

# Core Concepts in Health

PAUL M. INSEL • WALTON T. ROTH

NINTH EDITION

BRIEF





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NINTH EDITION

# Core Concepts in Health

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# Preface

Now in its ninth edition, *Core Concepts in Health* has maintained its leadership in the field of health education for more than 25 years. Since we pioneered the concept of self-responsibility for personal health in 1976, hundreds of thousands of students have used our book to become active, informed participants in their own health care. Each edition of *Core Concepts* has brought improvements and refinements, but the principles underlying the book have remained the same. Our commitment to these principles has never been stronger than it is today, and it is reflected as fully in this Brief Edition as in the Ninth Edition of *Core Concepts* on which this edition is based. We have prepared the Brief Edition to accommodate instructors whose courses—sometimes carrying only one hour of credit—afford too little time for the complete range of topics and the level of detail of the larger edition.

## OUR GOALS

Our goals in writing this book can be stated simply:

- To present scientifically based, accurate, up-to-date information in an accessible format.
- To involve students in taking responsibility for their health and well-being.
- To instill a sense of competence and personal power in students.

The first of these goals means making expert knowledge about health and health care available to the individual. *Core Concepts* brings scientifically based, accurate, up-to-date information to students about topics and issues that concern them—exercise, stress, nutrition, weight management, contraception, intimate relationships, HIV infection, drugs, alcohol, and a multitude of others. Current, complete, and straightforward coverage is balanced with “user-friendly” features designed to make the text appealing. Written in an engaging, easy-to-read style and presented in a colorful, open format, *Core Concepts* invites the student to read, learn, and remember. Boxes, tables, artwork, photographs, and many other features highlight areas of special interest throughout the book.

The second of our goals is to involve students in taking responsibility for their health. *Core Concepts* uses innovative pedagogy and unique interactive features to get students thinking about how the material they’re reading relates to their own lives. We invite them to examine their emotions about the issues under discussion, to consider their per-

sonal values and beliefs, and to analyze their health-related behaviors. Beyond this, for students who want to change behaviors that detract from a healthy lifestyle, we offer guidelines and tools, ranging from samples of health journals and personal contracts to detailed assessments and behavior change strategies.

Perhaps our third goal in writing *Core Concepts in Health* is the most important: to instill a sense of competence and personal power in the students who read the book. Everyone has the ability to monitor, understand, and affect his or her own health. Although medical and health professionals possess impressive skills and have access to a huge body of knowledge that benefits everyone in our society, people can help to minimize the amount of professional care they actually require in their lifetime by taking care of themselves—taking charge of their health—from an early age. Our hope is that *Core Concepts* will continue to help young people make this exciting discovery—that they have the power to shape their own futures.

## ORGANIZATION AND CONTENT OF THE BRIEF NINTH EDITION

The Brief Ninth Edition of *Core Concepts* focuses on the health issues and concerns of greatest importance to students. The general content of this edition remains essentially the same as the Brief Eighth Edition, with coverage of stress, psychological health, intimate relationships and communication, sexuality, substance use and abuse, nutrition, exercise, weight management, cardiovascular disease, cancer, infectious diseases, aging, and environmental health. New to the Brief Ninth Edition is Chapter 15, “Conventional and Complementary Medicine: Skills for the Health Care Consumer,” which provides consumer-oriented coverage of both conventional Western medicine and widely used complementary and alternative practices. Topics include the basic premises of conventional medicine; the scientific method and the U.S. drug approvals process; guidelines for choosing a primary care physician; strategies for safe use of over-the-counter and prescription medications; general characteristics of complementary and alternative medicine (CAM); descriptions of such CAM practices as acupuncture, chiropractic, homeopathy, and herbal remedies; consumer guidelines for evaluating CAM practitioners and therapies; and health insurance options.

The ninth edition also includes a greater emphasis on the development of total wellness, with expanded coverage of spiritual wellness and the close connections between mind and body. New and updated topics include paths to spiritual wellness; global religious views on tobacco use; the effects of stress on the brain and the immune system; and the benefits of close connections with others. Chapter 4 has been expanded to include more information on the benefits of intimate relationships and additional strategies for building and maintaining healthy interpersonal relationships. Suggested journal writing activities throughout the book help students to further explore their feelings and values.

For the ninth edition, all chapters were carefully reviewed, revised, and updated. The latest information from scientific and health-related research is incorporated in the text, and newly emerging topics and issues are discussed. The following list gives a sample of some of the current concerns addressed in the ninth edition:

- Healthy People 2010 objectives
- Dietary Guidelines for Americans, 2000 Edition, and Dietary Reference Intakes
- Complementary and alternative medicine
- Causes and prevention of violence
- Ecstasy, GHB, and other “club drugs”
- West Nile virus and other emerging infections
- Emergency contraception and other new methods of contraception
- Mifepristone (RU-486)
- Dietary supplement labeling and safety issues
- Health and safety effects of cell phone use
- Implications of the Human Genome Project
- Women’s health issues
- Effective communication
- Genetically modified foods, organic foods, food irradiation, food safety, and other nutrition issues
- Campus safety
- Spiritual wellness
- Carpal tunnel syndrome
- Health risks of cigars, bidis, and spit tobacco

Of course, the health field is dynamic, with new discoveries, advances, trends, and theories reported every week. Ongoing research—on the role of diet in cancer prevention, for example, or on new treatments for HIV infection—continually changes our understanding of the human body and how it works in health and disease. For this reason, no health book can claim to have the final word on every topic. Yet within these limits, *Core Concepts* does present the latest available information and scientific thinking on innumerable topics.

To help students keep up with rapidly advancing knowledge about health issues, the Brief Ninth Edition also includes coverage of a key source of up-to-date information—the Internet. Each chapter includes an annotated list of World Wide Web sites that students can use as a launching point for further exploration of important topics. Chapter 1 also includes guidelines for evaluating health information from the Web.

**Ww.** Each chapter in the ninth edition is also closely tied to the Web site developed as a companion to the text. Boxes, illustrations, tables, and sections of text marked with the special new World Wide Web icon have corresponding links and activities on the *Core Concepts in Health* Online Learning Center (<http://www.mhhe.com/insel9>). The Web site and other online supplements are described below in greater detail.

## FEATURES OF THE BRIEF NINTH EDITION

As a concise version of the ninth edition of *Core Concepts in Health*, this Brief Edition builds on the features that attracted and held our readers’ interest in the previous eight editions. One of the most popular features has always been the **boxes**, which allow us to explore a wide range of current topics in greater detail than is possible in the text itself. More than one-third of the boxes are new to the ninth edition, and many others have been significantly revised or updated. The boxes are divided into six categories, each marked with a unique icon and label.



New to the ninth edition, **In the News** boxes focus on current health issues that have recently been highlighted in the media. Topics covered include the Human Genome Project, same-sex marriage and civil unions, cybersex, club drugs, genetically modified foods, cell phones and distracted driving, mifepristone (RU-486), and emerging infectious diseases. Each In the News box is accompanied by the new World Wide Web icon, indicating that the *Core Concepts* Online Learning Center has links to Internet resources students can use to learn more about the topic of the box.



**Mind/Body/Spirit** boxes are an expanded version of the Sound Mind, Sound Body boxes that appeared in previous editions of *Core Concepts*. The new label reflects their broader focus and greater emphasis on spiritual wellness and the close connections between people’s feelings and states of mind and their physical health. Included in Mind/Body/Spirit boxes are topics such as paths to spiritual wellness, religious views of tobacco use, sexual decision making and personal values, expressive writing and chronic conditions, how exercise fosters emotional wellness, and how stress affects the brain and the immune system. These boxes emphasize that all the dimensions of wellness must be developed in order for an individual to achieve optimal health and well-being.





**Take Charge** boxes distill from each chapter the practical advice students need in order to apply information to their own lives. By referring to these boxes, students can easily find ways to foster friendships, for example; to become more physically active; to enhance support in their relationships; to increase the amount of whole grains in their diets; and to help a friend who has a problem with tobacco, alcohol, or other drugs or has an eating disorder.



**Critical Consumer** boxes emphasize the key theme of critical thinking by helping students develop and apply critical thinking skills, thereby allowing them to make sound choices related to health and well-being. Critical Consumer boxes provide specific guidelines for evaluating health news and Web sites, using food labels to make dietary choices, selecting exercise footwear, evaluating dietary supplements, and so on.



**Dimensions of Diversity** boxes are part of our commitment to reflect and respond to the diversity of the student population. These boxes give students the opportunity to identify any special health risks that affect them because of who they are as individuals or as members of a group. They also broaden students' perspectives by exposing them to a wide variety of viewpoints on health-related issues. The different dimensions reflected include gender, ethnicity, socioeconomic status, and age. The principles embodied by these boxes are described in Chapter 1; topics covered in later chapters include special cardiovascular disease risks for women and African Americans, exercise for people with disabilities, drug use in rural areas and links between poverty and poor environmental health.

In addition, some Dimensions of Diversity boxes highlight health issues and practices in other parts of the world, allowing students to see what Americans share with people in other societies and how they differ. Students have the opportunity to learn about attitudes toward death in other countries, the pattern of HIV infection around the world, and other topics of interest.



**In Focus** boxes highlight current wellness topics of particular interest. Topics include bicycle helmets, shyness, Alzheimer's disease, headaches, diabetes, and carpal tunnel syndrome.

In addition to the box program, many new and refined features are included in the ninth edition of *Core Concepts*. **Vital Statistics** tables and figures highlight important facts and figures in a memorable format that often reveals surprising contrasts and connections. From tables and figures marked with the Vital Statistics label, students can learn about drinking and drug use among college students, world population growth, trends in public opinion about abortion, leading causes of death and disability in the United States, the relationship

between victims and offenders in violent crime, and a wealth of other information. For students who grasp a subject best when it is displayed graphically, numerically, or in a table, the Vital Statistics feature provides alternative ways of approaching and understanding the text. In addition, for each Vital Statistics table and figure, the *Core Concepts* Online Learning Center has links to sites where students can find the latest statistics and information.

*Core Concepts* features a wealth of attractive and helpful **illustrations**, more than 20 of which are new to the ninth edition. The anatomical art, which has been prepared by medical illustrators, is both visually appealing and highly informative. These illustrations help students understand such important information as how blood flows through the heart, how alcohol affects the body, and how to use a condom. New topics illustrated for the ninth edition include diabetes, types of stroke, alcohol consumption by college students, and the vegetarian food pyramid. These lively and abundant illustrations will particularly benefit those students who learn best from visual images

Many of the illustrations in the ninth edition are marked with the new CD icon, indicating that they appear in an enhanced format on *Core Concepts Interactive*, the student CD-ROM that accompanies the text. From self-guided mini-tutorials on the CD-ROM, students can learn more about the stress response, the effects of alcohol and tobacco use, physical processes of aging, immediate and long-term effects of physical activity, the greenhouse effect, and many other topics. The CD-ROM is described in more detail below.

New to the ninth edition, **Communicate!** exercises suggest strategies and activities for improving communication skills in ways that will enhance wellness. Communicate! covers all aspects of communication, from interpersonal communication and communication with oneself to mass communication, from assertive speaking to empathic listening, and from methods of persuasion to critical evaluation of public messages. These exercises appear at appropriate points throughout each chapter.

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

**Take Action**, appearing at the end of every chapter, suggests hands-on exercises and projects that students can undertake to extend and deepen their grasp of the material. Suggested projects include interviews, investigations of campus or community resources, and experimentation with some of the behavior change techniques suggested in the text. Special care has been taken to ensure that the projects are both feasible and worthwhile.

**Journal Entry** also appears at the end of each chapter. These entries suggest ways for students to use their Health Journal (which we recommend they keep while using *Core Concepts*) to think about topics and issues, explore their own views, and express their thoughts in written form. They are designed to help students deepen their awareness and understanding of their own health-related behaviors. (Journal Entry questions also appear on the *Core Concepts* Online Learning Center in a format that enables students to e-mail their responses to their instructors.)

Making wise choices about health requires students to sort through and evaluate health information. To help students become skilled evaluators, each chapter contains at least one **Critical Thinking Journal Entry**. These entries help students develop their critical thinking skills, including finding relevant information, separating fact from opinion, recognizing faulty reasoning, evaluating information, and assessing the credibility of sources. Critical Thinking Journal Entry questions do not have right or wrong answers; rather, they ask students to analyze, evaluate, or take a stand on a particular issue.

The **Behavior Change Strategies** that conclude many chapters offer specific behavior management/modification plans relating to the chapter's topic. Based on the principles of behavior management that are carefully explained in Chapter 1, these strategies will help students change unhealthy or counterproductive behaviors. Included are strategies for dealing with test anxiety, quitting smoking, planning a personal exercise program, phasing in a healthier diet, and many other practical plans for change.

Designed for quick reference is the **Appendix**, "Nutritional Content of Popular Items from Fast-Food Restaurants." It provides a handy guide to the nutritional content of commonly ordered items at popular fast-food restaurants. Students can use the information to make healthier fast-food choices and to plan their daily food intake. "First Aid at a Glance" from the Red Cross appears inside the back cover of the text, providing information that can save lives. These guides offer students the kind of information they can keep and use for years to come.

An innovative **built-in Study Guide** is included in the back of the book. Printed on perforated pages for easy removal, the study guide provides sample test questions for each chapter to help students prepare for examinations. Also included are 17 Wellness Worksheets, which provide additional opportunities for self-assessment.

## LEARNING AIDS

Although all the features of *Core Concepts in Health* are designed to facilitate learning, several specific learning aids have also been incorporated in the text. Learning objectives labeled **Looking Ahead** appear on the opening page of each chapter, identifying major concepts and

helping to guide students in their reading and review of the text. Important terms appear in boldface type in the text and are defined in a **running glossary**, helping students handle a large and complex new vocabulary. A pronunciation guide to all the key terms appears on the student CD-ROM.

**Chapter summaries** offer students a concise review and a way to make sure they have grasped the most important concepts in the chapter. Also found at the end of every chapter are **Selected Bibliographies** and sections called **For More Information** that contain annotated lists of books, newsletters, hotlines, organizations, and Web sites that students can use to extend and broaden their knowledge or pursue subjects of interest to them. A complete **Index** at the end of the book includes references to glossary terms in boldface type.

## TEACHING TOOLS

Available to qualified adopters of the Brief Ninth Edition of *Core Concepts in Health* is a comprehensive package of supplementary materials that enhance teaching and learning. Included in the package are the following items:

- Instructor's Resource Binder
- Transparency Acetates
- Instructor's CD-ROM
- Students on Health Custom Video and McGraw-Hill Health and Wellness Custom Video
- Computerized Test Bank
- *Core Concepts in Health* Online Learning Center
- *Core Concepts Interactive* Student CD-ROM
- Wellness Worksheets
- *Mayfield's Quick View Guide to the Internet for Students of Health, Physical Education, and Exercise Science, Version 2.0*
- Nutrition and Weight Management Journal
- Additional videos, software, and other multimedia
- PageOut, PowerWeb, and other distance learning and online instruction options

The **Instructor's Resource Binder**, contains a variety of helpful teaching materials in an easy-to-use form.

• The **Instructor's Resource Guide**, prepared for the ninth edition by Cathy Kennedy, Colorado State University, includes learning objectives, extended chapter outlines, classroom activities, Internet resources, selected Healthy People 2010 objectives, and health crossword puzzles. The **examination questions** included in the Instructor's Resource Guide have been completely revised and updated for the ninth edition by Kathy McGinnis, San Diego City College. The text bank contains nearly 1600 multiple choice and true-false questions. The answer key

lists the page number in the text where each answer is found.

- More than 150 **transparency masters and handouts** are provided as additional lecture resources. The transparency masters include tables, graphs, and key points from the text; illustrations of many body systems are also provided.

- A complete set of **Wellness Worksheets**, a student learning aid described below, is also included in the Instructor's Resource Binder.

Expanded for the ninth edition, the set of 80 **transparency acetates** provide material suitable for lecture and discussion. The acetates do not duplicate the transparency masters in the Instructor's Resource Binder, and many of them are from sources other than the text.

The **Instructor's CD-ROM**, expanded for the ninth edition, contains annotated PowerPoint® lecture outlines, an image set, transparency acetates, and an electronic version of the Instructor's Resource Guide, including the transparency masters and handouts. Also available on the CD-ROM is a new **Integrated Teaching Solutions** tool, which allows the user to create customized chapter lecture outlines keyed to all the supplements available with the text.

Two **customized videos** are available with the ninth edition. The **McGraw-Hill Health and Wellness Custom Video**, new for the ninth edition, includes brief video segments with additional information on health topics such as nutrition, exercise, and heart disease. **Students on Health** was filmed exclusively for *Core Concepts* with students at college campuses across the country. The 8–10-minute segments focus on key wellness concerns and are designed to stimulate critical thinking and class discussion. The accompanying Instructor's Video Guide provides summaries of each segment and discussion questions.

A **computerized test bank** is available to qualified adopters. Diploma, developed by Brownstone Research Group, allows instructors to design tests using the examination questions included with *Core Concepts in Health* and/or incorporating their own questions. It is available in both Windows and Macintosh formats.

Updated and expanded for the ninth edition, the **Core Concepts in Health Online Learning Center** includes a variety of tools for both instructors and students. Password-protected instructor's resources include links to professional resources and downloadable versions of the PowerPoint slides, acetates, image set, Wellness Worksheets, and Instructor's Resource Guide. The Integrated Teaching Solutions tool is also available online. Student resources include a wide variety of elements keyed to each chapter in the text: chapter outlines and learning objectives, interactive study guide questions, glossary flashcards with a pronunciation guide, interactive crossword puzzles, Journal Entry exercises, Internet activities

that guide students in locating and evaluating health-related Web sites, In the News and Vital Statistics Web links, and extensive sets of health and wellness Web links. In addition, the Online Learning Center includes a Behavior Change Workbook and information on career opportunities in health. All of the resources in the Online Learning Center can also be used with PageOut, Web CT, Blackboard, and other options for online courses.

The **Core Concepts Interactive Student CD-ROM** is also expanded and updated for the ninth edition. Packaged with each copy of the text, this interactive CD-ROM provides many helpful learning aids and wellness tools. Resources include interactive quizzes and wellness self-assessments, self-guided tutorials on special topics, a pronunciation guide to key terms, an electronic fitness log, and a guide to using the Internet.

The more than 100 **Wellness Worksheets** available with the ninth edition help students become more involved in their own wellness and better prepared to implement successful behavior change. The worksheets include assessment tools, Internet activities, and knowledge-based reviews of key concepts. They are available shrink-wrapped with the text in an easy-to-use pad.

Other practical items for the student can also be shrink-wrapped with the text:

- The **Nutrition and Weight Management Journal** guides students in assessing their current diet and making appropriate changes.

- Available in a new edition is **Mayfield's Quick View Guide to the Internet for Students of Health, Physical Education, and Exercise Science, Version 2.0**, by Jennifer Campbell Koella and Michael Keene, University of Tennessee, Knoxville. In addition to listing useful Web links, it provides step-by-step instructions on how to access the Internet; how to find, evaluate, and use online information about wellness; and many other topics.

**Additional videos, software, and other multimedia** are available to qualified adopters. The video library includes tapes on topics such as stress, AIDS, violence, nutrition, alcohol use, and many more. DINE Healthy software provides an easy way for students to evaluate their diets and track the energy expenditure of their activities. HealthQuest software contains interactive assessments, behavior change activities, current articles, video clips, Web links, and many other resources.

McGraw-Hill also offers a wide variety of **digital solutions** to help instructors put courses online. **PageOut** is a simple program that enables instructors to easily develop Web sites for their courses. PageOut can be used to create a course home page, an instructor home page, an interactive syllabus that can be linked to elements in the Online Learning Center, Web links, online discussion areas, an online grade book, and much more. The Online Learning Center can also be customized to work with products like WebCT and Blackboard. **PowerWeb** is a student Internet



resource that includes articles from the Annual Editions series, weekly updates with assessments, informative and timely world news, Web links, research and study tools, and interactive exercises. For more information on these and other digital solutions offered by McGraw-Hill, contact your local representative or visit our Web site (<http://www.mhhe.com/solutions>).

## A NOTE OF THANKS

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**Paul M. Insel**  
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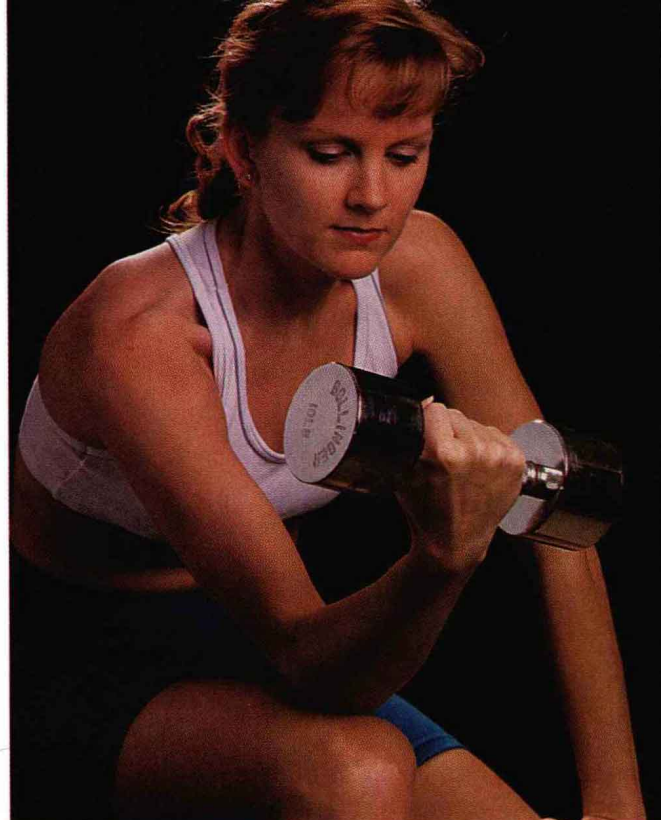
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