relationships</i>	103
Marriage	103
Cohabitation	104
Gay and Lesbian Partnerships	104
<i>Success in Committed Relationships</i>	104
Partnering Scripts	104
Being Self-Nurturant	105
Elements of Good Relationships	105
<i>Staying Single</i>	106
<i>Having Children . . . or Not?</i>	106
<i>When Relationships Falter</i>	107
The Warning Signs	107
Why Relationships End	108
Coping with Loneliness	108
<i>Building Better Relationships</i>	108
<i>Your Sexual Identity</i>	110
Gender Identity and Roles	110
<i>Reproductive Anatomy and Physiology</i>	111
Female Reproductive Anatomy and Physiology	111
Male Reproductive Anatomy and Physiology	114
<i>Expressing Your Sexuality</i>	117
Human Sexual Response	117
Sexual Orientation	117
Normalcy and Sexual Behavior	118
Options for Sexual Expression	118
Variant Sexual Behavior	120
<i>Difficulties That Can Hinder Sexual Functioning</i>	121
Sexual Desire Disorders	121
Sexual Arousal Disorders	121
Orgasm Disorders	121
Sexual Pain Disorders	122
Seeking Help	122
Drugs and Sex	122
TAKING CHARGE: MANAGING YOUR RELATIONSHIPS AND SEXUAL BEHAVIOR	123

CHECKLIST FOR CHANGE	123
SUMMARY	124
DISCUSSION QUESTIONS	124
APPLICATION EXERCISE	124

Chapter 6

BIRTH CONTROL, PREGNANCY, AND CHILDBIRTH: MANAGING YOUR FERTILITY 125

<i>Methods of Fertility Management</i>	126
Reversible Contraception	126
New Methods of Birth Control	131
Contraceptives for Men?	132
Fertility Awareness Methods	133
Permanent Contraception	135
<i>Abortion</i>	136
Methods of Abortion	137
RU-486	138
<i>Planning a Pregnancy</i>	138
Emotional Health	138
Maternal Health	138
Paternal Health	138
Financial Evaluation	139
Contingency Planning	139
<i>Pregnancy</i>	139
Prenatal Care	139
A Woman's Reproductive Years	142
Pregnancy Testing	142
The Process of Pregnancy	142
Prenatal Testing and Screening	143
<i>Childbirth</i>	144
Choosing Where to Have Your Baby	144
Labor and Delivery	145
Birth Alternatives	146
Drugs in the Delivery Room	146
Breast-Feeding and the Postpartum Period	147
Complications	147
<i>Infertility</i>	149
Causes in Women	149
Causes in Men	149
Treatment	149
Surrogate Motherhood	152
Adoption	152
TAKING CHARGE: MANAGING YOUR FERTILITY	153
CHECKLIST FOR CHANGE	153
SUMMARY	153
DISCUSSION QUESTIONS	154
APPLICATION EXERCISE	154

PART III AVOIDING OR OVERCOMING HARMFUL HABITS

Chapter 7

LICIT AND ILLICIT DRUG USE: UNDERSTANDING ADDICTIONS 155

<i>Defining Addiction</i>	156
Signs of Addiction	157

The Addictive Process	157
<i>Drug Dynamics</i>	158
Types of Drugs	158
Routes of Administration of Drugs	160
<i>Drug Use, Abuse, and Interactions</i>	161
Individual Response to Psychoactive Drugs	161
Drug Interactions	162
<i>Prescription Drugs</i>	162
Types of Prescription Drugs	162
Use of Generic Drugs	164
<i>Over-the-Counter Drugs</i>	164
How Prescription Drugs Become OTC Drugs	164
Types of OTC Drugs	164
Rules for Proper OTC Drug Use	166
OTC Herbal Products	167
<i>Illicit Drugs</i>	167
<i>Controlled Substances</i>	168
Cocaine	168
Amphetamines	171
Newer-Generation Stimulants	171
Marijuana	172
Opiates	173
Psychedelics	175
The Deliriants	177
Designer Drugs	177
Inhalants	178
Steroids	179
<i>Illegal Drug Use in the United States</i>	180
Women and Drug Abuse	180
Drugs in the Workplace	181
Solutions to the Problem	181
TAKING CHARGE: MANAGING DRUG USE BEHAVIOR	183
CHECKLIST FOR CHANGE	183
SUMMARY	183
DISCUSSION QUESTIONS	184
APPLICATION EXERCISE	184

Chapter 8

ALCOHOL, TOBACCO, AND CAFFEINE: UNACKNOWLEDGED ADDICTIONS 185

<i>Alcohol: An Overview</i>	186
Alcohol and College Students	186
<i>Effects of Alcohol</i>	188
Alcohol's Chemical Makeup	188
Behavioral Effects	190
Absorption and Metabolism	191
Immediate Effects	192
Long-Term Effects	192
Alcohol and Pregnancy	194
Drinking and Driving	195
<i>Alcoholism</i>	196
How, Why, Who?	196
The Causes of Alcoholism	196
Effects of Alcoholism on the Family	198
Costs to Society	200
Women and Alcoholism	200
<i>Recovery</i>	200
The Family's Role	200
Treatment Programs	201
Relapse	202

<i>Our Smoking Society</i>	202
Tobacco and Social Issues	202
College Students and Smoking	203
<i>Tobacco and Its Effects</i>	204
Physiological Effects of Nicotine	205
<i>Health Hazards of Smoking</i>	205
Cancer	205
Cardiovascular Disease	206
Respiratory Disorders	206
Other Health Effects	206
Women and Smoking	207
<i>Smokeless Tobacco</i>	208
Risks of Smokeless Tobacco	208
<i>Environmental Tobacco Smoke</i>	208
Tobacco and Politics	209
<i>Quitting</i>	210
Breaking the Nicotine Addiction	210
Benefits of Quitting	211
<i>Caffeine</i>	213
Caffeine Addiction	213
The Health Consequences of Long-Term Caffeine Use	214
TAKING CHARGE: MANAGING ALCOHOL, TOBACCO, AND CAFFEINE	214
CHECKLIST FOR CHANGE	214
SUMMARY	215
DISCUSSION QUESTIONS	216
APPLICATION EXERCISE	216

PART IV BUILDING HEALTHY LIFESTYLES

Chapter 9

NUTRITION: EATING FOR OPTIMUM HEALTH 217

<i>Healthy Eating</i>	218
Responsible Eating	219
The Food Guide Pyramid	219
Today's Dietary Guidelines	221
Making the Pyramid Work for You	221
<i>Obtaining Essential Nutrients</i>	222
Water: A Crucial Nutrient	222
Proteins	222
Carbohydrates	223
Fiber	224
Fats	225
Vitamins	226
Minerals	227
<i>The Medicinal Value of Food</i>	232
Antioxidants	233
Folate	234
<i>Gender and Nutrition</i>	234
Different Cycles, Different Needs	234
Changing the Meat and Potatoes Man	234
Determining Nutritional Needs	235
<i>Vegetarianism</i>	235
The Vegetarian Pyramid	237
<i>Improved Eating for the College Student</i>	237
Fast Foods: Eating on the Run	238
When Funds Are Short	238

<i>Food Safety</i>	238
Food-Borne Illnesses	238
Irradiation	241
Food Additives	241
Food Allergies	241
Organic Foods	244
TAKING CHARGE: MANAGING YOUR EATING BEHAVIOR	244
CHECKLIST FOR CHANGE	244
SUMMARY	245
DISCUSSION QUESTIONS	245
APPLICATION EXERCISE	246

Chapter 10

MANAGING YOUR WEIGHT: FINDING A HEALTHY BALANCE 247

<i>Body Image</i>	248
Determining the Right Weight for You	249
Redefining Obesity	250
Too Little Fat?	250
<i>Assessing Your Body Content</i>	251
Body Mass Index	251
Waist-to-Hip Ratio	252
Measures of Body Fat	252
<i>Risk Factors for Obesity</i>	253
Heredity	253
Hunger, Appetite, and Satiety	254
Developmental Factors	255
Setpoint Theory	255
Endocrine Influence	256
Psychosocial Factors	256
Eating Cues	256
Metabolic Changes	256
Lifestyle	257
Gender and Obesity	258
<i>Managing Your Weight</i>	258
What Is a Calorie?	259
Exercise	259
Changing Your Eating Habits	259
“Miracle” Diets	260
Trying to Gain Weight	261
<i>Eating Disorders</i>	261
Anorexia Nervosa	262
Bulimia Nervosa	262
Binge Eating Disorder	262
Who's at Risk?	262
Treatment for Eating Disorders	263
TAKING CHARGE: TAKING CONTROL OF YOUR WEIGHT	263
CHECKLIST FOR CHANGE	263
SUMMARY	264
DISCUSSION QUESTIONS	264
APPLICATION EXERCISE	264

Chapter 11

PERSONAL FITNESS: IMPROVING YOUR HEALTH THROUGH EXERCISE 265

<i>Benefits of Regular Physical Activity</i>	266
Improved Cardiorespiratory Fitness	267
Improved Bone Mass	267
Improved Weight Control	268

Improved Health and Life Span	268
Improved Mental Health and Stress Management	269
Improved Physical Fitness	269
<i>Improving Cardiorespiratory Fitness</i>	270
Aerobic Fitness Programs	270
<i>Improving Your Flexibility</i>	273
Types of Stretching Exercises	273
<i>Improving Muscular Strength and Endurance</i>	274
Principles of Strength Development	274
Methods of Providing Resistance	275
Getting Started	275
<i>Body Composition</i>	276
<i>Fitness Injuries</i>	276
Causes of Fitness-Related Injuries	276
Prevention	277
Common Overuse Injuries	279
Treatment	280
Exercising in the Heat	280
Exercising in the Cold	281
<i>Planning Your Fitness Program</i>	281
Identifying Your Fitness Goals	281
Designing Your Fitness Program	282
TAKING CHARGE: MANAGING YOUR FITNESS BEHAVIORS	283
CHECKLIST FOR CHANGE	283
SUMMARY	283
DISCUSSION QUESTIONS	283
APPLICATION EXERCISE	284

<i>What Causes Cancer?</i>	300
Lifestyle Factors	300
Biological Factors	300
Occupational/Environmental Factors	301
Social and Psychological Factors	301
Chemicals in Foods	302
Viral Factors	302
Medical Factors	302
<i>Types of Cancers</i>	303
Classifications of Cancer	303
Lung Cancer	303
Breast Cancer	304
Colon and Rectum Cancers	305
Prostate Cancer	306
Skin Cancer: Sun Bathers Beware	306
Testicular Cancer	307
Ovarian Cancer	307
Endometrium (Uterine) Cancer	308
Leukemia	308
<i>Facing Cancer</i>	308
Detecting Cancer	308
New Hope in Cancer Treatments	309
Life After Cancer	311
TAKING CHARGE: MANAGING YOUR HEALTH	312
CHECKLIST FOR CHANGE	312
SUMMARY	312
DISCUSSION QUESTIONS	313
APPLICATION EXERCISE	313

PART V PREVENTING AND FIGHTING DISEASE

Chapter 12

CARDIOVASCULAR DISEASE AND CANCER: REDUCING YOUR RISKS 285

<i>Understanding Your Cardiovascular System</i>	286
<i>Types of Cardiovascular Disease</i>	288
Atherosclerosis	288
Coronary Heart Disease	288
Angina Pectoris	289
Arrhythmias	289
Congestive Heart Failure (CHF)	289
Congenital and Rheumatic Heart Disease	290
Stroke	290
<i>Controlling Your Risks for Cardiovascular Diseases</i>	291
Risks You Can Control	291
Risks You Cannot Control	294
<i>Women and Cardiovascular Disease</i>	294
Risk Factors for Heart Disease in Women	294
Symptoms of Heart Disease in Postmenopausal Women	294
Neglect of Heart Disease Symptoms in Women	296
<i>New Weapons Against Heart Disease</i>	296
Techniques of Diagnosing Heart Disease	296
Angioplasty versus Bypass Surgery	297
Aspirin for Heart Disease	299
Thrombolysis	299
<i>An Overview of Cancer</i>	299
What Is Cancer?	299

Chapter 13

INFECTIOUS DISEASES AND NONINFECTIOUS CONDITIONS: RISKS AND RESPONSIBILITIES 315

<i>Assessing Your Disease Risks</i>	316
Risk Factors You Can't Control	316
Risk Factors You Can Control	317
<i>The Pathogens: Routes of Invasion</i>	317
Bacteria	318
Viruses	319
Other Pathogens	321
<i>Your Body's Defenses</i>	322
Physical and Chemical Defenses	322
The Immune System: Your Body Fights Back	323
Fever	324
Pain	324
Vaccines: Bolstering Your Immunity	325
<i>Emerging and Resurgent Diseases</i>	325
Tiny Microbes: Lethal Threats	326
<i>Sexually Transmitted Infections</i>	328
Possible Causes	328
Modes of Transmission	329
Chlamydia	329
Pelvic Inflammatory Disease (PID)	329
Gonorrhea	330
Syphilis	330
Pubic Lice	331
Venereal Warts	331
Candidiasis (Moniliasis)	332
Trichomoniasis	332
General Urinary Tract Infections	332

Herpes	332
HIV/AIDS	333
A Shifting Epidemic	334
Women and AIDS	334
How HIV Is Transmitted	334
Symptoms of HIV Disease	335
Testing for HIV Antibodies	336
New Hope and Treatment	336
Preventing HIV Infection	337
Noninfectious Diseases	337
Chronic Lung Diseases	337
Neurological Disorders	340
Headaches	340
Seizure Disorders	341
Gender-Related Disorders	342
Fibrocystic Breast Condition	342
Premenstrual Syndrome (PMS)	342
Endometriosis	342
Digestion-Related Disorders	343
Diabetes	343
Lactose Intolerance	344
Colitis and Irritable Bowel Syndrome (IBS)	344
Diverticulosis	344
Peptic Ulcers	344
Musculoskeletal Diseases	345
Arthritis	345
Fibromyalgia	346
Systemic Lupus Erythematosus (SLE)	346
Low Back Pain	346
Other Maladies	346
Chronic Fatigue Syndrome (CFS)	347
Repetitive Stress Injuries (RSIs)	348
TAKING CHARGE: MANAGING YOUR DISEASE RISKS	348
CHECKLIST FOR CHANGE	348
SUMMARY	349
DISCUSSION QUESTIONS	349
APPLICATION EXERCISE	350

PART VI FACING LIFE'S CHALLENGES

Chapter 14

LIFE'S TRANSITIONS: THE AGING PROCESS 351

Redefining Aging	352
What Is Successful Aging?	353
The Elderly: A Growing Population	353
Health Issues for an Aging Society	353
Health Care Costs	353
Theories on Aging	354
Biological Theories	354
Psychosocial Affects on Aging	355
Changes in the Body and Mind	355
Typical Physical Changes	355
Mental Changes	359
Health Challenges of the Elderly	361
Alcohol Use and Abuse	361
Prescription Drug Use	361

Over-the-Counter Remedies	361
Preventive Actions for Healthy Aging	362
Improving Fitness	362
Eating for Healthy Older Years	362
Caring for the Elderly	362
Understanding Death	363
Defining Death	363
Denying Death	363
The Process of Dying	364
Coping Emotionally with Death	364
Social Death	365
Coping with Loss	366
What Is "Normal" Grief?	366
When an Infant or a Child Dies	367
Quasi-Death Experiences	367
Taking Care of Business	367
Hospice Care: Positive Alternatives	367
Making Funeral Arrangements	368
Pressures on Survivors	368
Wills	368
Organ Donation	369
Life-and-Death Decision Making	370
The Right to Die	370
Rational Suicide	370
TAKING CHARGE: DEALING WITH THE AGING PROCESS	371
CHECKLIST FOR CHANGE	371
SUMMARY	372
DISCUSSION QUESTIONS	372
APPLICATION EXERCISE	373

Chapter 15

ENVIRONMENTAL HEALTH: THINKING GLOBALLY, ACTING LOCALLY 375

Overpopulation	376
Air Pollution	378
Sources of Air Pollution	378
Photochemical Smog	378
Acid Rain	379
Indoor Air Pollution	379
Ozone Layer Depletion	380
Global Warming	381
Reducing Air Pollution	381
Water Pollution	382
Water Contamination	382
Chemical Contaminants	382
Noise Pollution	385
Land Pollution	386
Solid Waste	386
Hazardous Waste	386
Radiation	388
Ionizing Radiation	389
EMFs: Emerging Risks?	390
Nuclear Power Plants	390
TAKING CHARGE: MANAGING ENVIRONMENTAL POLLUTION	392
CHECKLIST FOR CHANGE	392
SUMMARY	392
DISCUSSION QUESTIONS	393
APPLICATION EXERCISE	393

CONSUMERISM: SELECTING
HEALTH-CARE PRODUCTS
AND SERVICES 395

Responsible Consumerism: Choices and Challenges 396

Attracting Consumers' Dollars 396

Putting Cure into Better Perspective 397

Accepting Responsibility for Your Health Care 397

Self-Help or Self-Care 398

When to Seek Help 398

Assessing Health Professionals 398

Choices of Medical Care 400

Traditional Western (Allopathic) Medicine 400

Allied Professionals 401

Nonallopathic "Complementary" Medicine 402

Health-Care Organizations, Programs, and Facilities 403

Types of Medical Practices 403

Integrated Health-Care Organizations 404

Issues Facing Today's Health-Care System 405

Cost 405

Access 406

Quality and Malpractice 406

Third-Party Payers 406

Early Private Health Insurance 407

Medicare and Medicaid (Social Insurance versus Welfare) 408

Managed Care 409

TAKING CHARGE: MANAGING YOUR HEALTH-CARE NEEDS 411

CHECKLIST FOR CHANGE 411

SUMMARY 412

DISCUSSION QUESTIONS 412

APPLICATION EXERCISE 413

Appendixes

A. Injury Prevention and Emergency Care 413

B. Complementary and Alternative Medicine: New Choices, New Responsibilities 421

REFERENCES 439

INDEX 452