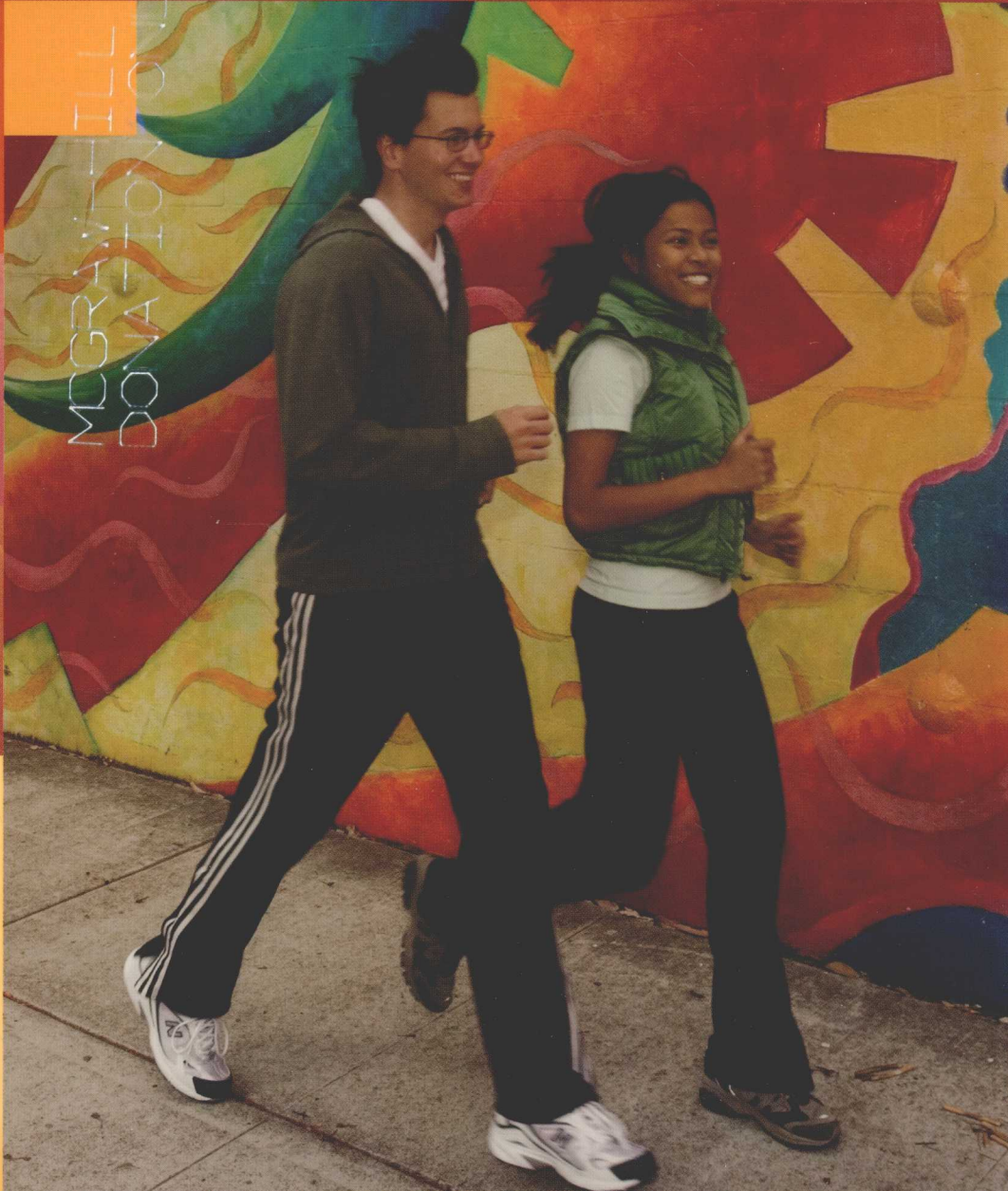
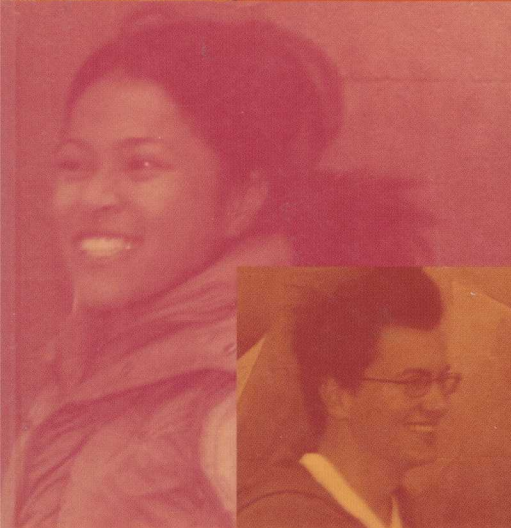


*Ninth Edition*

# Understanding Your Health

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9



*Wayne A. Payne*

*Dale B. Hahn*

*Ellen B. Lucas*

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# Understanding Your Health

Ninth Edition

Wayne A. Payne, Ed.D.

Dale B. Hahn, Ph.D.

Ellen B. Lucas, Ph.D.

*All of Ball State University,  
Muncie, Indiana*



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# Understanding **Your** Health



*To all our students, with the hope that the  
decisions they make will be healthy ones.*

# Preface

As a health educator, you already know that personal health is one of the most exciting courses a college student will take. Today's media-oriented college students are aware of the critical health issues of the new millennium. They hear about environmental issues, substance abuse, sexually transmitted diseases, fitness, and nutrition virtually every day. The value of the personal health course is its potential to expand students' knowledge of these and other health topics. Students will then be able to examine their attitudes toward health issues and modify their behavior to improve their health and perhaps even prevent or delay the onset of certain health conditions.

*Understanding Your Health* accomplishes this task with a carefully composed, well-documented text that addresses the health issues most important to both instructors and students. As health educators, we understand the teaching issues you face daily in the classroom and have written this text with your concerns in mind.

## Hallmarks of the Text

Several unique themes and features set *Understanding Your Health* apart from other personal health texts. These successful features continue to define *Understanding Your Health* in its ninth edition.

### A Text for All Students

This book is written for college students in a wide variety of settings, from community colleges to large four-year universities. The content is carefully constructed to be meaningful to students of all ages. We have paid special attention to the increasing numbers of nontraditional-age students (those over age 25) who have decided to pursue a college education. *Understanding Your Health* continues to encourage students of all ages and backgrounds to achieve their goals.

### Two Central Themes

Throughout the text, two central themes—the multiple dimensions of health and the developmental tasks—

offer students a foundation for understanding their own health and achieving positive behavior change. The multiple dimensions of health are introduced in Chapter 1 and revisited in each part opener, where they are discussed in the context of the chapters that follow. The developmental tasks are also introduced in Chapter 1, where they are applied to young, middle, and older adulthood.

## Flexible Organization

The ninth edition of *Understanding Your Health* has 21 chapters. The first stands alone as an introductory chapter that explains the focus of the book. The arrangement of the remaining chapters follows the recommendations of both the users of previous editions of the book and reviewers for this edition. Of course, professors can choose to cover the chapters in any sequence that suits the needs of their courses.

## Wellness and Disease Prevention

Throughout this new edition, students are continually urged to be proactive in shaping their future health. Even the chapter titles invite students to take control of their health behavior.

## Integrated Presentation of Aging

Topics of interest to midlife and older adults are integrated into appropriate chapters according to subject. This organization allows both traditional-age and nontraditional-age students to learn about the physical and emotional changes that take place as we age.

## Separate Coverage of Cancer and Chronic Conditions

Rapid developments in cancer prevention, diagnosis, and treatment warrant a single comprehensive chapter on cancer, in which we present the latest research and information.

In addition, *Understanding Your Health* features a separate chapter in which more than 20 of the most common chronic conditions are discussed.

## Technology: The Key to Teaching and Learning

Just a quick glance through the pages of *Understanding Your Health* shows that technology is woven throughout every chapter, both in the content and in the chapter pedagogy. Similarly, the package of supplements that accompanies the text emphasizes technology while acknowledging that printed materials also have merit. Together, the text and its supplements offer the ideal approach to teaching and learning—one that integrates the best tools that technology has to offer, challenging both instructors and students to reach higher.

## Updated Coverage: New and Expanded Topics

As experienced health educators and authors, we know how important it is to provide students with the most current information available. The ninth edition of *Understanding Your Health* has been thoroughly updated with the latest information, statistics, and findings. Throughout each chapter, we have incorporated new examples and discussions, from information on newly available prescription drugs and medications (Chapters 2, 3, 11, and 12), to the latest information on dieting and supplements (Chapters 5, 6, and 16).

Another exciting change to this edition of *Understanding Your Health* is the addition of a new chapter, Chapter 21, Accepting Dying and Death. Written by coauthor Ellen B. Lucas, Ph.D., this chapter presents information about the psychological stages of death; coping with grief and the loss of friends, parents, and children; hospice care; euthanasia; and physician-assisted suicide. The chapter also offers important practical advice for preparing advance health care directives.

In addition to these topics, we have once again included chapter-ending “As We Go To Press” boxes in relevant chapters. These unique boxes allow us to comment on breaking news right up to press time, ensuring that the most current issues in health are addressed. For example, in Chapter 2 we discuss the concern and controversy over prescription antidepressants for children, and in Chapter 21 we touch on the growing trend of cryogenic freezing.

Following is a sampling of topics that are either completely new to this edition or are covered in greater depth than in the previous edition:

## Chapter 1: Shaping Your Health

- Traditional definitions of health
- Composition and role of health
- Leading causes of death for Americans under 80 years of age

## Chapter 2: Achieving Psychological Health

- Advertising psychological medications
- How to say “sorry” and mean it
- Personality types
- Attention Deficit Disorder

## Chapter 3: Managing Stress

- New technological stressors
- Stress is different for different populations
- Yoga
- Antidotes to anger

## Chapter 4: Becoming Physically Fit

- Anterior and posterior musculature charts

## Chapter 5: Understanding Nutrition and Your Diet

- Low-carb diets
- New USDA food guidelines
- Food and spirituality
- Phytochemicals
- Sample 2,000-calorie menu
- Updated fast-food choices
- Food pyramids of other cultures

## Chapter 6: Maintaining a Healthy Weight

- Reality television and body image
- Religion and dieting
- Dieting myths
- Childhood obesity
- Clothing sizes around the world
- Surgical intervention

## Chapter 7: Making Decisions about Drug Use

- Effects of Methamphetamine abuse
- Warning signs of a meth lab
- Ritalin and Adderall abuse on campus



## Chapter 8: Taking Control of Alcohol Use

- Dangers of drinking games
- Alcohol absorption and race

## Chapter 9: Rejecting Tobacco Use

- Smoking statistics by state
- Carcinogenic agents
- Sexual dysfunction and infertility
- Employment-related consequences of smoking
- International smoking bans

## Chapter 10: Enhancing Your Cardiovascular Health

- Hypertension
- Cholesterol levels
- Updated statistics on cardiovascular disease

## Chapter 11: Living with Cancer

- Updated statistics on cancer
- Cancer screening guidelines
- Genetic markers
- Role of self-examination in the detection of breast cancer
- Solar UV index

## Chapter 12: Managing Chronic Conditions

- Categorization of chronic conditions
- Expanded discussion of diabetes
- Changing pharmaceutical choices in treating IBDs
- Expanded discussion of multiple sclerosis
- Revised classification for Alzheimer's

## Chapter 13: Preventing Infectious Diseases

- Immunization schedule
- 2004–2005 influenza vaccine shortage
- Lyme disease
- Bird influenza
- Updated HIV/AIDS statistics

## Chapter 14: Exploring the Origins of Sexuality

- Irregular menstrual cycles
- Changing diet to improve fibrocystic breast condition
- Gender preference

## Chapter 15: Understanding Sexual Behavior and Relationships

- Same-sex marriage
- Comparison of drug treatments for erectile dysfunction
- Expanded coverage of transgendered people

## Chapter 16: Managing Your Fertility

- Contraceptive effectiveness table
- Standard Days method of periodic abstinence
- Abstinence as birth control
- New methods of contraception
- Side effects of emergency hormonal contraception
- New method of female sterilization (the Essure coil)
- Partial birth abortion

## Chapter 17: Becoming a Parent

- Gay and lesbian adoption
- Therapeutic cloning
- Infertility and adoption

## Chapter 18: Becoming an Informed Health Care Consumer

- The Internet
- Alternative forms of health care
- Self-diagnosis
- Lack of health insurance
- Medicare prescription drug coverage
- The FDA's drug approval process

## Chapter 19: Protecting Your Safety

- Identity theft
- Driving distractions

## Chapter 20: The Environment and Your Health

- Media hype
- Religious perspectives on the Human-Environment relationship
- Non-ionizing radiation
- Polycyclic aromatic hydrocarbons
- Ionizing radiation
- Species extinction and the loss of natural habitats

## Chapter 21: Accepting Dying and Death

- Definitions of death
- Psychological stages of death
- Advance health care directives
- Coping with specific causes of death
- Euthanasia
- Physician-assisted suicide
- Near-death experiences
- Interacting with dying people
- Discussing death with children
- Hospice care
- Death rituals

## Student-Friendly Chapter Pedagogy

Each chapter of *Understanding Your Health* is rich with pedagogical features that offer a variety of ways to address new and emerging health issues and to pique student interest in particular topics.

### Chapter Objectives

Each chapter begins with a set of clear objectives that help students distill the most important concepts in the pages that follow.

### Taking Charge of Your Health

Located at the end of each chapter, these bulleted lists invite students to put the knowledge and information they've gleaned from the chapter to work in their everyday lives. Cross-referencing the text with Internet links and real-world situations allows students to see how what they've learned can be applied in their own lives.

### Eye on the Media

Face it—a student's world revolves around media of all types, especially the Web. Students get most of their health information not from instructors and textbooks but from television, self-help books, popular news magazines, the Web, and the radio. To meet students on this familiar ground, we've included Eye on the Media boxes, which take a critical look at these media sources of health information.

### Discovering Your Spirituality

Spirituality has become an important focus in health courses. Discovering Your Spirituality boxes highlight the spiritual dimension of health and its effect on overall wellness. The boxes cover topics such as body image,

living well with cancer or a chronic infectious disease, making decisions about sex, and having an enjoyable social life without abusing alcohol or other drugs.

## Considering Complementary Care

This feature highlights nontraditional approaches to health care. Topics include the use of herbal supplements, biofeedback, meditation, and dietary aids. Students are encouraged to critique these approaches, weighing their possible advantages and disadvantages. Although methods that are known to be dangerous are clearly identified as such, students are invited to consider new approaches that are becoming more accepted because they show promising results. An underlying theme is patient responsibility coupled with a physician's advice.

## Talking Points

Interspersed throughout each chapter, Talking Points offers students opportunities to explore how they might start a dialogue about specific health-related issues and situations.

## Changing for the Better

These unique question-and-answer boxes show students how to put health concepts into practice. Each box begins with a real-life question, followed by helpful tips and practical advice for initiating behavior change and staying motivated to follow a healthy lifestyle.

## Learning from Our Diversity

These boxes expose students to alternative viewpoints and highlight what we can learn from the differences that make us unique. Topics include the Mediterranean Food Pyramid, the male contraceptive pill, and special issues related to infectious disease among older adults.

## Star Boxes

In each chapter, special material in Star boxes encourages students to delve into a particular topic or closely examine an important health issue.

## Personal Assessments

Each chapter contains at least one Personal Assessment inventory. These self-assessment exercises serve three important functions: to capture students' attention, to serve as a basis for introspection and behavior change, and to provide suggestions for carrying the applications further.

## Definition Boxes

Key terms are set in boldface type and defined in corresponding boxes. Pronunciation guides are provided where appropriate. Other important terms in the text are set in italics for emphasis. Both approaches facilitate student vocabulary comprehension.

## Chapter Summaries

Each chapter concludes with a bulleted summary of key concepts and their significance or application. The student can then return to any topic in the chapter for clarification or study.

## Review Questions

A set of questions appears at the end of each chapter to aid the student in review and analysis of chapter content.

## Comprehensive Health Assessment

The Comprehensive Health Assessment at the end of Chapter 1 allows students to take a close look at their current state of health, typical health behavior, and risk factors. Using this assessment, students can pinpoint trouble spots in their own health behavior and find out what they can do to reduce their risk of disease or other health conditions. At the end of the semester, they can take a look at their previous answers to see how their behavior changed as they learned more about health and wellness issues.

## Health Reference Guide

The updated Health Reference Guide at the back of the book lists many commonly used health resources. Internet addresses, phone numbers, and mailing addresses of various organizations and government agencies are provided as available. The guide is perforated and laminated, making it durable enough for students to keep for later use.

## Vegetarian Food Pyramid

Many students now follow or are considering a vegetarian diet. To help them understand how such a diet meets nutrient needs, we have printed a vegetarian food pyramid along with the USDA Food Guide Pyramid in Chapter 5.

## Comprehensive Glossary

At the end of the text, all terms defined in boxes, as well as pertinent italicized terms, are merged into a comprehensive glossary.

## Appendixes

*Understanding Your Health* includes four appendixes that are valuable resources for the student:

- **First Aid.** This updated appendix outlines important general first-aid measures, such as what to do when someone is choking, bleeding, or in shock. It includes a special section on recognition and first-aid treatment of epileptic seizures.
- **Body Systems.** The systems of the human body have been clearly and accurately rendered in this appendix to make difficult anatomical concepts easier for students to understand.
- **Canadian Health.** Written by Canadian health educator Don Morrow, this section provides a comprehensive overview of the health promotion movement in Canada. It presents the historical background of the movement, including an explanation of important documents such as *A New Perspective on the Health of Canadians*, the *Ottawa Charter for Health Promotion*, and the theoretical model of *A Framework for Health Promotion*. It also discusses the *Action Statement for Health Promotion in Canada*, current provincial perspectives, recent initiatives, and future directions.
- **Canada's Food Guide to Healthy Eating.** This well-known and respected guide offers an interesting comparison with the USDA Food Guide Pyramid.

## Supplements

An extensive supplements package is available to qualified adopters to enhance the teaching-learning process. We have made a concerted effort to produce supplements of extraordinary utility and quality. This package has been carefully planned and developed to help instructors derive the greatest benefit from the text. We encourage instructors to examine them carefully. Many of the products can be packaged with the text at a discounted price. Beyond the following brief descriptions, additional information about these supplements is available from your McGraw-Hill sales representative.

## Integrated Instructor's Resource CD

Organized by chapter, the Instructor's Resource CD includes resources to help you teach your course. The CD will work in both Windows and Macintosh environments and includes the following elements:

- **Course Integrator Guide.** This guide includes all the useful features of an instructor's manual, such as learning objectives, suggested lecture outlines, suggested

activities, media resources, and Web links. It also integrates the text with all the related resources McGraw-Hill offers, such as the Online Learning Center, the HealthQuest CD-ROM, and the Health and Human Performance Discipline Page. The guide also includes references to relevant print and broadcast media.

- **Test Bank.** This file includes more than 1,000 questions, including multiple-choice, true/false, and short essay. It has been rewritten to enhance clarity, and it now includes critical thinking questions and more applications questions.
- **Computerized Test Bank.** McGraw-Hill's Computerized Testing is the most flexible and easy-to-use electronic testing program available in higher education. The program allows instructors to create tests from book-specific test banks and to add their own questions. It accommodates a wide range of question types, and multiple versions of the test can be created. The program is available for Windows, Macintosh, and Linux environments.
- **PowerPoint.** A complete set of PowerPoint lecture slides for the course is included on the Instructor's Resource CD, as well as on the instructor's portion of the Online Learning Center. This presentation, ready to use in class, was prepared by a professional in the field of health and fitness. It corresponds to the content in each chapter of *Understanding Your Health*, making it easier for you to teach and ensuring that your students can follow your lectures point by point. You can modify the presentation as much as you like to meet the needs of your course.

## Online Learning Center

The Online Learning Center to accompany this text offers a number of additional resources for both students and instructors. Many study tools are open to all students. Premium content such as assessments and PowerWeb require student registration using the pass code that comes free with new books. Visit this Web site to find useful materials such as the following:

For the instructor

- Downloadable PowerPoint presentations
- Course Integrator Guide

For the student

- Self-scoring chapter quizzes and online study guides
- Flash cards and crossword puzzles for learning key terms and their definitions
- Learning objectives
- Interactive activities

- Web links for study and exploration of topics in the text
- Online labs
- Wellness worksheets
- PowerWeb
- Newsfeeds
- Student success strategies

## HealthQuest CD-ROM, by Bob Gold and Nancy Atkinson

The HealthQuest CD-ROM helps students explore their wellness behavior using state-of-the-art interactive technology. Students can assess their current health status, determine their risks, and explore options for positive lifestyle change. Tailored feedback gives students a meaningful and individualized learning experience without using valuable classroom time. Modules include the Wellboard (a health self-assessment); Stress Management and Mental Health; Fitness; Nutrition and Weight Control; Communicable Diseases; Cardiovascular Health; Cancer; Tobacco, Alcohol, and Other Drugs. An online Instructor's Manual presents ideas for incorporating HealthQuest into your course.

## Fitness and Nutrition Log

This logbook helps students track their diet and exercise programs. It serves as a diary to help students monitor their behaviors. It can be packaged with any McGraw-Hill textbook for a small additional fee.

## PowerWeb

[www.dushkin.com/online](http://www.dushkin.com/online)

The PowerWeb Web site is a reservoir of course-specific articles and current events. Students can visit PowerWeb to take a self-scoring quiz, complete an interactive exercise, click through an interactive glossary, or check the daily news. An expert in each discipline analyzes the day's news to show students how it relates to their field of study.

PowerWeb is part of the Online Learning Center. Students are also granted full access to Dushkin/McGraw-Hill's Student Site, where they can read study tips, conduct Web research, learn about different career paths, and follow links on the Web.

## Wellness Worksheets

This collection of activities and assessments helps students become more involved in their own wellness and better prepared to implement behavior change programs.

It includes over 120 assessments under the topics of General Wellness and Behavior Change; Stress Management; Psychological and Spiritual Wellness; Intimate Relationships and Communication; Sexuality; Addictive Behaviors and Drug Dependence; Nutrition; Physical Activity and Exercise; Weight Management; Chronic Diseases: Cardiovascular Disease and Cancer; Infectious Diseases: Aging, Dying and Death; Consumer Health; Personal Safety; and Environmental Health. They are available online in the premium content or may be packaged with the text at minimal cost.

## NutritionCalc Plus

<http://nutritioncalc.mhhe.com>

NutritionCalc Plus (ISBN 0-07-292084-X) is a dietary analysis program with an easy-to-use interface that allows users to track their nutrient and food group intakes, energy expenditures, and weight control goals. It generates a variety of reports and graphs for analysis, including comparisons with the Food Guide Pyramid and the latest Dietary Reference Intakes (DRIs). The database includes thousands of ethnic foods, supplements, fast foods, and convenience foods, and users can add their own foods to the food list. NutritionCalc Plus is available on CD-ROM or in an online version.

## Video Library

The McGraw-Hill Video Library contains many quality videotapes, including selected videos from the *Films for Humanities* series and all the videos from the award-winning *Healthy Living: Road to Wellness* series. Digitized video clips are also available (see *Healthy Living Video Clips* CD-ROM). The library also features *Students on Health*, a unique video filmed on college campuses across the country that includes eight brief segments, 8 to 10 minutes long, featuring students involved in discussion and role play on health issues. Finally, an additional video—*McGraw-Hill Health Video*—is available. This video features brief clips on a wide range of topics of interest in personal health courses. Contact your McGraw-Hill sales representative to discuss eligibility to receive videos.

## PageOut: The Course Web Site Development Center

[www.pageout.net](http://www.pageout.net)

PageOut, free to instructors who use a McGraw-Hill textbook, is an online program you can use to create

your own course Web site. PageOut offers the following features:

- A course home page
- An instructor home page
- A syllabus (interactive and customizable, including quizzing, instructor notes, and links to the text's Online Learning Center)
- Web links
- Discussions (multiple discussion areas per class)
- An online gradebook
- Links to student Web pages

Contact your McGraw-Hill sales representative to obtain a password.

## Course Management Systems

[www.mhhe.com/solutions](http://www.mhhe.com/solutions)

Now instructors can combine their McGraw-Hill Online Learning Center with today's most popular course management systems. Our Instructor Advantage program offers customers access to a complete online teaching website called the Knowledge Gateway, prepaid, toll-free phone support, and unlimited e-mail support directly from WebCT and Blackboard. Instructors who use 500 or more copies of a McGraw-Hill textbook can enroll in our Instructor Advantage Plus program, which provides on-campus, hands-on training from a certified platform specialist. Consult your McGraw-Hill sales representative to learn what other course management systems are easily used with McGraw-Hill online materials.

## Classroom Performance System

Classroom Performance System (CPS) brings interactivity into the classroom/ lecture hall. It is a wireless response system that gives instructors and students immediate feedback from the entire class. The wireless response pads are essentially remotes that are easy to use and that engage students. CPS is available for both IBM and Mac computers.

## Primis Online

[www.mhhe.com/primis/online](http://www.mhhe.com/primis/online)

Primis Online is a database-driven publishing system that allows instructors to create content-rich textbooks, lab manuals, or readers for their courses directly from the Primis Web site. The customized text can be delivered in print or electronic (eBook) form. A Primis eBook is a digital version of the customized text (sold directly to students as a file downloadable to their computer or accessed online by a password). *Understanding Your Health*, ninth edition, is included in the database.

## EZ Test

McGraw-Hill's EZ Test is a flexible and easy-to-use electronic testing program. The program allows instructors to create tests from book-specific items. It accommodates a wide range of question types, and instructors may add their own questions. Multiple versions of the test can be created, and any test can be exported for use with course management systems such as WebCT, BlackBoard, and PageOut. EZ Test Online is a new service that gives you a place to easily administer your EZ Test-created exams and quizzes online. The program is available for Windows and Macintosh environments.

## You Can Make a Difference: Be Environmentally Responsible, Second Edition, by Judith Getis

This handy text is organized around the three parts of the biosphere: land, water, and air. Each section contains descriptions of the environmental problems associated with that part of the biosphere. Immediately following the problems, or challenges, are suggested ways in which individuals and communities can help solve or alleviate them.

## Annual Editions

*Annual Editions* is an ever-enlarging series of more than 70 volumes, each designed to provide convenient, low-cost

access to a wide range of current, carefully selected articles from some of the most important magazines, newspapers, and journals published today. The articles, drawn from more than 400 periodical sources, are written by prominent scholars, researchers, and commentators. All *Annual Editions* have common organizational features, such as annotated tables of contents, topic guides, unit overviews, and indexes. In addition, a list of annotated Web sites is included. An Instructor's Resource Guide with testing suggestions for each volume is available to qualified instructors.

## Taking Sides

[www.dushkin.com/takingsides](http://www.dushkin.com/takingsides)

McGraw-Hill/Dushkin's *Taking Sides* series currently consists of 22 volumes, with an instructor's guide with testing material available for each volume. The *Taking Sides* approach brings together the arguments of leading social and behavioral scientists, educators, and contemporary commentators, forming 18–20 debates, or issues, that present the pros and cons of current controversies in an area of study. An Issue Introduction that precedes the two opposing viewpoints gives students the proper context and historical background for each debate. After reading the debate, students are given other viewpoints to consider in the Issue Postscript, which also offers recommendations for further reading. *Taking Sides* fosters critical thinking in students and encourages them to develop a concern for serious social dialogue.

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### For the Ninth Edition:

**Denise Colaianne**  
*Western Connecticut State University*

**William Ebomoyi**  
*University of Northern Colorado*

**Heidi Fuller**  
*Salem State College*

**Kim Hyatt**  
*Weber State University*

**John Kowalczyk**  
*University of Minnesota*

**Janis McWayne**  
*Francis Marion University*

**Dave Oster**  
*Jefferson College*

**Lana Zinger**  
*Queensborough Community College*

### For the Eighth Edition:

**Srijana Bajracharya**  
*Ithaca College*

**Steve G. Gabany**  
*Indiana State University*

**Rosann L. Poole**  
*Tallahassee Community College*

**Kerry J. Redican**  
*Virginia Polytechnic Institute and State University*

**Andrew L. Shim**  
*Southwestern College*

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*William Paterson University*

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**M. Basti**  
*Cuesta College*

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**Stephen Green**  
*Mississippi State University*

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*Coastal Carolina University*

**Kimberley Hyatt**  
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*Kent State University*

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*University of Virginia*

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**M. Ann Smith**  
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**Charles Tucker**  
*Valdosta State University*

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*East Carolina University*

**Kathy Webster**  
*California State University, Fullerton*

**Holly Willey**  
*Mississippi State University*

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*University of Maine-Presque Isle*

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*Gardner-Webb University*

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*Weber State University*

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*DeAnza College*

**Mark G. Wilson**  
*University of Georgia*

**Focus Group Participants:**

**Danny Ballard**  
*Texas A&M University*

**Robert C. Barnes**  
*East Carolina University*

**Jacki Benedik**  
*University of Southwestern Louisiana*

**Kathie C. Garbe**  
*Youngstown State University*

**Virginia Peters**  
*University of Central Oklahoma*

**Les Ramsdel**  
*Eastern Kentucky University*

**James Robinson III**  
*University of Northern Colorado*

**Linda Schiller-Moening**  
*North Hennepin Community College*

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*Emory University*

**Judith Boone Alexander**  
*Evergreen Valley College*

**Judy B. Baker**  
*East Carolina University*

**Robert C. Barnes**  
*East Carolina University*

**Loren Bensley**  
*Central Michigan University*

**Ernst Bleichart**  
*Vanier College*

**Shirley F. B. Carter**  
*Springfield College*

**Vivien C. Carver**  
*Youngstown State University*

**Cynthia Chubb**  
*University of Oregon*

**Janine Cox**  
*University of Kansas*

**Dick Dalton**  
*Lincoln University*

**Sharron K. Deny**  
*East Los Angeles College*

**Emogene Fox**  
*University of Central Arkansas*

**George Gerrodette**  
*San Diego Mesa College*

**Ray Johnson**  
*Central Michigan University*

**James W. Lochner**  
*Weber State College*

**Linda S. Myers**  
*Slippery Rock University*

**Virginia Peters**  
*University of Central Oklahoma*

**James Robinson III**  
*University of Northern Colorado*

**Merwin S. Roeder**  
*Kearney State College*

**James H. Rothenberger**  
*University of Minnesota*

**Ronald E. Sevier**  
*El Camino Community College*

**Reza Shahrokh**  
*Montclair State College*

**Albert Simon**  
*University of Southwestern Louisiana*

**Dennis W. Smith**  
*University of North Carolina-  
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*Southwestern College*

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*Modesto Junior College*

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*Northern Illinois University*

**Susan Cross Lipnickey**  
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**Gerald W. Matheson**  
*University of Wisconsin-La Crosse*



**Hollis N. Matson**  
San Francisco State University

**David E. Mills**  
University of Waterloo

**Peggy Pederson**  
Montana State University

**Valerie Pinhas**  
Nassau Community College

**Jacy Showers**  
Formerly of Ohio State University

**Parris Watts**  
University of Missouri-Columbia

**Wayne E. Wylie**  
Texas A&M University

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