



an invitation  
**TO HEALTH**

BRIEF EDITION

build your future

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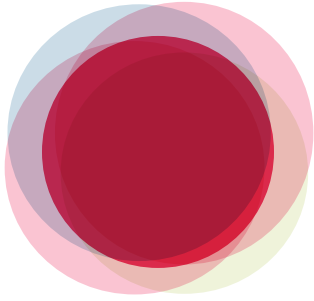
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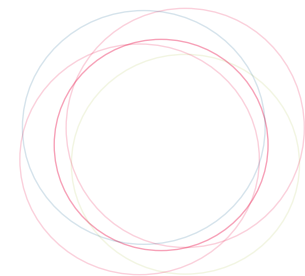
# An Invitation to Health

## Build Your Future

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**BRIEF EDITION**

DIANNE HALES



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**Dianne Hales**

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Acquisitions Editor: Aileen Berg

Developmental Editor: Nedah Rose,  
Marni Rolfes

Editorial Assistant: Margaux Cameron

Media Editor: Katie Walton

Senior Market Development Manager:  
Tom Ziolkowski

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*To my husband, Bob, and my daughter Julia,  
who make every day an invitation to joy, and  
in loving memory of my parents, Henry and  
Lucille Plucinnik.*

.....







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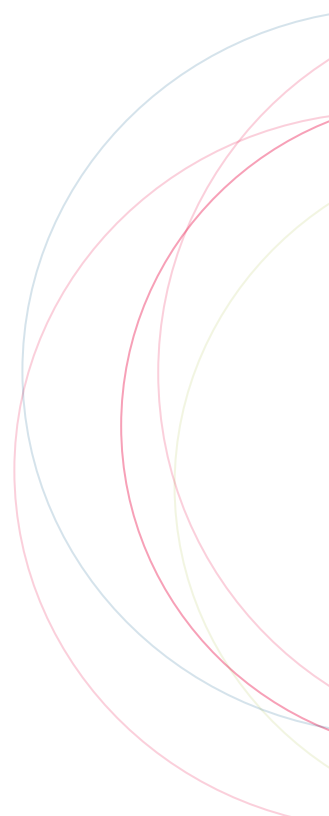
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# Preface

## To the Student

How healthy are you? In nationwide surveys, most college students rate their health as good or excellent. Whether you're male or female, a traditional-age undergraduate or older, you're likely to say the same.

Ask yourself another question: How long do you think you will stay healthy? Through the next two decades? Until you turn 50? Up to retirement age? Into your 70s or 80s? The answer, to a greater extent than you might imagine, depends on the choices you make and the behaviors you adopt now.

More than 40 percent of undergraduates are already overweight or obese. Twenty percent have at least one risk factor for cardiovascular disease. An estimated 70 to 85 percent do not exercise regularly. Most eat diets that are high in fats and sugar and low in fruits, vegetables, and grains. Nine in ten report feeling stressed. If you add the risks of smoking, binge drinking, and drug use, college itself can seem hazardous to a student's health.

Yet the years when you prepare for your professional life can also be the best time to build your future—one that's happy, healthy, and fulfilling. Every day you make choices that can affect both how long and how well you live. The knowledge you acquire in this course will help you make better choices, ones that will have a direct impact on how you look, feel, and function—now and for decades to come.

Perhaps you think you know all you need to know about how to take care of yourself. If so, take a minute and ask yourself some questions:

- How well do you understand yourself? Are you able to cope with emotional upsets and crises? Do you often feel stressed out?
- How strong are your social relationships?
- How nutritiously do you eat? Are you always going on—and off—diets?
- Do you exercise regularly?
- How solid and supportive are your relationships with others? Are you conscientious about birth control and safe-sex practices?
- Do you occasionally get drunk or high? Do you smoke?
- What do you know about your risk for infectious diseases, heart problems, cancer, or other serious illnesses?
- Are you a savvy health-care consumer? Do you know how to evaluate medical products and health professionals?
- How much do you know about complementary and alternative medicine?

- If you needed health care, do you know where you'd turn or how you'd pay?
- Have you taken steps to ensure your personal safety at home, on campus, and on the streets?
- Can you improve your odds for living a long and healthy life?
- What are you doing today to prevent physical, psychological, social, and environmental problems in the future?

Chances are there are some aspects of health you haven't considered before—and others you feel you don't have to worry about for years. Yet the choices you make and the actions you take now will have a dramatic impact on your future.

Your health is your personal responsibility. Over time, your priorities and needs will inevitably change, but the connections between various dimensions of your well-being will remain the same: The state of your mind will affect the state of your body, and vice versa. The values that guide you through today can keep you mentally, physically, and spiritually healthy throughout your lifetime. Your ability to cope with stress will influence your decisions about alcohol and drug use. Your commitment to honest, respectful relationships will affect the nature of your sexual involvements. Your eating and exercise habits will determine whether you develop a host of medical problems.

This edition of *An Invitation to Health: Build Your Future* is packed with information, advice, recommendations, and research, and provides the first step in taking full charge of your own well-being. Ultimately, the power to shape your destiny belongs to you—and it's a lot easier than you might think. You could simply add a walk or workout to your daily routine. You could snack on fruit instead of high-fat foods. You could cut back on alcohol. You could buckle your seat belt whenever you get in a car. These are small changes and relatively easy ones to make. They may not seem like a big deal now, yet they could make a crucial difference in determining how active and fulfilling the rest of your life will be.

Knowledge alone can't assure you a lifetime of well-being. The rest depends on you. The skills you acquire, the habits you form, the choices you make, the ways you live day by day will all shape your health and your future. You cannot simply read this book and study health the way you study French or chemistry. You must decide to make it part of your daily life.

This is our invitation to you.

—Dianne Hales

## To the Instructor

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Most college students, regardless of their gender, ages, or ethnic backgrounds, think of themselves as healthy. Some even think they are invincible—too young, too strong, too energetic to worry about illness or injury. They may assume that they know all they need to know to stay that way.

You know better. And you know that the choices students make, the knowledge they gain, and the habits they form in college can make a difference for decades to come. This is why the theme of the new edition of *An Invitation to Health* is “Build Your Future.” My message to students is that the future doesn’t begin tomorrow, or next year, or on graduation day. It starts now.

The 15 chapters in the latest edition provide building blocks for a healthy, happy, fulfilling future. In addition to the most current scientific findings on the traditional aspects of health, I have included new topics that range from relationships in emerging adulthood to dangerous trends, such as distracted driving, “legal” herbal drugs, and cyberbullying. A ground-breaking chapter on Social Health explores the impact of digital communications and social networking on physical and psychological health. A new chapter on Consumer Health equips students with the knowledge and tools they need to evaluate health information and get quality traditional or alternative health care.

To a greater extent than has ever been possible, this *Invitation* is truly interactive. A new “How Do You Compare?” feature provides current data on how undergraduates feel, sleep, eat, exercise, drink, and behave so students can get a better sense of real campus life. “Health in Action” gives students step-by-step guidance on how to apply what they’re learning in their daily lives. Each chapter ends with a “Build Your Future” checklist that reinforces key behavioral changes that can enhance and safeguard health.

Because journaling can be a key element of the self-awareness that can lead to healthy change, several of the features include a direction to the students to use an online journal in which to record their responses to the activities in the feature. Many of your students may have an existing blog that they could use for these activities. If not, your school may provide access to a blogging platform that students can use. There are also many free resources that can be used for journaling, such as WordPress, Blogger, TypePad, Tumblr, Posterous, LiveJournal, and many, many more. We encourage you and your students to explore them.

This textbook is an invitation to you as an instructor. I invite you to share your passion for education and to enter into a partnership with the editorial team at Wadsworth Cengage Learning. We welcome your feedback and suggestions. Please let us hear from you at [www.cengage.com/health](http://www.cengage.com/health). I personally look forward to working with you toward our shared goal of preparing a new generation for a healthful future.

## What’s New in *An Invitation to Health: Build Your Future*

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Some things don’t change: As always, this *Invitation* presents up-to-date, concise, research-based coverage of all the dimensions of health. As always, it defines *health* in the broadest sense of the word—not as an entity in itself, but as an integrated process for discovering, using, and protecting all possible resources within the individual, family, community, and environment.

What is new is the theme that threads through every chapter: preparing students for a healthy, happy, and fulfilling future. One of the most important building blocks is behavioral change, which has always been fundamental to *An Invitation to Health*. The one feature that has appeared in every edition—and that remains the most popular—is “Your Strategies for Change.”

The 15 chapters have been reorganized in response to reviewers’ suggestions. We now discuss nutrition (including the new federal dietary guidelines) and weight management before fitness. Sexually transmitted infections are covered in the chapter on sexual health. We discuss both personal safety and environmental issues in the chapter on “Protecting Yourself and Your Environment.”

Completely new is a chapter on Social Health, which includes material on communicating, friendships, intimate relationships, marriage, and families. Also covered are issues related to social networking, including the Facebook phenomenon, self-disclosure and privacy in a digital age, relationships in emerging adulthood, hooking up, and online dating.

Another new chapter focuses on Consumer Health, including ways to evaluate health information, prepare for a medical exam, get quality traditional and alternative care, and navigate the health system.

Throughout this edition, the focus is on students, with real-life examples, the latest statistics on undergraduate behaviors and attitudes, and coverage of new campus health risks, including hookah (waterpipe) smoking, the combination of binge drinking and disordered drinking, and potent drugs such as “bath salts” and synthetic marijuana.

Every chapter includes several new interactive features:

- “How Do You Compare?,” which showcases the latest research on student behavior, including their stress levels (Chapter 3), weights (Chapter 6), and sexual experiences (Chapter 8).
- “Health in Action,” a practical learn-it, live-it lab that applies lessons from each chapter on such subjects as assessing a relationship (Chapter 4), infection protection (Chapter 10), and preventing date rape (Chapter 14).



- “Build Your Future,” an end-of-the-chapter checklist that students can use to assess their current status and work toward a healthier future, whether by creating better relationships (Chapter 4), preventing serious illnesses (Chapter 10), or taking charge of their health (Chapter 13).

Other popular features that have been retained and updated include “Health on a Budget” and a “Self Survey” that appears in the Personal Wellness Guide and online. Other end-of-chapter resources include “Review Questions” and “Critical Thinking Questions.” At the end of the book is a full Glossary, and on “CourseMate,” you will find the *Hales Health Almanac*, which includes a directory of resources, emergency procedures, and a guide to common medical tests.

Because health is an ever-evolving field, this edition includes many new topics, including autism spectrum disorders, caffeinated alcoholic beverages, herbal alternative drugs, the relationship between binge drinking and disordered eating, and obesity surgery. All of the chapters have been updated with the most current research, including many citations published in 2012 and incorporating the latest available statistics. The majority come from primary sources, including professional books; medical, health, and mental health journals; health education periodicals; scientific meetings, federal agencies and consensus panels; publications from research laboratories and universities; and personal interviews with specialists in a number of fields.

As I tell students, *An Invitation to Health: Build Your Future* can serve as an owner’s manual to their bodies and minds. By using this book and taking your course, they can acquire a special type of power—the power to make good decisions, to assume responsibility, and to create and follow a healthy lifestyle. This textbook is our invitation to them to live what they learn and make the most of their health and their future.

## An Overview of Changes

Following is a chapter-by-chapter listing of some of the key topics that have been added, expanded, or revised for this edition:

### Chapter 1: Your Invitation to a Healthy Future

**New Sections:** Health on a Budget: Invest in Your Future • The Benefits of Education • Building a Healthy Future • Health in Action: Smart Steps to Take Now • Build Your Future: Making Healthy Changes • How Do You Compare? Do Young Adults Practice Healthy Habits?

**Updated Sections:** Health and Wellness • The Dimensions of Health • Physical Health • A Report Card on the Health of Americans • Healthy People 2020 • Health Disparities • The Perils of Emerging Adulthood • Student Health Norms

### Chapter 2: Psychological and Spiritual Well Being

**New Sections:** Develop Self-Compassion • Pursue Happiness • Spiritual Happiness • Strategies for Change: Make Yourself Happier • Cultivate Gratitude • Sleepless on Campus • Sleepy Students • Your Strategies for Prevention: If You Take an Antidepressant • How Do You Compare? Mental Health Problems on Campus • Health on a Budget: Count Your Blessings • Health in Action: Accentuate the Positive

**Updated Sections:** Emotional and Mental Health • Inside the Teen and Twentysomething Brain • Learning from Positive Psychology • Forgive • Understanding Mental Health and Illness • Mental Health on Campus • Students at Risk • The Toll on Students • Depressive Disorders • Depression in Students • Attention Disorders • Autism Spectrum Disorders • Suicide • Suicide on Campus • Strategies for Prevention and Change

### Chapter 3: Personal Stress Management

**New Sections:** Stress in America • How Do You Compare? Stressed Out on Campus • Health in Action: Write it Out • Health on a Budget: How to Handle Economic Stress

**Updated Sections:** What Causes Stress? • The General Adaptation Syndrome • Cognitive-Transactional Model • The Diathesis Stress Model • Stress and the Heart • Stress on Campus • Students Under Stress • Gender Differences • Colleges Respond • Economic Stress • Meditation • Mindfulness • Yoga • Posttraumatic Stress Disorder • Overcoming Procrastination

### Chapter 4: Social Health

**New Sections:** Living in a Wired World • Social Networking on Campus • How Do You Compare? The Net Generation • Strategies for Prevention: The Do’s and Don’ts of Online Dating • Hooking Up • Health on a Budget: Money Can’t Buy Love • Same-Sex Marriage • Health in Action: Assessing a Relationship

**Updated Sections:** The Social Dimension of Health • Being Agreeable and Assertive • The Facebook Phenomenon • Self-Disclosure and Privacy in a Digital Age • Friendship • Shyness and Social Anxiety • Building a Healthy Community • Dating on Campus • Online Flirting and Dating • Loving and Being Loved • Infatuation • Partnering Across the Life Span • The New Transition to Adulthood • Marriage • The Benefits of Marriage • Marriages That Last • Issues Couples Confront • Conflict in Marriage • Saving Marriage • Divorce • Unmarried Parents

### Chapter 5: Personal Nutrition

**New Sections:** The American Cancer Society Guidelines • Fast Food: Nutrition on the Run • Health on a Budget: Frugal Food Choices • Health in Action: Make More Healthful Fast Food Choices • How Do You Compare? Monitoring Your Health



**Updated Sections:** Water • Protein • Fiber • Vitamin D • Dietary Supplements • Dietary Guidelines for Americans • Balancing Calories to Manage Weight • Foods and Food Components to Reduce • Sodium • Food and Nutrients to Increase • Vegetables and Fruits • Whole Grains • Milk and Milk Products • Protein Foods • Oils • Nutrients of Concern • Building Healthy Eating Patterns • Myplate • Myplate vs. the MyPyramid System • The USDA Food Patterns • His Plate, Her Plate: Gender and Nutrition • Campus Cuisine: How College Students Eat • You Are What You Drink • Soft Drinks • Energy Drinks • What is Organic? • Food Safety

## Chapter 7: Managing Your Weight

**New Sections:** Body Composition • Supersized Nation • Genetics • The Bottom Line • Can a Person Be Fat and Fit? • Frequent Meals and Snacks • Build Your Future: Taking Control of Your Weight

**Updated Sections:** Body Mass Index (BMI) • Body Image • Weight and the College Student • Understanding Weight Problems • Weight Loss Diets • Over-the-Counter Diet Pills • Obesity Surgery

## Chapter 8: The Joy of Fitness

**New Sections:** Lower Weight • A More Active and Fulfilling Old Age • Build Your Future: Shaping Up

**Updated Sections:** Gender, Race, and Fitness • Working Out on Campus • Why Exercise? • The Benefits of Exercise • Protection Against Cancer • Exercise Risks • How Much Exercise Is Enough? • Target Heart Rate • Muscle Dysmorphia • Drugs Used to Boost Athletic Performance • Sports Nutrition • Sports Drinks

## Chapter 8: Sexual Health

**New Sections:** Sexuality and the Dimensions of Health • How Do You Compare: The Sex Lives of College Students • The Gender Spectrum • How Do You Compare: The Sex Lives of College Students • Health in Action: Talking about STIs

**Updated Sections:** Premenstrual Syndrome • Circumcision • Responsible Sexuality • Creating a Sexually Healthy Relationship • Making Sexual Decisions • Teen Sexual Activity • Oral Sex • Sexually Transmitted Infections and Diseases • STIs on Campus • Human Papillomavirus • Incidence • HPV Vaccination • Genital Herpes • Gonorrhea • Incidence • Syphilis • HIV and AIDs • Recognizing and Treating HIV/AIDs

## Chapter 9: Conception and Reproduction

**New Sections:** Female Condom • Health in Action: Choosing a Contraceptive • How Do You Compare: Contraceptive Choices of College Students • Health on a Budget: The Costs of Contraception

**Updated Sections:** Reproductive Responsibility • Choosing a Birth Control Method • The Benefits of Risks and Contraception • Contraception on Campus • Hormonal Contraceptives • Contraceptive Implants • Emergency Contraception • The Politics of Abortion

## Chapter 10: Major Diseases

**New Sections:** Health in Action: Infection Protection • Strategies for Change: Caring for Your Child • The Power of Prevention • Cardiometabolic Risk Factors • Height • Your Cardiometabolic Health • Health on a Budget: Lowering Your Cardiometabolic Risk Factors

**Updated Sections:** Infectious Illnesses • Immunizations for Adults • Infectious Diseases • Common Cold • Influenza • Seasonal Influenza • H1N1 Influenza (Swine Flu) • The Threat of a Pandemic • Meningitis • Hepatitis B • Hepatitis C • Other Infectious Illnesses • Herpes Gladiatorum • The “Superbug” Threat: MRSA • Preventing MRSA • Who Is at Highest Risk? • Waist Circumference • Skin Cancer

## Chapter 11: Addictions

**New Sections:** “Synthetic”, “Herbal” and “Legal” Drugs • Health in Action: Recognizing Substance Abuse • How Do You Compare? Student Drug Use • Health on a Budget: Develop a Positive Addiction

**Updated Sections:** Risky Behaviors • Gambling on Campus • Drug Use on Campus • Caffeine and Its Effects • Prescription Drugs • Principles of Drug Addiction Treatment

**New Table:** Commonly Abused Drugs

## Chapter 12: Alcohol and Tobacco

**New Sections:** Cancer • Predrinking/pregaming • E-Cigarettes • Build Your Future: Becoming Smoke-Free • Health in Action: Kicking the Habit • How Do You Compare: Drinking on Campus • Health on a Budget: Drink Less, Save More

**Updated Sections:** Drinking on Campus • How Do You Compare: Student Drinking • Why Students Drink • Binge Drinking and Disordered Eating • Caffeinated Alcoholic Beverages • Moderate Alcohol Use • Alcoholism Treatments • Smoking in America • A Global View • Why People Start Smoking • Smoking, Gender, and Race • Social Smoking • Other Forms of Tobacco • Water Pipes (Hookahs) • Quitting • Virtual Support • Environmental Tobacco Smoke • Health Effects of Secondhand Smoke • Thirdhand Smoke • Smoking on Campus

## Chapter 13: Consumer Health

**New Sections:** Build Your Future: Taking Charge of Your Health • How Do You Compare? CAM Use in the United States • Health on a Budget: Too Good to Be True? • Health in Action: Is a CAM Therapy Right for You? • Your Strategies for Change: Making the Most of a Medical Visit

**Updated Sections:** Improving Your Consumer Health • Finding Good Advice Online • Getting Medical Facts Straight • Evidence-Based Medicine • Personalizing Your Health Care • Your Family Health History • Oral Health • Becoming a Savvy Health Care Consumer • Avoiding Medication Mistakes • Elective Treatments • Vision Surgery • Cosmetic Surgery • Health Hoaxes and Medical Quackery • Your Medical Exam



## Chapter 14: Protecting Yourself and Your Environment

**New Sections:** Building Your Future: Taking Care of Yourself and Your Planet • How Do You Compare: How Safe Do You Feel? • Health in Action: How to Avoid Date Rape

**Updated Sections:** Safety on the Road • Avoid Distracted Driving • Don't Text or Talk • Cyberbullying and Sexting • Dating Violence • Nonvolitional Sex and Sexual Coercion • Rape • Climate Change • Global Warming • The Health Risks • The Impact of Pollution • The Water You Drink • Household Products • Is Bottled Better • Portable Water Bottles • Your Hearing Health • Hearing Loss

## Chapter 15: A Lifetime of Health

**New Sections:** How Do You Compare? What Kills Young Americans? • Health on a Budget: "Buy" Yourself a Longer Life • Cognitive Aging • Reproductive Aging • Physical Activity: It's Never Too Late • Build Your Future: Living Long and Well • How Do You Compare? What Kills Young Adults? • Health on a Budget: "Buy" Yourself a Longer Life • Health in Action: Preparing for Medical Crises in Older Relatives

**Updated Sections:** How Long Can You Expect to Live? • Successful Aging • Women at Midlife • Menopause • Hormone Therapy • Alzheimer's Disease • Grief • Grief's Effects on Health

## Supplemental Resources

### Profile Plus

NEW! Take control. Reach your goals with Profile Plus. Profile Plus is a brand-new tool that not only allows students to track their diet and activity, but also walks them through the key steps in behavior change. After completing a Wellness Profile, students select areas where they would like to make a healthy lifestyle change. The program guides students to reflect on their current behaviors, identify obstacles, and reach successful behavior change. As they analyze the nutritional value of the foods they eat through the diet tracker, students will learn how to adjust their diets to reach personal health goals and gain a better understanding of how nutrition impacts their lives. Instructors can assign and review student work in the form of reports and labs submitted through the system. Use Profile Plus in all your Introductory Health classes to show students how the concepts they are learning relate to their personal health goals and apply to their daily lives.

- Instant Access Code: 978-0-840-06580-3
- Printed Access Card: 978-0-840-06581-0

### Global Health Watch

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## Online Instructor's Manual with Test Bank

Bringing you a wealth of resources, the Instructor's Manual provides learning objectives, detailed chapter outlines, a list of chapter-specific labs, a list of Websites, classroom activities, and teaching strategies. References, readings, and resources are also included for each chapter in the book. The Test Bank provides multiple choice, fill-in-the-blank, matching, critical thinking, short answer, and essay questions. The questions are coded according to Bloom's Taxonomy and include page references for the correct answers in the main text.

- ISBN-13: 978-1-133-96045-4

## PowerLecture with JoinIn Student Response System and ExamView®

Making lecture preparation easier, this DVD includes customizable PowerPoint® presentation slides with images from the text, new BBC® video clips, and electronic versions of the Instructor's Manual and Test Bank. JoinIn content for Response Systems tailored to the text allows you to transform your classroom and assess your students' progress with instant in-class quizzes and polls. Featuring automatic grading, ExamView® allows you to create, deliver, and customize tests and study guides (both print and online) in minutes. See assessments onscreen exactly as they will print or display online. Build tests of up to 250 questions using up to 12 question types and enter an unlimited number of new questions or edit existing questions.

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## Personal Wellness Guide

Accompanying the text, this booklet contains 20 Self-Surveys that ask students to measure their health in areas covered in the chapters of the text. Each Self-Survey is followed by Your Health Action Plan, which provides suggestions for implementing change in the area just surveyed.

- ISBN-13: 978-1-133-93999-3

## Careers in Health, Physical Education, and Sport, Second Edition

Unique to Cengage Learning, this informative supplement walks students through the process of exploring different health-related careers, offers advice on how to prepare for the transition into the working world, and gives valuable insight into different types of career paths, education requirements, and reasonable salary expectations.

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- ISBN-13: 978-0-495-01315-0

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Harold Horne, *University of Illinois at Springfield*  
Linda L. Howard, *Idaho State University*  
Mary Hunt, *Madonna University*  
Kim Hyatt, *Weber State University*  
Dee Jacobsen, *Southeastern Louisiana University*  
John Janowiak, *Appalachian State University*  
Peggy Jarnigan, *Rollins College*  
Jim Johnson, *Northwest Missouri State University*  
Chester S. Jones, *University of Arkansas*  
Herb Jones, *Ball State University*  
Jane Jones, *University of Wisconsin, Stevens Point*  
Lorraine J. Jones, *Muncie, Indiana*  
Becky Kennedy-Koch, *The Ohio State University*  
Mark J. Kittleson, *Southern Illinois University*  
Anthony F. Kiszewski, *Bentley University*  
Darlene Kluka, *University of Central Oklahoma*  
John Kowalczyk, *University of Minnesota, Duluth*  
Debra A. Krummel, *West Virginia University*  
Roland Lamarine, *California State University, Chico*  
David Langford, *University of Maryland, Baltimore County*  
Terri Langford, *University of Central Florida*  
Beth Lanning, *Baylor University*  
Norbert Lindskog, *Harold Washington College*  
Loretta Liptak, *Youngstown State University*  
David G. Lorenzi, *West Liberty State College*  
S. Jack Loughton, *Weber State University*  
Rick Madson, *Palm Beach Community College*  
Ashok Malik, *College of San Mateo*  
Michele P. Mannion, *Temple University*  
Jerry Mayo, *Hendrix College*  
Jessica Middlebrooks, *University of Georgia*  
Kim H. Miller, *University of Kentucky*  
Esther Moe, *Oregon Health Sciences University*  
Kris Moline, *Lourdes College*  
Rosemary Moulahan, *High Point University*  
Richard Morris, *Rollins College*  
Sophia Munro, *Palm Beach Community College*

John W. Munson, *University of Wisconsin–Stevens Point*  
Anne O'Donnell, *Santa Rosa Junior College*  
Terry Oehrtman, *Ohio University*  
Randy M. Page, *University of Idaho*  
Carolyn P. Parks, *University of North Carolina*  
Anthony V. Parrillo, *East Carolina University*  
Lorraine Peniston, *Hartford Community College*  
Miguel Perez, *University of North Texas*  
Pamela Pinahs-Schultz, *Carroll College*  
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Steven Sansone, *Chemeketa Community College*  
Debra Secord, *Coastline College*  
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Andrew Shim, *Southwestern College*  
Agneta Sibrava, *Arkansas State University*  
Steve Singleton, *Wayne State University*  
Larry Smith, *Scottsdale Community College*  
Teresa Snow, *Georgia Institute of Technology*  
Carl A. Stockton, *Radford University*  
Linda Stonecipher, *Western Oregon State College*  
Ronda Sturgill, *Marshall University*  
Rosemarie Tarara, *High Point University*  
Laurie Tucker, *American University*  
Emogene Johnson Vaughn, *Norfolk State University*  
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David M. White, *East Carolina University*  
Sabina White, *University of California–Santa Barbara*  
Robert Wilson, *University of Minnesota*  
Roy Wohl, *Washburn University*  
Martin L. Wood, *Ball State University*  
Sharon Zackus, *City College of San Francisco*





# About the Author

Dianne Hales is one of the most widely published and honored freelance journalists in the country. She is the author of 15 trade books, including *La Bella Lingua*, *Just Like a Woman*, *Think Thin Be Thin*, and *Caring for the Mind*, with translations into Italian, French, Spanish, Portuguese, German, Dutch, Swedish, and Korean.

In 2011 she received the highest honor the government of Italy can bestow on a foreigner, an honorary knighthood, with the title of *Cavaliere dell'Ordine della Stella della Solidarietà Italiana* (Knight of the Order of the Star of Italian Solidarity) in recognition of her book, *La Bella Lingua: My Love Affair with Italian, the World's Most Enchanting Language*, as “an invaluable tool for promoting the Italian language.”

Dianne Hales is a former contributing editor for *Parade*, *Ladies Home Journal*, *Working Mother*, and *American Health* and has written more than a thousand articles for national publications, including *Family Circle*, *Glamour*, *Good Housekeeping*, *Health*, *The New York Times*, *Reader's Digest*, *The Washington Post*, *Woman's Day*, and *World Book Encyclopedia*.

Additionally, Dianne Hales has received writing awards from the American Psychiatric Association and the American Psychological Association, an EMMA (Exceptional Media Merit Award) for health reporting from the National Women's Political Caucus and Radcliffe College, three “EDI” (Equality, Dignity, Independence) awards for print journalism from the National Easter Seal Society, the National Mature Media Award, and awards from the Arthritis Foundation, California Psychiatric Society, CHADD (Children and Adults with Attention Deficit/Hyperactivity Disorder), Council for the Advancement of Scientific Education, and the New York City Public Library.





# I

## After studying the material in this chapter, you should be able to

- **Define** health and wellness.
- **Identify** the six dimensions of health and illustrate the interplay among them.
- **Describe** how poverty, race, and gender contribute to health disparities in the U.S.
- **Outline** the national health objectives in the *Healthy People 2020 Initiative*.
- **List** guidelines for evaluating websites that provide health information.
- **Describe** the stages in the Transtheoretical Model of Change and apply it to a health behavior you want to change.



Corinna always thought of health as something you worry about when you get older. Then her twin brother developed a health problem she'd never heard of: prediabetes (discussed in Chapter 10), which increased his risk of diabetes and heart disease. At a health fair on campus, she learned that her blood pressure was higher than normal. "Maybe I'm not too young to start thinking about my health," she concluded. Neither are you—

## Your Invitation to a Healthy Future

whether you're a traditional-age college student or older, like an ever-increasing number of undergraduates.

*An Invitation to Health* asks you to go beyond thinking about your health to taking charge and making healthy choices for yourself and your future. This book is both *about* and *for* you: It includes material on your mind and your body, your spirit and your social ties, your needs and your wants, your past and your potential. It will help you explore options, discover possibilities, and find new ways to make your life worthwhile. If you don't make the most of what you are, you risk never discovering what you might become.

You have more control over your life and well-being than anything or anyone else does. Through the decisions you make and the habits you develop, you can influence how well—and perhaps how long—you will live.

Being healthy, as you'll learn in this chapter, means more than not being sick or in pain.

Health is a personal choice that you make every day when you decide on everything from what to eat to whether to exercise to how to handle stress. Sometimes making the best choices demands making healthy changes in your life. This chapter will show you how.

This chapter also extends an invitation to live more fully, more happily, and more healthfully. It is an offer that you literally cannot afford to refuse. Your future depends on it.

### Health and Wellness

By simplest definition, **health** means being sound in body, mind, and spirit. The World Health Organization defines health as "not merely the absence of disease or infirmity," but "a state of complete physical, mental, and



**health** A state of complete well-being, including physical, psychological, spiritual, social, intellectual, and environmental dimensions.

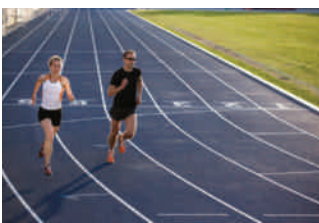
Visit [www.cengagebrain.com](http://www.cengagebrain.com) to access course materials for this text, including the Behavior Change Planner, interactive quizzes, tutorials, and more. See the preface on page xv for details.



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Robin Skjoldborg/Jupiterimages

Health is the process of discovering, using, and protecting all the resources within our bodies, minds, spirits, families, communities, and environment.

social well-being.”<sup>1</sup> Health is the process of discovering, using, and protecting all the resources within our bodies, minds, spirits, families, communities, and environment.

Health has many dimensions: physical, psychological, spiritual, social, intellectual, and environmental. Some add an “emotional” and a “cultural” dimension. This book integrates these aspects into a *holistic* approach that looks at health and the individual as a whole, rather than part by part.

**Wellness** can be defined as purposeful, enjoyable living or, more specifically, a deliberate lifestyle choice characterized by personal responsibility and optimal enhancement of physical, mental, and spiritual health. In the broadest sense, wellness is:

- A decision you make to move toward optimal health.
- A way of life you design to achieve your highest potential.
- A process of developing awareness that health and happiness are possible in the present.
- The integration of body, mind, and spirit.
- The belief that everything you do, think, and feel has an impact on your state of health and the health of the world.

*Health-related quality of life and well-being* is a term that health-care providers and officials use to assess the impact of health status on an individual’s quality of life. This multidimensional concept encompasses domains related to physical, mental, emotional, and social functioning. As scientists have shown again and again in recent decades, psychological factors play a major role in enhancing physical well-being and preventing illness, but they also can trigger, worsen, or prolong physical symptoms. Similarly, almost every medical illness affects people psychologically as well as physically.

play of factors that determine your level of wellness.

## Physical Health

Webster’s 1913 dictionary defined health as “the state of being hale, sound, or whole, in body, mind, or soul, especially the state of being free from physical disease or pain.” According to a contemporary medical dictionary, health is “an optimal state of physical, mental, and social well-being, not merely the absence of disease or infirmity.”

Health is not a static state, but a process that depends on the decisions we make and the behaviors we practice every day. To ensure optimal physical health, we must feed our bodies nutritiously, exercise them regularly, avoid harmful behaviors and substances, watch for early signs of sickness, and protect ourselves from accidents.

## Psychological Health

Like physical well-being, psychological health, discussed in the following chapters, is more than the absence of problems or illness. Psychological health refers to both our emotional and mental states—that is, to our feelings and our thoughts. It involves awareness and acceptance of a wide range of feelings in oneself and others, as well as the ability to express emotions, to function independently, and to cope with the challenges of daily stressors.

## Spiritual Health

Spiritually healthy individuals identify their own basic purpose in life; learn how to experience love, joy, peace, and fulfillment; and help themselves and others achieve their full potential. As they devote themselves to others’ needs more than their own, their spiritual development produces a sense of greater meaning in their lives. (See Chapter 2 for an in-depth discussion of spiritual and emotional well-being.)

## Social Health

Social health refers to the ability to interact effectively with other people and the social environment, to develop satisfying interpersonal

# The Dimensions of Health

By learning more about the six dimensions of health, you gain insight into the complex inter-



**wellness** A deliberate lifestyle choice characterized by personal responsibility and optimal enhancement of physical, mental, and spiritual health.

relationships, and to fulfill social roles. It involves participating in and contributing to your community, living in harmony with fellow human beings, developing positive interdependent relationships, and practicing healthy sexual behaviors. (See Chapter 4, “Social Health.”)

Health educators are placing greater emphasis on social health in its broadest sense as they expand the traditional individualistic concept of health to include the complex interrelationships between one person’s health and the health of the community and environment. This change in perspective has given rise to a new emphasis on **health promotion**, which educators define as “any planned combination of educational, political, regulatory, and organizational supports for actions and conditions of living conducive to the health of individuals, groups, or communities.” Examples on campus include establishing smoke-free policies for all college buildings, residences, and dining areas; prohibiting tobacco advertising and sponsorship of campus social events; promoting safety at parties; and enforcing alcohol laws and policies.

## Intellectual Health

Your brain is the only one of your organs capable of self-awareness. Every day you use your mind to gather, process, and act on information; to think through your values; to make decisions, set goals, and figure out how to handle a problem or challenge. Intellectual health refers to your ability to think and learn from life experience, your openness to new ideas, and your capacity to question and evaluate information. Throughout your life, you’ll use your critical thinking skills, including your ability to evaluate health information, to safeguard your well-being.

## Environmental Health

You live in a physical and social setting that can affect every aspect of your health. Environmental health refers to the impact your world has on your well-being. It means protecting yourself from dangers in the air, water, and soil, and in products you use—and working to preserve the environment itself. (Chapter 14 offers a thorough discussion of environmental health.)

# A Report Card on the Health of Americans

The United States spends more than any other nation on health care: a whopping \$2.26 trillion total, or \$7,400 per person per year. However, Americans rank twenty-third in life expectancy for men and twenty-fifth for women. Life expectancy has increased more slowly in the United States than in other developed countries such as Japan, Australia, Sweden, and Switzerland. The primary reasons, according to researchers, are smoking, particularly by women, and obesity.<sup>2</sup>

Yet Americans are living longer. According to the latest statistics from the Centers for Disease Control and Prevention (CDC), life expectancy at birth is now 78.7 years, up from 75.4 years in 1990. The gender gap in longevity has narrowed to 4.9 years, with female life expectancy at 81.1 years and male at 76.2 years.<sup>3</sup> The racial longevity gap also has shrunk, from a difference of 7 years between whites and blacks in 1990 to 3.9 years.<sup>4</sup> Over a 75-year period (1935–2010), the age-adjusted risk of dying dropped 60 percent, with the greatest reduction for younger age groups.<sup>5</sup>

Americans could be living both longer and healthier lives. A healthy lifestyle, recent research has confirmed, can cut the death rate for non-smokers by about half.<sup>6</sup> However, only a minority of Americans at every age have adapted healthy behaviors. Here are the latest findings on our health and habits from the Centers for Disease Control and Prevention (CDC):<sup>7</sup>

- **Fitness.** Americans have become more active but fewer than 20 percent of men and women exercise regularly.
- **Weight.** The percentage of obese Americans has risen from 30 percent in 2000 to 34 percent. Two-thirds of the population are either overweight or obese.
- **Overall health.** About 10 percent of Americans overall describe their health as fair or poor. This percentage increases to 24 percent of those over age 65.



**health promotion** Any planned combination of educational, political, regulatory, and organizational supports for actions and conditions of living conducive to the health of individuals, groups, or communities.





Howard Harrison/Alamy

Your choices and behaviors during your college years can influence how healthy you will be in the future.

## Healthy People 2020

Every decade since 1980, the U.S. Department of Health and Human Services (HHS) has published a comprehensive set of national public health objectives as part of the Healthy People Initiative. The department's vision is to create a society in which all people can live long, healthy lives. Its mission includes identifying nationwide health improvement priorities, increasing public awareness of health issues, and providing measurable objectives and goals.<sup>8</sup>

Drawing on the lessons learned and needs identified in *Healthy People 2010*, HHS has set the following overarching goals for *Healthy People 2020*:

- Eliminate preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Promote healthy development and healthy behaviors across every stage of life.<sup>9</sup>

Here are examples of specific new recommendations that have been added to the national health agenda for 2020:

- **Nutrition and Weight Status:** prevent inappropriate weight gain in youth and adults.
  - **Tobacco Use:** increase recent smoking-cessation success by adult smokers.
  - **Sexually Transmitted Infection:** increase the proportion of adolescents who abstain from sexual intercourse or use condoms if sexually active.
  - **Substance Abuse:** reduce misuse of prescription drugs.
  - **Heart Disease and Stroke:** increase overall cardiovascular health in the U.S. population.
  - **Injury and Violence Prevention:** reduce sports and recreation injuries.
- If you were setting personal health objectives for yourself to obtain by 2020, what would they be? What would be your goals for your family, community, and the entire nation?
- **Medical conditions.** Almost a third of Americans over age 20 have hypertension; 15 percent have high cholesterol; 12 percent have diabetes. About 18 percent of Americans over age 65 have had cancer.
  - **Health care.** Almost a quarter (23 percent) of men and women between ages 18 and 44 did not see a health-care professional in the previous year. A similar percentage (22 percent) in this age group reported at least one emergency room visit. About four in ten Americans (38 percent) between ages 18 and 44 took at least one prescription medication.
  - **Mortality.** The number of Americans who die every year—the national mortality rate—has fallen to an all-time low. Death rates declined for 10 of the leading 15 causes of death, including heart disease, cancer, stroke, accidents, Alzheimer's disease, homicide, influenza, and pneumonia.

## Health Disparities

The disparities between the least healthy and the healthiest people are greatest among young adults. In general, men are less likely to enjoy the best levels of self-rated health. Women may have better health and fewer disparities because more of them are attaining college degrees, getting jobs, and earning higher incomes.<sup>10</sup>

**The Toll of Poverty** The primary reason for the health problems faced by minorities in the United States is poverty. Without adequate insurance or the ability to pay, many cannot afford the tests and treatments that could prevent illness or overcome it at the earliest possible stages. According to public health experts, low income may account for one-third of the racial differences in death rates for middle-aged African American adults.

In some cases, both genetic and environmental factors may play a role. Take, for example, the high rates of diabetes among the Pima Indians. Until 50 years ago, these American Indians were not notably obese or prone to diabetes. After World War II, the tribe started trading handmade baskets for lard and flour. Their lifestyle became more sedentary and their diet higher in fats. In addition, researchers have discovered that many Pima Indians have an inherited resistance to insulin that increases their susceptibility to diabetes. The combination of a hereditary predisposition and environmental factors may explain why the Pimas now have epidemic levels of diabetes.

**Race and Ethnicity** Despite great improvements in the overall health of the nation, Americans who are members of racial and ethnic groups—including black or African Americans, American Indians, Alaska Natives, Asian Americans, Hispanics, Latinos, and Pacific Islanders—are more likely than whites to suffer poor health and die prematurely.<sup>11</sup> The longevity gap between white and black women is 4 years; for white and black men it is 6 years.<sup>12</sup> Many factors, including genetic variations, environmental influences, and specific health behaviors, contribute to these disparities.

Quality of health care has been slowly improving for all Americans, but a recent government analysis found that poor people receive worse care than high-income people for about 80 percent of measures such as health screenings and immuni-



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Heredity places this Pima Indian infant at higher risk of developing diabetes, but environmental factors also play a role.

zations. Hispanics receive worse care than whites for about 60 percent of these measures; blacks, American Indians, and Alaska Natives, for 40 percent; and Asians, for 20 percent.<sup>13</sup>

Black Americans lose substantially more years of potential life to homicide (nine times as many), stroke (three times as many), and diabetes (three times as many) as whites. Hispanics suffer more fatal injuries, chronic liver disease, and cirrhosis of the liver. Compared with whites, blacks have more new AIDS cases. American Indian and Alaska Native women are less likely to receive prenatal care, and Asian American women have significantly lower rates of mammography.

Caucasians are prone to osteoporosis (progressive weakening of bone tissue); cystic fibrosis; skin cancer; and phenylketonuria (PKU), a metabolic disorder that can lead to mental retardation.

Native Americans, including those indigenous to Alaska, are more likely to die young than the population as a whole, primarily as a result of

accidental injuries, cirrhosis of the liver, homicide, pneumonia, and the complications of diabetes. The suicide rate among American Indians and Alaska Natives is 50 percent higher than the national rate. The rates of co-occurring mental illness and substance abuse (especially alcohol) are also higher among Native American youth and adults.

### **Cancer Screening and Management**

Overall, black Americans are more likely to develop cancer than persons of any other racial or ethnic group. Black women have higher rates of colon, pancreatic, and stomach cancer. Black men have higher rates of prostate, colon, and stomach cancer.

African Americans have the highest death rates for lung cancer of any racial or ethnic group in the United States. Medical scientists have debated whether the reason might be that treatments are less effective in blacks or whether many are not diagnosed early enough nor treated rigorously enough.

African American women are more than twice as likely to die of cervical cancer than are white women and are more likely to die of breast cancer than are women of any other racial or ethnic group. Native Hawaiian women have the highest rates of breast cancer. Women from many racial minorities, including those of Filipino, Pakistani, Mexican, and Puerto Rican descent, are more likely to be diagnosed with late-stage breast cancer than white women.

**Cardiovascular Disease** Heart disease and stroke are the leading causes of death for all racial and ethnic groups in the United States, but rates of death from heart disease and from stroke are higher among African American adults than among white adults. African Americans also have higher rates of high blood pressure (hypertension), develop this problem earlier in life, suffer more severe hypertension, and have higher rates of stroke.

**Diabetes** American Indians and Alaska Natives, African Americans, and Hispanics are twice as likely to be diagnosed with diabetes compared with non-Hispanic whites. American Indians have the highest rate of diabetes in the world.

## *Your Strategies for Prevention*

### **If You Are at Risk**

Certain health risks may be genetic, but behavior influences their impact. Here are specific steps you can take to protect your health:

- Ask if you are at risk for any medical conditions or disorders based on your family history or racial or ethnic background.
- Find out if there are tests that could determine your risks. Discuss the advantages and disadvantages of such testing.
- If you or a family member require treatment for a chronic illness, ask your doctor whether any medications have proved particularly effective for your racial or ethnic background.
- If you are African American, you are significantly more likely to develop high blood pressure, diabetes, and kidney disease. Being overweight or obese adds to the danger. The information in Chapters 5, 6, and 7 can help you lower your risk by keeping in shape, making healthy food choices, and managing your weight.
- Hispanics and Latinos have disproportionately high rates of respiratory problems, such as asthma, chronic obstructive lung disease, and tuberculosis. To protect your lungs, stop smoking and avoid secondary smoke. Learn as much as you can about the factors that can trigger or worsen lung diseases.

**Infant Mortality** African American, American Indian, and Puerto Rican infants have higher death rates than white infants.

**Mental Health** American Indians and Alaska Natives suffer disproportionately from depression and substance abuse. Minorities have less access to mental health services and are less likely to receive needed high-quality mental health services.

**Infectious Disease** Asian Americans and Pacific Islanders have much higher rates of



hepatitis B. Black teenagers and young adults become infected with hepatitis B three to four times more often than those who are white. Black people also have a higher incidence of hepatitis C infection than white people. Almost 80 percent of reported cases affect racial and ethnic minorities.

### HIV and Sexually Transmitted Infections

Although African Americans and Hispanics represent only about a quarter of the U.S. population, they account for about two-thirds of adult AIDS cases and more than 80 percent of pediatric AIDS cases. The rate of syphilis infection for African Americans is nearly 30 times the rate for whites.

**Sex and Gender** Medical scientists define *sex* as a classification, generally as male or female, according to the reproductive organs and functions that derive from the chromosomal complement. *Gender* refers to a person's self-representation as male or female or how that person is responded to by social institutions on the basis of the individual's gender presentation. Rooted in biology, gender is shaped by environment and experience.

The experience of being male or female in a particular culture and society can and does have an effect on physical and psychological well-being. In fact, sex and gender may have a greater impact than any other variable on how our bodies function, how long we live, and the

symptoms, course, and treatment of the diseases that strike us. (See Figure 1.1.)

As you will see throughout this text, gender affects many aspects of health. Although many assume that men are the stronger sex, they die at a faster rate than women. About 115 males are conceived for every 100 females, but males die more often before birth. Boys are more likely to be born prematurely, to suffer birth-related injuries, and to die before their first birthdays than girls.

Men's overall mortality rate is 41 percent higher than women's. They have higher rates of cancer, heart disease, stroke, lung disease, kidney disease, liver disease, and HIV/AIDS. They are four times more likely to take their own lives or to be murdered than women. By age 65, there are only 77 men for every 100 women. At age 85 women outnumber men by 2.6 to 1. More than half of all women older than age 65 are widows. Among centenarians, there are four females for every male.

Among the reasons that may contribute to the health and longevity gap between the sexes are:

- **Biological factors**, such as the fact that women have two X chromosomes and men only one, different levels of sex hormones (particularly testosterone and estrogen), and metabolic variations.

Figure 1.1 **Some of the Many Ways Men and Women Are Different**

