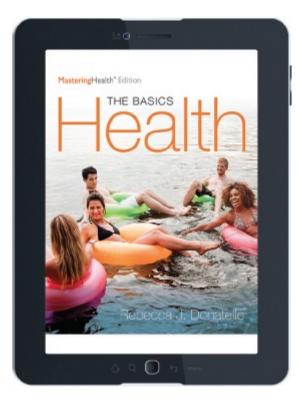
MasteringHealth[™] Edition

THE BASICS Rebecca J. Donatelle

SO MANY OPTIONS FOR YOUR STUDENTS

Students today want options when it comes to their learning and especially their textbooks. *Health: The Basics* gives students the flexibility they desire, offering a wide range of formats for the book and a large array of online learning resources. Let your students find a version that works best for them!



Whether it's on a laptop, tablet, or cell phone, *Health: The Basics* lets students access media and other tools about health.

Health: The Basics Pearson eText 2.0

Available at no charge within MasteringHealth, the Pearson eText 2.0 version of *Health: The Basics* gives students access to the text whenever and wherever they have access to the Internet. Features of the eText now include:

- Now available on smartphones and tablets.
- Seamlessly integrated videos and other rich media.
- Accessible (screen-reader ready).
- Configurable reading settings, including resizable type and night reading mode.
- Instructor and student note-taking, highlighting, bookmarking, and search.

Health: The Basics Books a La Carte

0-13-428695-2 / 978-0-13-428695-2

Books a la Carte features the same exact content as *Health: The Basics* in a convenient, three-hole-punched, loose-leaf version. Books a la Carte offers a great value for your students—this format costs 35% less than a new textbook package.

Pearson Custom Library: You Create Your Perfect Text

www.pearsonlearningsolutions.com/custom-library

Health: The Basics is available on the Pearson Custom Library, allowing instructors to create the perfect text for their course. Select the chapters you need, in the sequence you want. Delete chapters you don't use: Your students pay only for the materials you choose.

No matter the format, with each new copy of the text students will receive full access to the Study Area in MasteringHealth, providing a wealth of videos, MP3 study podcasts and case studies, mobile apps, and interactive online worksheets. Give your students all the learning options with *Health: The Basics*.

READY, SET,

WITH DONATELLE, HEALTH: THE BASICS, 12E The MasteringHealth Edition

GET YOUR STUDENTS READY!

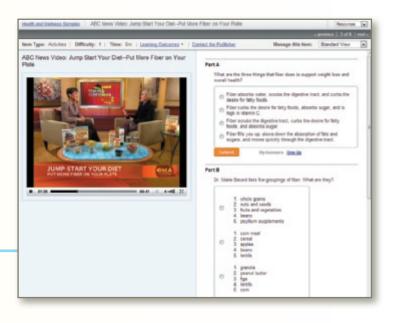


NEW! Study Plan Tied to Learning Outcomes

Numbered learning outcomes now introduce every chapter and mini-chapter, giving students a roadmap for their reading. Each chapter concludes with a Study Plan, which summarizes key points of the chapter and provides review questions and critical thinking questions to check understanding, all tied to the chapter's learning outcomes and assignable in MasteringHealth.

NEW! ABC News Lecture Launchers

New videos from *ABC News* bring personal health to life and spark discussion with up-to-date hot topics such as stress among millennials, hate crimes, and rates of heroin use. Assignable multiple-choice questions available in MasteringHealth provide wrong-answer feedback to redirect students to the correct answer.



WHAT DO YOU THINK? May are so many people occorring sugnatures to form vegetarism or your campus? What concerns about vegetarism of you have. I term

veglaamme to por new, v mp? will provide adequate amounts of porties. Program will provide adequate amounts of porties. Program adults, sick people, and families with young child organs new do take special care to ensure that their pants. In all cases, sek advice from a health care p

Supplements: Researc

there supplements are product so metalogies one or an ofingenization of the strength sector is supplement in the supplement table is provided by the supplement of the supplement table is provided by the supplement of the supplement of the supplementation is and the supplementation of the supplem

og atta Jarrif, inte supportent maintaines or ell-mensification (hat activities. Do you oudy need to take distary suppl Delaray Supplements, part of the Nat Balth, states that scores supplements in an output of foods, as recommented to prevent or test distans, not ry supplement. Products ty supplement. Products by main ad cataloging the state of the states of the states the states of the states of the states of the states the states of the states of the states the st

Control of the second s

NEW! Interactive Behavior Change Activities— Which Path Would You Take?

By scanning QR codes with their mobile devices, students gain access to an exploration of various health choices through an engaging, interactive, low-stakes, and anonymous experience. These activities show students the possible consequences of various choices they make today on their future health through a choose-your-own-adventure style interface.

WHICH PATH WOULD YOU TAKE ?



UPDATED!

A new mini-chapter, Focus On: Sexuality, has been pulled from the previously titled Healthy Relationships and Understanding Sexuality chapter, making it easier to assign the sexuality material in connection with the Reproductive Choices chapter (contraception). Additional information on social connections is now included in the Relationships chapter.



UPDATED!

Current Health Topics Straight from the Headlines

Current health issues are covered throughout the new edition, speaking to students' questions and concerns. New and updated material covers such areas as

- the heritability of well-being
- suicide risk factors
- the psychological and physiological effects of meditation
- technostress
- the relationship between media violence and actual violence
- social network use
- the abuse of heroin, khat, and salvia

- the characteristics of successful weight losers
- orthorexia nervosa
- CrossFit and high-intensity interval training (HIIT)
- the global burden of disease
- safe oral sex
- the human impact on the existence or extinction of other species

UPDATED!

Focus On: Financial Health mini-chapter has been streamlined to focus more on the connection between wealth and health.

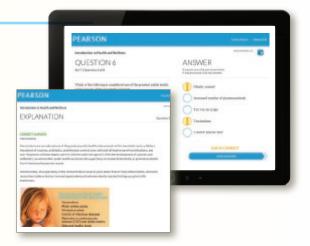
GET YOUR **STUDENTS GOING** WITH **MasteringHealth**"

Mastering is the most effective and widely used online homework, tutorial, and assessment system for the sciences and now includes content specifically for health courses. Mastering delivers self-paced tutorials that focus on your course objectives, provides individualized coaching, and responds to each student's progress.

BEFORE CLASS

Dynamic Study Modules and eText 2.0 Provide Students with a Preview of What's to Come

NEW! Dynamic Study Modules help students study effectively on their own by continuously assessing their activity and performance in real time. Students complete a set of questions with a unique answer format that also asks them to indicate their confidence level. Questions repeat until the student can answer them all correctly and confidently. Once completed, Dynamic Study Modules explain the concept using materials from the text.





NEW! Interactive eText 2.0, complete with embedded media, is mobile friendly and ADA accessible.

- Now available on smartphones and tablets
- Seamlessly integrated videos and other rich media
- Accessible (screen-reader ready)
- Configurable reading settings, including resizable type and night reading mode
- Instructor and student note-taking, highlighting, bookmarking, and search

DURING CLASS Engage Students with Learning Catalytics™





Learning Catalytics, a "bring your own device" student engagement, assessment, and classroom intelligence system, allows students to use their smartphones, tablets, or laptops to respond to questions in class.

AFTER CLASS

Easy-to-Assign, Customizable, and Automatically Graded Assignments

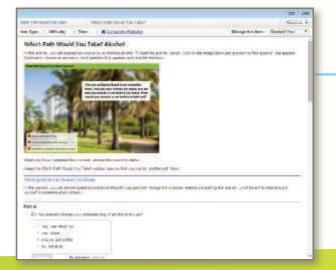
The breadth and depth of content available to you to assign in MasteringHealth is unparalleled, allowing you to quickly and easily assign homework to reinforce key concepts.



NEW! Interactive Behavior Change Activities—Which Path Would You Take? allow students to explore various health choices through an engaging, interactive, low-stakes, and anonymous experience.

In activities covering topics such as alcohol, smoking, nutrition, and fitness, students receive specific feedback on the choices they make today and the possible consequences on their future health.





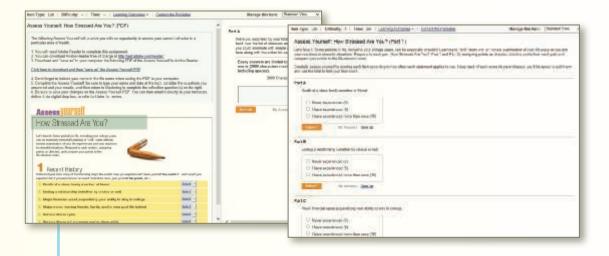
These activities are linked out to Mastering from the book and made assignable in Mastering with follow-up questions.

AFTER CLASS

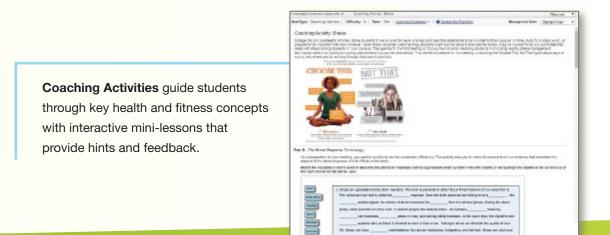
Other Automatically Graded Health and Fitness Activities Include ...

NEW! Study Plans tie all end-of-chapter material (including chapter review, pop quiz, and Think About It! questions) to specific numbered learning outcomes and Mastering assets. Assignable Study Plan items contain at least one multiple-choice question per learning outcome and wrong-answer feedback.





UPDATED! Self-Assessments from the text are available within MasteringHealth in easy-to-assign formats both in PDF format with a selfreflection section and as a multi-part activity that speaks to your gradebook.



Name Name Name Name Image: Name

NutriTools Coaching Activities

in the nutrition chapter allow

experiment with different food

options and learn firsthand how

students to combine and

to build healthier meals.

Behavior Change Videos are concise whiteboard-style videos that help students with the steps of behavior change, covering topics such as setting SMART goals, identifying and overcoming barriers to change, planning realistic timelines, and more. Additional videos review key fitness concepts such as determining target heart rate range for exercise. All videos include assessment activities and are assignable in MasteringHealth.



Concernance and a surgery and Causelines Assignments Haster Contribute Revisionary wata/Edit Assignment, Stress Management 1 Start 2 Select Content 3 Organize Content 2 Specily Outcomes 5 Preview and Ausig To see student would organized by learning out ones, choose learning out ones to seaso ab with these items. Learninger, Moturing Meeting autometry that the sea Hits Provided Learning Outcomes CAddEdit My Learning Outcomes FIR DIA and in Links Street rinna ... NUCL VIEW TRADITOR Date (50 Nava rideo: Share Can Damage Moments Realth Dates. * Date 1 Seales Gesler T D0088...... Quarter 3 Dated Thirden Oceation 2 10008-0 Charles 2 Diffuse Thermon Diversion 4 Charter & Links Thinking Quantum 5 Duce. • Date 1 Serie Desire 11 .0008.-Ordena -

Learning Outcomes

All of the MasteringHealth assignable content is tagged to book content and to Bloom's Taxonomy. You also have the ability to add your own outcomes, helping you track student performance against your learning outcomes. You can view class performance against the specified learning outcomes and share those results quickly and easily by exporting to a spreadsheet.

EVERYTHING YOU NEED TO TEACH IN ONE PLACE

Rebecca J. Donatelle

TEACHING TOOLKIT



Teaching Toolkit DVD for Health: The Basics

The *Teaching Toolkit* DVD provides everything that you need to prep for your course and deliver a dynamic lecture, in one convenient place. These valuable resources are included on three disks:

DISK 1 Robust Media Assets for Each Chapter

- ABC News Lecture Launcher videos
- Behavior Change videos
- PowerPoint Lecture Outlines
- PowerPoint clicker questions and Jeopardy-style quiz show questions
- Files for all illustrations and tables and selected photos from the text

DISK 2 Comprehensive Test Bank

- Test Bank in Microsoft Word, PDF, and RTF formats
- Computerized Test Bank, which includes all the questions from the printed test bank in a format that allows you to easily and intuitively build exams and quizzes

DISK 3 Additional Innovative Supplements for Instructors and Students

For Instructors

- Instructor Resource and Support Manual in Microsoft Word and PDF formats
- Step-by-step MasteringHealth tutorials
- Video introduction to Learning Catalytics[™]
- Great Ideas in Teaching Health & Wellness
- Teaching with Student Learning Outcomes
- Teaching with Web 2.0

For Students

- Take Charge Self-Assessment Worksheets
- Behavior Change Log Book and Wellness Journal
- Live Right! Beating Stress in College and Beyond
- Eat Right! Healthy Eating in College and Beyond
- Food Composition Table

User's Quick Guide for *Health: The Basics*

This easy-to-use printed supplement accompanies the Teaching Toolkit and offers easy instructions for both experienced and new faculty members to get started with the rich Toolkit content and MasteringHealth.

MasteringHealth[™] Edition

HEALTH THE BASICS

REBECCA J. DONATELLE

Oregon State University

PEARSON

Senior Acquisitions Editor: Michelle Cadden Project Manager: Lauren Beebe Program Manager: Susan Malloy Development Editors: Kari Hopperstead, Nic Albert Editorial Assistant: Heidi Arndt Director of Development: Barbara Yien Development Manager: Cathy Murphy Program Management Team Lead: Mike Early Project Management Team Lead: Nancy Tabor Production Management: Jeanine Furino, Cenveo[®] Publisher Services Copyeditor: Jane Loftus Compositor: Cenveo[®] Publisher Services Art Coordinator: Eric Zeiter, Lachina Design Manager: Marilyn Perry Interior Designer: Jerilyn Bockorick, Cenveo® Publisher Services Cover Designer: Yvo Riezebos, Tandem Creative, Inc. Illustration: Lachina Rights & Permissions Project Manager: William Opaluch Rights & Permissions Management: Rachel Youdelman Photo Researcher: Amanda Larkin, QBS Learning Senior Procurement Specialist: Stacey J. Weinberger Executive Product Marketing Manager: Neena Bali Senior Field Marketing Manager: Mary Salzman

Cover Photo Credit: Dreampictures/Image Source/Corbis

Copyright ©2017, 2015, 2013 Pearson Education, Inc. All Rights Reserved. Printed in the United States of America. This publication is protected by copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise. For information regarding permissions, request forms and the appropriate contacts within the Pearson Education Global Rights & Permissions department, please visit www.pearsoned.com/permissions/.

Acknowledgements of third party content appear on page C-1, which constitutes an extension of this copyright page.

PEARSON, ALWAYS LEARNING and MasteringHealth[™] are exclusive trademarks in the U.S. and/or other countries owned by Pearson Education, Inc. or its affiliates.

Unless otherwise indicated herein, any third-party trademarks that may appear in this work are the property of their respective owners and any references to third-party trademarks, logos or other trade dress are for demonstrative or descriptive purposes only. Such references are not intended to imply any sponsorship, endorsement, authorization, or promotion of Pearson's products by the owners of such marks, or any relationship between the owner and Pearson Education, Inc. or its affiliates, authors, licensees or distributors.

Library of Congress Cataloging-in-Publication Data

Donatelle, Rebecca J., 1950Health: the basics / Rebecca J. Donatelle. -- 12e [edition].
pages cm
Includes bibliographical references and index.
ISBN 978-0-13-418326-8 (alk. paper) -- ISBN 0-13-418326-6 (alk. paper)
1. Health--Textbooks. I. Title.
RA776.D663 2017
613--dc23

2015029437

ISBN 10: 0-13-418326-6; ISBN 13: 978-0-13-418326-8 (Student edition) ISBN 10: 0-13-428694-4; ISBN 13: 978-0-13-428694-5 (Instructor's Review Copy)



BRIEF CONTENTS

PART ONE

Finding the Right Balance

1 Accessing Your Health 1

FOCUS ON

IMPROVING YOUR FINANCIAL HEALTH 25

2 Promoting and Preserving Your Psychological Health 37

FOCUS ON

CULTIVATING YOUR SPIRITUAL HEALTH 60

3 Managing Stress and Coping with Life's Challenges 71

FOCUS ON

IMPROVING YOUR SLEEP 98

4 Preventing Violence and Injury 110

PART TWO

Creating Healthy and Caring Relationships

5 Connecting and Communicating in the Modern World 134

FOCUS ON

UNDERSTANDING YOUR SEXUALITY 156

6 Considering Your Reproductive Choices 171

PART THREE

Avoiding Risks from Harmful Habits

- 7 Recognizing and Avoiding Addiction and Drug Abuse 203
- 8 Drinking Alcohol Responsibly and Ending Tobacco Use 231

PART FOUR

Building Healthy Lifestyles

- 9 Nutrition: Eating for a Healthier You 262
- 10 Reaching and Maintaining a Healthy Weight 292

FOCUS ON

ENHANCING YOUR BODY IMAGE 317

11 Improving Your Personal Fitness 329

PART FIVE

Preventing and Fighting Disease

12 Reducing Your Risk of Cardiovascular Disease and Cancer 354

FOCUS ON

MINIMIZING YOUR RISK FOR DIABETES 386

13 Protecting against Infectious Diseases and Sexually Transmitted Infections 397

FOCUS ON

REDUCING RISKS FOR CHRONIC DISEASES AND CONDITIONS 428

PART SIX

Facing Life's Challenges

- **14** Preparing for Aging, Death, and Dying 438
- **15** Promoting Environmental Health 456
- **16** Making Smart Health Care Choices 476

FOCUS ON

UNDERSTANDING COMPLEMENTARY AND INTEGRATIVE HEALTH 494

ANSWERS TO CHAPTER REVIEW QUESTIONS A-1

REFERENCES R-1 PHOTO CREDITS C-1 INDEX I-1

CONTENTS

PREFACE XIV ACKNOWLEDGMENTS XIX

PART ONE Finding the Right Balance

Accessing Your Health

1

Why Health, Why Now? 2

Choose Health Now for Immediate Benefits 2 Choose Health Now for Long-Term Rewards 2 Your Health Is Linked to Your Community 4

What Is Health? 5

Models of Health5Wellness and the Dimensions of Health6

What Influences Your Health? 7

Individual Behavior 8 Biology and Genetics 9 Social Factors 10 Access to Quality Health Services 10 Policymaking 11

How Does Behavior Change Occur? 12 Health Belief Model 12 Social Cognitive Model 12 Transtheoretical (Stages of Change) Model 12

How Can You Improve Your Health Behaviors? 13 Step One: Increase Your Awareness 13 Step Two: Contemplate Change 13 Step Three: Prepare for Change 16 Step Four: Take Action to Change 18 Let's Get Started! 19

ASSESS YOURSELF 20 STUDY PLAN 23

FOCUS ON Improving Your Financial Health 25

The Link Between Health and Wealth 26

Money and Stress 26 Money and Access to Resources 27 Poverty, Early Care, and Education 27

Financial Struggles in College 27 Making College More Affordable 27

Actions to Improve Your Financial Health 28 Prioritizing Health Insurance 28 Making a Budget 28 Understanding Debt and Credit Basics 30 Protecting against Fraud and Identity Theft 32

ASSESS YOURSELF 34 STUDY PLAN 36

2 Promoting and Preserving Your Psychological Health 37

What Is Psychological Health? 38 Mental Health 39 Emotional Health 40 Social Health 40 Spiritual Health 41

Keys to Enhancing Psychological Health 41 Self-Efficacy and Self-Esteem 41 Emotional Intelligence 43 Personality 43 Happiness and the Mind-Body Connection 43

When Psychological Health Deteriorates 44

Mental Health Threats to College Students 45 Mood Disorders 46 Anxiety Disorders 48 Obsessive-Compulsive Disorder 49 Post-Traumatic Stress Disorder 49 Personality Disorders 50 Schizophrenia 50

Suicide: Giving Up on Life 51

Overall Suicide Risks 51 Warning Signs of Suicide 52 Preventing Suicide 52

Seeking Professional Help 53

Mental Illness Stigma 53 Getting Evaluated for Treatment 53 Mental Health Professionals 54 What to Expect in Therapy 54 Pharmacological Treatment 55

ASSESS YOURSELF 56

STUDY PLAN 58

FOCUS **ON** Cultivating Your Spiritual Health 60

What Is Spirituality? 61

Spirituality and Religion 62 Spirituality Integrates Three Facets 62 Spiritual Intelligence 62

The Benefits of Spiritual Health63Physical Benefits62Psychological Benefits64

Cultivating Your Spiritual Health 64

Tune in to Yourself and Your Surroundings 64 Train Your Body 66 Expand Your Mind 67 Reach Out to Others 68

ASSESS YOURSELF 69

STUDY PLAN 70

3 Managing Stress and Coping with Life's Challenges 71

What Is Stress? 72

Your Body's Stress Response 73

The General Adaptation Syndrome 73 Do Men and Women Respond Differently to Stress? 75

Physical Effects Of Stress 75

Stress and Cardiovascular Disease 76 Stress and Weight Gain 76 Stress and Hair Loss: A Little Known Fact 76 Stress and Diabetes 76 Stress and Digestive Problems 76 Stress and Impaired Immunity 77

Stress and Your Mental Health 77

Stress, Memory, and Concentration 77 Psychological Effects of Stress 78

What Causes Stress? 78

Psychosocial Stressors 78

Individual Factors That Affect Your Stress Response 82

Appraisal82Self-Esteem and Self-Efficacy82Type A and Type B Personalities82Type C and Type D Personalities83Psychological Hardiness83Psychological Resilience83Shift and Persist83

Managing Stress in College 84 Practicing Mental Work to Reduce Stress 84 Developing a Support Network 85 Cultivating Your Spiritual Side 85 Managing Emotional Responses 86

Taking Physical Action 87 Managing Your Time 88 Consider Downshifting 89 Relaxation Techniques for Stress Management 89

ASSESS YOURSELF 93

STUDY PLAN 96

FOCUS ON Improving Your Sleep 98

Sleepless in America 98 Why So Sleep Deprived? 100 Wired and Tired 100

The Importance of Sleep 100 Sleep and Health 100

The Processes of Sleep102Non-REM Sleep102REM Sleep102Your Sleep Needs103

Getting a Good Night's Sleep 103

Sleep Disorders 105

Insomnia 105 Sleep Apnea 106 Restless Legs Syndrome 107 Narcolepsy 107

ASSESS YOURSELF 108

STUDY PLAN 109

4 Preventing Violence and Injury 110

What Is Violence? 111 Violence Overview 111 Violence on U.S. Campuses 112

Factors Contributing to Violence 112

What Makes Some Individuals Prone to Violence? 113 How Much Impact Do the Media Have? 114

Interpersonal and Collective Violence 114

Homicide 114 Hate and Bias-Motivated Crimes 116 Gang Violence 116 Terrorism 116 Intimate Partner Violence 117 Child Abuse and Neglect 118 Elder Abuse 118

Sexual Victimization 118

Sexual Assault and Rape 119 Sexual Harassment 121 Stalking and Cyberstalking 122 Child Sexual Abuse 122

Preventing Violence 122

Self-Defense against Personal Assault and Rape 122 Campus-Wide Responses to Violence 124 Community Strategies for Preventing Violence 124

Unintentional Injuries 124

Motor Vehicle Safety 125 Cycling Safety 127 Stay Safe in the Water128Safety at Home128ASSESSYOURSELF130STUDYPLAN132

PART TWO Creating Healthy and Caring Relationships

5 Connecting and Communicating in the Modern World 134

Intimate Connections 135

Relating to Yourself 135 Family Relationships 136 Friendships 136 Romantic Relationships 136

The Value of Relationships 137

Building Communication Skills 139 Learning Appropriate Self-Disclosure 139 Becoming a Better Listener 141 Using Nonverbal Communication 141 Connecting Digitally: Too Much of a Good Thing? 141 Managing Conflict through Communication 144

Relationships: For Better and Worse 144 Characteristics of Healthy Relationships 145 Confronting Couples Issues 146 When and Why Relationships End 148

Coping with Failed Relationships 148

Marriage, Partnering, and Singlehood 148

Marriage 148 Cohabitation 150 Gay and Lesbian Marriage and Partnerships 151 Staying Single 152

ASSESS YOURSELF 153

FOCUS ON Understanding Your Sexuality 156

Your Sexual Identity 156 Sexual Orientation 158

Reproductive Anatomy and Physiology158Female Reproductive Anatomy and Physiology158Male Reproductive Anatomy and Physiology161

Human Sexual Response 162 Sexual Dysfunction 163

Sexual Expression and Behavior 164

Options for Sexual Expression 164 Drugs and Sex 166 Responsible and Satisfying Sexual Behavior 167

ASSESS YOURSELF 168

STUDY PLAN 170

6 Considering Your Reproductive Choices 171

Basic Principles of Birth Control 172 Barrier Methods 174 Male Condom 174 Female Condom 175 Jellies, Creams, Foams, Suppositories, and Film 176 Diaphragm with Spermicidal Jelly or Cream 177 Cervical Cap with Spermicidal Jelly or Cream 178 Contraceptive Sponge 178 Hormonal Methods 179 Oral Contraceptives 179 Combination Pills 179 Progestin-Only Pills 180 Contraceptive Skin Patch 180 Vaginal Contraceptive Ring 181 Contraceptive Injections 181 Contraceptive Implants 181 Intrauterine Contraceptives 182 ParaGard, Mirena, Skyla, and Liletta 182 Behavioral Methods 182 Withdrawal 182 Abstinence and "Outercourse" 183 Fertility Awareness Methods 183 Emergency Contraception 184 Permanent Methods of Birth Control 184 Female Sterilization 184 Male Sterilization 185 Choosing a Method of Contraception 186 Abortion 188

The Abortion Debate 189

Emotional Aspects of Abortion 189 Methods of Abortion 189

Pregnancy 190

Planning for Pregnancy and Parenthood 190 The Process of Pregnancy 191 Prenatal Care 193

Childbirth 194

Labor and Delivery 195 Complications of Pregnancy and Childbirth 196 The Postpartum Period 196 Infertility 197 Causes in Women 197 Causes in Men 197 Infertility Treatments 198 Surrogate Motherhood 198 Adoption 198



PART THREE **Avoiding Risks from Harmful Habits**

7 Recognizing and Avoiding Addiction and Drug Abuse 203

What Is Addiction? 204

The Process of Addiction 204 Habit versus Addiction 205 Addiction Affects Family and Friends 206

Addictive Behaviors 206

Gambling Disorder 206 Compulsive Buying Disorder 207 Exercise Addiction 207 Technology Addictions 207

What Is a Drug? 207 How Drugs Affect the Brain 208 Routes of Drug Administration 209 Drug Interactions 210

Drug Misuse and Abuse 210

Abuse of Over-the-Counter Drugs 210 Nonmedical Use or Abuse of Prescription Drugs 211 Use and Abuse of Illicit Drugs 212 Why Do Some College Students Use Drugs? 212 Why Don't Some College Students Use Drugs? 213

Common Drugs of Abuse 214

Stimulants 214 Marijuana and Other Cannabinoids 218 Depressants 219 Opioids (Narcotics) 221 Hallucinogens 222 Inhalants 224 Anabolic Steroids 224

Treating and Reducing Drug Abuse 225

Treatment Approaches 225 Drug Treatment and Recovery for College Students 226 Addressing Drug Misuse and Abuse in the United States 227

ASSESS YOURSELF 228



8 Drinking Alcohol Responsibly and Ending Tobacco Use 231

Alcohol: An Overview 232 The Chemistry and Potency of Alcohol 232 Absorption and Metabolism 233 Blood Alcohol Concentration 234 Alcohol and Your Health 235 Short-Term Effects of Alcohol Use 235 Drinking and Driving 237 Long-Term Effects of Alcohol 238 Alcohol and Pregnancy 239 Alcohol Use in College 240 High-Risk Drinking and College Students 241 Efforts to Reduce Student Drinking 242 Abuse and Dependence 242 Identifying an Alcoholic 242 The Causes of Alcohol Use Disorder 243 Women and Alcoholism 244

Alcohol and Prescription Drug Abuse 244 Costs to Society 245 Treatment and Recovery 245

Tobacco Use in the United States246Tobacco and Social Issues247College Students and Tobacco Use247Tobacco Use and Prevention Policies249

Tobacco and Its Effects249Nicotine249Tar and Carbon Monoxide249Tobacco Use Disorder250Tobacco Products250

Health Hazards of Tobacco Products 252 Cancer 252 Cardiovascular Disease 254 Respiratory Disorders 254 Sexual Dysfunction and Fertility Problems 254 Unique Risks for Women 255 Other Health Effects 255

Environmental Tobacco Smoke 255

Quitting 255

Benefits of Quitting 255 How Can You Quit? 256

PART FOUR Building Healthy Lifestyles

9 Nutrition: Eating for a Healthier You 262

Essential Nutrients For Health 263

Recommended Intakes for Nutrients 263 Calories 264 Water: A Crucial Nutrient 264 Proteins 264 Carbohydrates 265 Fats 267 Vitamins 270 Minerals 271 Beneficial Non-Nutrient Components of Foods 273

Nutritional Guidelines 273

Dietary Guidelines for Americans, 2010 273 MyPlate Food Guidance System 275

How Can I Eat More Healthfully? 276

Read Food Labels 276 Understand Serving Sizes 279 Vegetarianism: A Healthy Diet? 279 Supplements: Research on the Daily Dose 280 Eating Well in College 281

Food Safety: A Growing Concern 282

Choosing Organic or Locally Grown Foods 282 Foodborne Illnesses 283 Avoiding Risks in the Home 284 Food Sensitivities, Allergies, and Intolerances 284 Genetically Modified Food Crops 286

ASSESS YOURSELF 288

STUDY PLAN 290

10 Reaching and Maintaining a Healthy Weight 292

Overweight and Obesity: A Growing Challenge 293

Overweight and Obesity in the United States 293 An Obesogenic World 293 Health Risks of Excess Weight 294

Factors Contributing to Overweight and Obesity295Genetic and Physiological Factors296Environmental Factors298

Psychosocial and Socioeconomic Factors 299

Breaking the Nicotine Addiction 256
ASSESS YOURSELF 258
STUDY PLAN 260

Assessing Body Weight and Body Composition 299

Body Mass Index (BMI)300Waist Circumference and Ratio Measurements301Measures of Body Fat301

Managing Your Weight: Individual Roles 302

Understanding Calories and Energy Balance 302 Diet and Eating Behaviors 303 Including Exercise 305 Keeping Weight Control in Perspective 307 Considering Drastic Weight-Loss Measures? 307 Trying to Gain Weight 311

ASSESS YOURSELF 312

STUDY PLAN 315

FOCUS ON Enhancing Your Body Image 317

What Is Body Image? 318

Many Factors Influence Body Image 318 Building a Positive Body Image 320 Body Image Disorders 320

Disordered Eating and Eating Disorders 322

Anorexia Nervosa 323 Bulimia Nervosa 323 Binge-Eating Disorder 324 Other Specified Feeding or Eating Disorder 324 Orthorexia Nervosa 325 Treatment for Eating Disorders 325 Helping Someone with Disordered Eating 325

Exercise Disorders 326

Compulsive Exercise 326 Muscle Dysmorphia 326 The Female Athlete Triad 326

ASSESS YOURSELF 327

STUDY PLAN 328

11 Improving Your Personal Fitness 329

Physical Activity for Health 330

Reduced Risk of Cardiovascular Diseases 331 Reduced Risk of Metabolic Syndrome and Type 2 Diabetes 332 Reduced Cancer Risk 332 Improved Bone Mass and Reduced Risk of Osteoporosis 332 Improved Weight Management 333 Improved Immunity 333 Improved Mental Health and Stress Management 333 Longer Life Span 334

Physical Activity for Fitness And Performance334Health-Related Components of Physical Fitness334Skill-Related Components of Physical Fitness335

Committing to Physical Fitness 336

What If I Have Been Inactive for a While? 336 Overcoming Common Obstacles to Physical Activity 336 Incorporating Physical Activity in Your Life 337

Creating Your Own Fitness Program 338 Set SMART Goals 338 Use the FITT Principle 338 The FITT Principle for Cardiorespiratory Fitness 338 The FITT Principle for Muscular Strength and Endurance 341 The FITT Principle for Flexibility 342

Implementing Your Fitness Program 343

Develop a Progressive Plan 343 Design Your Exercise Session 343 Explore Activities That Develop Multiple Components of Fitness 345

Taking in Proper Nutrition for Exercise345Foods for Exercise and Recovery346Fluids for Exercise and Recovery346

Preventing and Treating Fitness-Related Injuries 347 Preventing Injuries 347 Treating Injuries 349

ASSESS YOURSELF 350

PART FIVE **Preventing and Fighting Disease**

12 Reducing Your Risk of Cardiovascular Disease and Cancer 354

Cardiovascular Disease in the United States 355 Understanding The Cardiovascular System 356 The Heart: A Mighty Machine 356

Key Cardiovascular Diseases 357 Hypertension 358 Atherosclerosis 359 Peripheral Artery Disease 359 Coronary Heart Disease 360 Angina Pectoris 360 Arrhythmias 361 Heart Failure 361 Stroke 361

Reducing Your Risks 362 Metabolic Syndrome: Quick Risk Profile 363 Modifiable Risks 363 Nonmodifiable Risks 365 Other Risk Factors Being Studied 367

Diagnosing and Treating Cardiovascular Disease 367

Techniques for Diagnosing Cardiovascular Disease 367 Bypass Surgery, Angioplasty, and Stents 368 Aspirin and Other Drug Therapies 368

Cancer: An Epidemiological Overview 368 What Is Cancer? 369

What Causes Cancer? 370

Lifestyle Risks 370 Genetic and Physiological Risks 371 Occupational and Environmental Risks 371 Chemicals in Foods 372 Infectious Diseases and Cancer 372

Types of Cancers 372

Lung Cancer 373 Breast Cancer 373 Colon and Rectal Cancers 375 Skin Cancer 375 Prostate Cancer 376 Ovarian Cancer 377 Cervical and Endometrial (Uterine) Cancer 377 Testicular Cancer 378 Pancreatic Cancer: Deadly and on the Rise 378

Facing Cancer 378 Cancer Treatments 379

ASSESS YOURSELF 380

STUDY PLAN 383

FOCUS ON Minimizing Your Risk for Diabetes 386

What Is Diabetes? 387

Type 1 Diabetes 387 Type 2 Diabetes 388 Prediabetes 389 Gestational Diabetes 390

What Are the Symptoms of Diabetes? 391

Complications of Diabetes 391 Diagnosing Diabetes 392

Treating Diabetes393Lifestyle Changes393Medical Interventions393

ASSESS YOURSELF 395

STUDY PLAN 396

13 Protecting against Infectious Diseases and Sexually Transmitted Infections 397

The Process of Infection 398

Routes of Transmission399Risk Factors You Can Control399Hard to Control Risk Factors399

Your Body's Defenses Against Infection 401

Physical and Chemical Defenses 401
How the Immune System Works 402
When the Immune System Misfires: Autoimmune Diseases 402
Inflammatory Response, Pain, and Fever 403
Vaccines Bolster Immunity 403

Types of Pathogens and the Diseases They Cause 403

Bacteria 404 Viruses 409 Other Pathogens 410 Emerging and Resurgent Diseases 411

Sexually Transmitted Infections (STIs) 412 What's Your Risk? 412

Routes of Transmission 413

Common Types of Sexually Transmitted

Infections 413 Chlamydia 413 Gonorrhea 414 Syphilis 415 Herpes 416 Human Papillomavirus (HPV) and Genital Warts 416 Candidiasis (Moniliasis) 417 Trichomoniasis 418 Pubic Lice 419

HIV/AIDS 420

How HIV Is Transmitted 420 Signs and Symptoms of HIV/AIDS 421 Testing for HIV 421 New Hope and Treatments 423 Preventing HIV Infection 423

ASSESS YOURSELF 424

STUDY PLAN 426

FOCUS ON Reducing Risks for Chronic Diseases and Conditions 428

Chronic Lower Respiratory (Lung) Diseases 428

Chronic Obstructive Pulmonary Disease 429 Bronchitis 430 Emphysema 430 Asthma 430

Allergies 431 Hay Fever 432

Headaches 432

Tension-Type Headaches432Migraine Headaches432Cluster Headaches433

Digestion-Related Disorders 433 Irritable Bowel Syndrome (IBS) 433 Crohn's Disease 433

Ulcerative Colitis 434

Musculoskeletal Diseases 434 Arthritis 434

Low Back Pain 434 Repetitive Motion Disorders 435

ASSESS YOURSELF 436 STUDY PLAN 437

PART SIX Facing Life's Challenges

14 Preparing for Aging, Death, and Dying 438

Aging 439

Older Adults: A Growing Population439Health Issues for an Aging Society439

Physical and Mental Changes of Aging 443

The Skin 441 Bones and Joints 442 The Urinary Tract 442 The Senses 442 Sexual Function 443 Mental Function and Memory 443

Strategies for Healthy Aging 444 Successful Aging 444 Improve Fitness 444 Eat for Longevity 445 Develop and Maintain Healthy Relationships 445 Enrich the Spiritual Side of Life 445

Understanding the Final Transitions: Dying and Death 445

Defining Death 445 The Process of Dying 446

Coping with Loss 447 What Is "Typical" Grief? 447 Worden's Model of Grieving Tasks 448

Life-and-Death Decision Making 448

The Right to Die 448 Rational Suicide and Euthanasia 449

Making Final Arrangements 449

Hospice Care: Positive Alternatives 449 Making Funeral Arrangements 451 Wills 451 Organ Donation 451

ASSESS YOURSELF 452

STUDY PLAN 454

15 Promoting Environmental Health 456

The Threat of Overpopulation 457

Bursting with People: Measuring the Impact 457 Factors That Affect Population Growth 459

Air Pollution 459

Components of Air Pollution 460 Acid Deposition 461 Indoor Air Pollution 461 Ozone Layer Depletion 462

Climate Change 463 Reducing the Threat of Global Warming 463

Water Pollution and Shortages 465 Water Contamination 465

Land Pollution 467 Solid Waste 467 Hazardous Waste 468

Radiation 469

Nonionizing Radiation 469 Ionizing Radiation 469 Nuclear Power Plants 470

Noise Pollution 471



STUDY PLAN 474

16 Making Smart Health Care Choices 476

Taking Responsibility for Your Health Care477Self-Care477When to Seek Help477Assessing Health Professionals478Your Rights as a Patient479Conventional Health Care480

Conventional Health Care Practitioners 481 Conventional Medication 481

Health Insurance 482

Private Health Insurance 483 Managed Care 483 Government-Funded Programs 484 Insurance Coverage by the Numbers 486

Issues Facing Today's Health Care System 487

Access 487 Cost 487 Quality 488

ASSESS YOURSELF 490

STUDY PLAN 492

FOCUS **ON** Understanding Complementary and Integrative Health 494

What Is Complementary and Integrative Health? 494
Complementary Medical Systems 495
Traditional Chinese Medicine 496
Ayurveda 496
Homeopathy 496
Naturopathy 497
Mind and Body Practices 497

Manipulative Therapies 497 Energy Therapies 498

Natural Products 499

Functional Foods 499 Herbal Remedies and Other Dietary Supplements 499 Consumer Protection 500

ASSESS YOURSELF 502

STUDY PLAN 503

ANSWERS TO CHAPTER REVIEW QUESTIONS A-1 REFERENCES R-1 PHOTO CREDITS C-1 INDEX I-1

FEATURE BOXES



- Chapter 1: Accessing Your Health 10 Focus On: Improving Your Financial
- Health 30
- Chapter 3: Managing Stress and Coping with Life's Challenges 92
- Chapter 8: Drinking Alcohol Responsibly 238
- Chapter 8: Ending Tobacco Use 255
- Chapter 9: Nutrition: Eating for a Healthier You 280
- Chapter 11: Improving Your Personal Fitness 337
- Chapter 12: Reducing Your Risk of Cardiovascular Disease and Cancer 372
- Focus On: Minimizing Your Risk for Diabetes 394
- Chapter 13: Protecting against Infectious Diseases and Sexually Transmitted Infections 413



Surfing for the Latest in Health 15
Technostress and Taking Time to Unplug 79
Apps for the Relaxation Response 90
Love in the Time of Twitter 143
Consensual Texts 165
Mobile Devices, Media, and the Internet: Could You Unplug? 208 Tracking Your Diet or Weight Loss? There's an App for That 308

Simpler Tests can Improve Treatment Outcomes For HIV and TB Patients 423

E-Concerns 469



Health Care Reform and Contraceptives 188

- Are Fruits and Veggies Beyond Your Budget? 283
- "Living Large" Can Be Increasingly Costly 295
- All Certifications Are Not Created Equal 344
- Diabetes: At What Cost? 388

Are You a Food Waster? 468

Health Care Spending Accounts 485



Challenge the Thoughts That Sabotage Change 19
Creative Ways to Cut Spending 30
Using PERMA to Enhance Your Happiness 44
Finding Your Spiritual Side Through Service 68
Overcoming Test-Taking Anxiety 83
Rethink Your Thinking Habits 95
Learn to Say No and Mean It! 89
Ditch Blue Light Devices 100

Reducing Your Risk of Dating Violence: Tips for Women and Men 120 Stay Safe on All Fronts 123 Minimizing the Chance of Injury During a Car Accident 127 Learning to Really Listen 141 Social Media Meanness 142 Responding to an Offer of Drugs 213 Tips for Drinking Responsibly 241 Cut Down on Your Drinking 243 Tips for Quitting Smoking 257 Bulk Up Your Fiber Intake! 267 Natural versus Organic Foods 282 Reduce Your Risk for Foodborne Illness 285 Tips for Sensible Snacking 305 Keys to Successful Weight Management 307 Ten Steps to a Positive Body Image 321 Plan It, Start It, Stick with It! 343 What to Do When a Heart Attack Hits 361 A Simple Test for Stroke 362 Reducing Your Risk for Diabetes 390 Reduce Your Risk of Infectious Disease 399 Safe Is Sexy 413 Preventing Asthma Attacks 431 Aging Well 439 Talking to Friends When Someone Dies 447 Avoiding Mold 463 Waste Less Water! 467 Be Proactive in Your Health Care 478 **Complementary Health Approaches** and Self-Care 500



Cutting Through the Pain 51 Feng Shui for Stress Relief 88 Caffeine, Sleep, and Your Health 104 Hooking Up: The New Norm or Nothing New? 138 Life Is an Open (Face)Book 144 Tech Between Us 146 How Can Men Be More Involved in Birth Control? 186 Alcohol and Energy Drinks: A Dangerous Mix 233 Nutrition Rating Systems 278 Beware of Portion Inflation at Restaurants 298 Who Wins in Losing? Characteristics of Successful Losers 303 Thinspiration and the Online World of Anorexia 320 Is High Intensity Interval Training (HIIT) Right for You? 340 Is Cholesterol So Bad? 364 Making Oral Sex Safe: Condoms. Dental Dams, and Abstinence 418

Q&A on HPV Vaccines 419

Body Piercing and Tattooing: Potential Risks 422

Potential Risks 422

The Placebo Effect: Mind Over Matter? 480

HEALTH HEADLINES

- America: Shorter Lives, Poorer Health 4 National Health Care Reform 11 Overdosing on Self-Esteem? 42 When Adults Have ADHD 46 Happiness and Flourishing New Strategies to Reduce Stress 87 Bringing the Gun Debate to Campus 115 E-Cigarettes Health Risks and Concerns 251 Coconut Oil: Friend or Foe? 269 Health Claims of Superfoods 274 Gluten-Free Diets 286 Transport Yourself! 337 Heart-Healthy Super Foods 366 Antibiotic Resistance: Bugs versus Drugs 400 Vaccine Controversy: Should Parents
- Be Allowed to Opt Out? 406 Be Eco-Clean and Allergen Free 429

HEALTH



The Challenge of Health Disparities 9 International Student Stress 81 He Says/She Says 140 Global Health and Alcohol Use 244 Women and Heart Attacks 360



Banning Phone Use While Driving: Good Idea or Going Too Far? 126

The End of the Defense of Marriage Act 151

Marijuana 220

Smoking on College & University Campuses: Should It Be Banned? 248

Genetically Modified Foods: Boon or Bane? 287

Obesity: Is It a Disability? 310

Physician-Assisted Suicide: Should It Be Legalized? 450

National Health Care: Is It a Government Responsibility? 489

PREFACE

oday, threats to our health and the health of our planet dominate the media and affect our daily lives on a regular basis. Looming water shortages, poor air quality, food safety concerns, violence and the threat of terrorism, chronic and infectious diseases, and other concerns have us wondering about our ability to survive and thrive. We are advised to watch what we eat, lose weight, exercise more, reduce our stress, sleep more, have healthier relationships, be vigilant against a host of threats, and do our part to protect ourselves, our communities, our resources, and our planet. The issues often seem so huge, so far-reaching and overwhelming, that you may wonder if there is anything you can do to make a difference-to ensure a life that is healthy and long and a planet that is preserved for future generations. You are not alone! Getting healthy and staying healthy is a challenge for many, but the good news is that you can do things to improve your health and the health of others. Regardless of your age, sex, race, the environment you live in, or the challenges you face, you can be an agent for healthy change for you, your loved ones, and the greater community. It can start now, and it can start with you!

After years of teaching and working with students of all ages and stages of life and careers, I am encouraged by the fact that so many young adults are working hard to change their own health futures and the health of their families and communities. The problem is that with so much "talk" about health on so many platforms, sifting through the "junk information" and making the right choices based on *good science* and *good sense*, can be difficult.

My goal in writing *Health: The Basics,* the MasteringHealth™ Edition, is to build upon the strengths of past editions; to utilize the most current, scientifically valid research, to examine some of the important issues and controversies about health today, and motivate students to become "actively engaged in health" at all levels. As part of the process, we have worked hard to provide students with essential tools and technologically sound resources to empower them to take a careful and realistic look at their health risks, to examine their behaviors and the factors that contribute to those behaviors, and take the steps necessary to prioritize health in their lives. Although prioritizing individual and community health is a priority of this text, it is important to recognize that our health is increasingly connected to the health of the global community and our planet. As such, my aim is to challenge students to think globally as they consider health risks and seek creative solutions, both large and small, to address complex health problems. There is no one-size-fits-all recipe for health. You can do it your waywhether that means starting slow with "baby steps" designed to change deeply engrained behaviors or gearing up for major changes that all happen at once. Remember, we didn't develop our behaviors overnight. Being patient but persistent with ourselves is often part of the process.

This book is designed to help students quickly grasp the information, focusing on key objectives that have relevance to their own lives, both now and in the future. We provide the most current, comprehensive, concise, and scientifically valid information about each health topic, put a wealth of technological tools and resources at students' fingertips to assist in decision making, encourage students to think about the issues, and help students answer these questions: What is the issue and why should I care? What are my options for action? When and how do I get started?

With each new edition of *Health: The Basics,* I am gratified by the overwhelming success that this book has enjoyed. I am excited about making this edition the best yet—more timely, more relevant, and more interesting for students. Let's face it: Our world faces unprecedented challenges to individual and community health. Understanding these challenges and having a personal plan to preserve, protect, and promote health will help ensure our *healthful* future!

NEW TO THIS EDITION

Health: The Basics, the MasteringHealth Edition, maintains many features that the text has become known for, while incorporating several major revisions, exciting new features, and a more explicit connection between the text and multi-media resources in MasteringHealth. **MasteringHealth** is an online homework, tutorial, and assessment product designed to improve and assess results by helping students quickly master concepts. Students benefit from self-paced tutorials that feature immediate wrong-answer feedback and hints that emulate the office-hour experience to help keep students on track. With a wide range of interactive, engaging, and assignable activities, students are encouraged to actively learn and retain tough course concepts and apply them to real-world changes.

The multimedia created for the MasteringHealth Edition is more innovative and interactive than ever, and a tighter text and MasteringHealth integration provides students the opportunity to master course content using a variety of resources on and off the page, reflecting the manner in which students study today.

The most noteworthy changes to the text and multimedia as a whole include the following.

- NEW! Interactive Behavior Change Activities— Which Path Would You Take? Allow students to explore various health choices through an engaging, interactive, low-stakes, and anonymous experience. These choose-your-own-adventure-style activities show students the possible consequences of various choices they make today on their future health; these activities are accessible via the QR code from the book and made assignable in MasteringHealth[™] with follow-up questions.
- **NEW!** *ABC News* **Videos** bring health to life and spark discussion with up-to-date hot topics from 2012 to 2015. MasteringHealth activities tied to the videos include multiple-choice questions that provide wrong-answer feedback to redirect students to the correct answer.
- NEW! Study Plans tie all end-of-chapter material (including Chapter Review, Pop Quiz, and Think About It questions) to specific, numbered Learning Outcomes. Assignable Study Plan items in MasteringHealth contain at least one multiple-choice question per Learning Outcome and include wrong-answer feedback.
- **NEW! eText 2.0** complete with embedded *ABC News* videos and Health Video Tutors; eText 2.0 is mobile friendly and ADA accessible.
 - Now available on smartphones and tablets.
 - Seamlessly integrated videos.
 - Accessible (screen-reader ready).
 - Configurable reading settings, including resizable type and night reading mode.
 - Instructor and student note taking, highlighting, bookmarking, and search.
- NEW! Focus On: Sexuality mini-chapter has been pulled from the previously titled Healthy Relationships and Understanding Sexuality chapter, and includes expanded coverage of topics such as sexual identity, sexual response and dysfunctions, and variant sexual behavior. This new Focus On makes it easier to assign the sexuality material in connection with the Reproductive Choices chapter (contraception).
- UPDATED! Chapter 5, Connecting and Communicating in the Modern World (formerly titled Healthy Relationships and Understanding Sexuality), now includes more information on social connections and how we interact and relate to others, including new research on social network use, addiction and social media meanness.
- UPDATED! Focus On: Financial Health minichapter has been streamlined to focus more on the connection between money and health and includes updated coverage of college students' financial issues and how these can affect both success in college and future health.

Chapter-by-Chapter Revisions

The MasteringHealth Edition has been thoroughly updated to provide students with the most current information and references for further exploration and includes a tighter integration between the text and multimedia resources in Mastering-Health. Learning outcomes are now explicitly tied to chapter sections and the end-of-chapter Study Plan to create a clear learning path for students. Portions of chapters have been reorganized to improve the flow of topics, and figures, tables, feature boxes, and photos have all been added, improved on, and updated. Throughout the text, all data, statistics, and references have been updated to the most recent possible. The following is a chapter-by-chapter listing of some of the most noteworthy changes, updates, and additions.

Chapter 1: Accessing Your Health

- New and updated coverage of relapse and recovery
- Updated research on health disparities
- New info on the Affordable Care Act

Focus On: Improving Your Financial Health

- Updated material on the link between health and wealth
- Updated coverage of financial struggles in college
- New chapter summaries and Pop Quiz

Chapter 2: Promoting and Preserving Your Psychological Health

- Updated coverage of emotional intelligence
- New research on heritability of well-being
- Updated material on risk factors for mental illness, as well as cost and stigma
- Updated research on mood disorders
- New research on suicide and risks in the United States and abroad

Focus On: Cultivating Your Spiritual Health

- New research on the psychological and physiological effects of meditation
- Updated research on the spiritual tendencies of undergraduates
- New coverage of the relationship between spirituality and stress reduction
- New chapter summaries and Pop Quiz

Chapter 3: Managing Stress and Coping with Life's Challenges

- Updated research on stress in America
- Updated material on massage therapy
- New material on technostress
- New app suggestions for help relaxing

Focus On: Improving Your Sleep

- Updated research on students and sleep
- New Student Health Today box on caffeine, sleep, and your health
- New Skills for Behavior Change on ditching blue-light devices
- New chapter summaries and Pop Quiz

Chapter 4: Preventing Violence and Injury

- Updated research on rates of violent crime in the United States and globally
- Updated research on violence and relationship violence on U.S. college campuses
- New info on the relationship between media violence and actual violence
- Updated research on the relationship between substance abuse and violence
- Updated Skills for Behavior Change with tips for men and women on reducing dating violence

Chapter 5: Connecting and Communicating in the Modern World

- Updated coverage of social support
- Updated discussions of social networks and social capital
- New material on relational connectedness and collective connectedness
- New research surrounding social network use, real-world connection, and addiction
- New Skills for Behavior Change on social media meanness

Focus On: Understanding Your Sexuality

- New Focus On, "Understanding Your Sexuality," with coverage of:
 - Sexual identity and its components
 - Male and female anatomy
 - Sexual response cycles and dysfunctions
 - Varieties of sexual expression
 - Makeup of healthy and responsible sexuality
- New chapter summaries and Pop Quiz

Chapter 6: Considering Your Reproductive Choices

- Updated statistics on contraception use and unintended pregnancy
- Coverage of new diaphragms
- Updated information on IUDs available
- Updated information on ECP availability
- Updated information on maternal health and pregnancy
- New Money & Health box on health care reform and contraceptives
- New Student Health Today box on men's involvement in birth control

Chapter 7: Recognizing and Avoiding Addiction and Drug Abuse

- Updated research regarding the prevalence of gambling addiction in the United States
- New coverage of khat
- New information on heroin use spreading to suburban areas
- New coverage of salvia
- Updated research regarding the prevalence of drug use in college students
- Updated information on the legalization of marijuana and its surrounding debate

Chapter 8: Drinking Alcohol Responsibly and Ending Tobacco Use

- Updated research on drinking rates
- Updated research on the dangers of alcohol use during pregnancy
- New coverage of alcohol use disorder
- New coverage of tobacco use disorder
- Updated information on e-cigarettes

Chapter 9: Nutrition: Eating for a Healthier You

- New Health Headlines on coconut oil
- Updated information on the *Dietary Guidelines for Americans*
- Updated data on the prevalence of vegetarianism
- Updated information on food-borne pathogens

Chapter 10: Reaching and Maintaining a Healthy Weight

- Updated statistics on overweight and obesity in the United States and globally
- New Student Health Today box on characteristics of successful weight losers
- Updated coverage and reviews of major diets and their effectiveness
- Updated coverage of prescription weight-loss drugs

Focus On: Enhancing Your Body Image

- New Student Health Today box on "thinspiration"
- Updated statistics regarding prevalence of eating disorders in the United States
- New discussion of orthorexia nervosa
- New chapter summaries and Pop Quiz

Chapter 11: Improving Your Personal Fitness

- Updated statistics regarding Americans meeting guidelines for aerobic exercise
- Updated research regarding physical activity and cognitive functions
- Updated research regarding physical activity and extended life span
- New coverage of Crossfit and other HIIT exercise plans

Chapter 12: Reducing Your Risk of Cardiovascular Disease and Cancer

- New and updated coverage of the global burden of disease
- Updated statistics regarding prevalence of cancer and heart disease
- Updated coverage of disease disparity and chronic disease across communities
- New guidelines for the management and treatment of high blood pressure
- Updated research on nonmodifiable risk factors for heart disease
- Updated discussion of the role of inflammation and infectious diseases in CVD and cancer risks

- Updated information about risks of prediabetes and strategies for prevention
- Updated research on the importance of prevention for CVD, cancer, and diabetes

Focus On: Minimizing Your Risk for Diabetes

- Updated statistics regarding the prevalence of diabetes
- Updated statistics on the economic burden of diabetes
- New chapter summaries and Pop Quiz

Chapter 13: Protecting against Infectious Diseases and Sexually Transmitted Infections

- Updated research on environmental conditions and the spread of disease
- Updated discussion of antibiotics and superbugs
- Updated coverage of MRSA
- Updated coverage of meningitis and college students, and its prevention
- Updated research on the prevalence of STIs
- Updated discussion of vaccination and opting out
- New Student Health Today box on making oral sex safe

Focus On: Reducing Risks for Chronic Diseases and Conditions

- Updated statistics regarding rates of bronchitis across populations
- Updated statistics regarding the prevalence of asthma and emphysema
- Updated information regarding the prevalence of migraines
- Updated discussion of IBS, IBD, Crohn's disease, and other conditions
- New chapter summaries and Pop Quiz

Chapter 14: Preparing for Aging, Death, and Dying

- Updated statistics on health care costs for older Americans
- Updated information regarding living arrangements of older Americans
- Updated coverage of the legality and controversy surrounding physician-assisted suicide

Chapter 15: Promoting Environmental Health

- Updated statistics on population growth and projections for the future
- Updated discussion of ecological footprints
- New coverage of the impact of human actions on the existence or extinction of other species
- Discussion of carbon tax and cap and trade policies to curb pollution
- Updated information on water use and access
- New tables on indoor air and water pollutants and their health and ecosystem effects

Chapter 16: Making Smart Health Care Choices

- Updated coverage of the ACA, with a special emphasis on young adults/college students
- New coverage of the diverse options for health care, including independent practice associations, HMOs, and others
- New and expanded coverage of Medicare Part A, B, and D, as well as Advantage plans and Medigap plans
- Updated stats on costs of healthcare, strategies for reducing health care and future issues

Focus On: Understanding Complementary and Integrative Health

- Updated coverage of alternative/integrative health approaches, rates of use, and considerations when making decisions about complementary and integrative health
- Updated coverage of complementary medical systems and specific methods of care
- Updated discussion of "natural" supplements
- New chapter summaries and Pop Quiz

TEXT FEATURES AND LEARNING AIDS

Health: The Basics includes the following special features, all of which have been revised and improved upon for this edition:

- Chapter Learning Outcomes summarize the main competencies students will gain from each chapter and alert students to the key concepts and are now explicitly tied to chapter sections. Focus On mini-chapters now also include learning outcomes.
- Study Plans tie all end-of-chapter material (including Chapter Review, Pop Quiz, and Think About It questions) to specific numbered Learning Outcomes and Mastering-Health[™] assets.
- What Do You Think? critical-thinking questions appear throughout the text, encouraging students to pause and reflect on material they have read.
- Why Should I Care? features present information on the effects poor health habits have on students in the here and now.
- Assess Yourself boxes help students evaluate their health behaviors. The Your Plan for Change section within each box provides students with targeted suggestions for ways to implement change.
- **Skills for Behavior Change** boxes focus on practical strategies that students can use to improve health or reduce their risks from negative health behaviors.
- **Tech & Health** boxes cover the new technology innovations that can help students stay healthy.
- **Money & Health** boxes cover health topics from the financial perspective.

- Points of View boxes present viewpoints on a controversial health issue and ask students *Where Do You Stand?* questions, encouraging them to critically evaluate the information and consider their own opinions.
- Health Headlines boxes highlight new discoveries and research, as well as interesting trends in the health field.
- Student Health Today boxes focus attention on specific health and wellness issues that relate to today's college students.
- Health in a Diverse World boxes expand discussion of health topics to diverse groups within the United States and around the world.
- A running glossary in the margins defines terms where students first encounter them, emphasizing and supporting understanding of material.
- A Behavior Change Contract for students to fill out is included at the back of the book.

SUPPLEMENTARY MATERIALS

Instructor Supplements

- MasteringHealth (www.masteringhealthandnutrition .com or www.pearsonmastering.com). MasteringHealth coaches students through the toughest health topics. A variety of Coaching Activities guide students through key health concepts with interactive mini-lessons, complete with hints and wrong-answer feedback. Reading Quizzes (20 questions per chapter) ensure students have completed the assigned reading before class. ABC News videos stimulate classroom discussions and include multiple-choice questions with feedback for students. Assignable Behavior Change Video Quiz and Which Path Would You Take? activities ensure students complete and reflect on behavior change and health choices. NutriTools in the nutrition chapter allow students to combine and experiment with different food options and learn firsthand how to build healthier meals. MP3 Tutor Sessions relate to chapter content and come with multiple-choice questions that provide wrong-answer feedback. Learning Catalytics provides open-ended questions students can answer in real time. Dynamic Study Modules enable students to study effectively in an adaptive format. Instructors can also assign these for completion as a graded assignment prior to class.
- Teaching Toolkit DVD. The Teaching Toolkit DVD includes everything instructors need to prepare for their course and deliver a dynamic lecture in one convenient place. Resources include *ABC News* videos, Health Video Tutor videos, clicker questions, Quiz Show questions, PowerPoint lecture outlines, all figures and tables from the text, PDF and and Microsoft Word files of the *Instructor Resource and Support Manual*, PDF, RTF, and Microsoft Word files of the Test Bank, the Computerized Test Bank, the User's Quick Guide, *Teaching with Student Learning Outcomes, Teaching with Web 2.0, Great Ideas! Active Ways to Teach Health and Wellness, Behavior Change Log Book and Wellness Journal, Eat Right!, Live Right!, and Take Charge of Your Health worksheets.*

- ABC News Videos and Health Video Tutors. New ABC News videos, each 3 to 8 minutes long, and 27 Health Video Tutors accessible via QR codes in the text help instructors stimulate critical discussion in the classroom. Videos are embedded within PowerPoint lectures on the Teaching Toolkit DVD and through MasteringHealth.
- Instructor Resource and Support Manual. This teaching tool provides chapter summaries, outlines, integrated ABC News video discussion questions, tips and strategies for managing large classrooms, ideas for in-class activities, and suggestions for integrating Mastering-Health and MyDietAnalysis into your course.
- **Test Bank.** The Test Bank incorporates Bloom's Taxonomy, or the higher order of learning, to help instructors create exams that encourage students to think analytically and critically. Test Bank questions are tagged to global and book-specific student learning outcomes.

Student Supplements

- The Study Area of MasteringHealth[™] is organized by learning areas. *Read It* houses the Pearson eText 2.0 as well as the Chapter Objectives and up-to-date health news. *See It* includes *ABC News* videos and the Behavior Change videos. *Hear It* contains MP3 Tutor Session files and audio-based case studies. *Do It* contains the chooseyour-own-adventure-style Interactive Behavior Change Activities—Which Path Would You Take?, interactive NutriTools activities, critical-thinking Points of View questions, and Web links. *Review It* contains Practice Quizzes for each chapter, Flashcards, and Glossary. *Live It* will help jump-start students' behavior change projects with interactive Assess Yourself Worksheets and resources to plan change.
- eText 2.0 comes complete with embedded ABC News videos and Health Video Tutors. eText 2.0 is mobile friendly and ADA accessible, available on smartphones and tablets, and includes instructor and student note taking, highlighting, bookmarking, and search functions.
- Behavior Change Log Book and Wellness Journal. This assessment tool helps students track daily exercise and nutritional intake and suggests topics for journalbased activities.
- **Eat Right! Healthy Eating in College and Beyond.** This booklet provides students with practical nutrition guidelines, shopper's guides, and recipes.
- Live Right! Beating Stress in College and Beyond. This booklet gives students tips for coping with stress during college and for the rest of their lives.
- Digital 5-Step Pedometer. This pedometer measures steps, distance (miles), activity time, and calories, and provides a time clock.
- MyDietAnalysis (www.mydietanalysis.com). Powered by ESHA Research, Inc., MyDietAnalysis features a database of nearly 20,000 foods and multiple reports. It allows students to track their diet and activity using up to three profiles and to generate and submit reports electronically.

t is hard for me to believe that *Health: The Basics* is in its 12th edition! Who would have envisioned the evolution of these health texts even a decade ago? With the nearly limitless resources of the Internet, social networking sites, instantaneous access to national databases for statistics, and a myriad of interesting videos and late-breaking news reports, there is a media blitz of information to communicate with students. Each step along the way in planning, developing, and translating that information to students and instructors requires a tremendous amount of work from many dedicated people, and I cannot help but think how fortunate I have been to work with the gifted publishing professionals at Pearson. Through time constraints, decision making, and computer meltdowns, this group handled every issue, every obstacle with patience, professionalism, and painstaking attention to detail.

Susan Malloy, program manager, used her years of experience organizing and developing major health-related textbooks to direct the planning, implementing, and producing of this text. Her guidance was invaluable in making sure that the book continues to be a market-leading text. In particular, Susan's past experience in the successes of *Access to Health* and *Health: the Basics* over the years and her above-and-beyond the call of duty efforts have been greatly appreciated.

Kari Hopperstead, development editor, has worked on several editions of these books as well. Her attention to detail, fabulous work ethic, and knowledge of the health marketplace (and my books!) were invaluable in creating the structure and plan as well as providing creative direction during the preeditorial phase.

In addition to Kari, Nic Albert did a fantastic job of providing guidance and editorial assistance in reining in an often "overzealous" author in streamlining page length and finetuning the many aspects of each chapter so that I didn't end up with a 1,000-page manuscript! He clearly has a solid grasp of what is important and did an excellent job of putting the pieces together in a concise and easy-to-understand manuscript.

Lastly, I would like to provide a special thank you to Lauren Beebe who has worked tirelessly and efficiently on both *Access to Health*, 14e, and *Health: The Basics*, 12e! Not only is Lauren a creative, highly skilled, and well-organized project manager; she has the temperament and professionalism to help move a project through time constraints, deadlines, and challenges, and to make sure that all of the great work from so many people comes to fruition in a top-notch product. Her skills in navigating production pitfalls, keeping the author and contributors on task, and meeting production deadlines were truly exemplary.

Further praise and thanks go to the highly skilled and hardworking, creative, and charismatic Senior Acquisitions Editor Michelle Cadden, who has helped to catapult this book into a competitive twenty-first century. From searching out and procuring cutting-edge technology to meet the demands of an increasingly savvy student to having her finger on the pulse of what instructors and students need in their classrooms today, Michelle's fresh approach and enthusiasm for the work were much appreciated, and Pearson is fortunate to have a new acquisitions editor with her experience and competence at the helm! Michelle has consistently been a key figure in moving the college/university health text to the next level.

Although these individuals were key contributors to the finished work, there were many other people who worked on this revision of *Health: The Basics*. At every level, I was extremely impressed by the work of key individuals. Thanks also to Jeanine Furino and the hard-working staff at Cenveo Publisher Services who put everything together to make a polished finished product. The talented artists at Lachina deserve many thanks for making our innovative art program a reality. Aimee Pavy, Senior Content Producer, put together our most innovative and comprehensive media package yet. Additional thanks go to the rest of the team at Pearson, especially Editorial Assistant Heidi Arndt, Development Manager Cathy Murphy, and Director of Development Barbara Yien.

The editorial and production teams are critical to a book's success, but I would be remiss if I didn't thank another key group who ultimately helps determine a book's success: the textbook representative and sales group and their hard-working, top-notch marketing leader, Executive Product Marketing Manager Neena Bali. From directing an outstanding marketing campaign to the everyday tasks of being responsive to instructor needs, Neena does a superb job of making sure that *Health: The Basics* gets into instructors' hands and that adopters receive the service they deserve. In keeping with my overall experiences with Pearson, the marketing and sales staffs are among the best of the best. I am very lucky to have them working with me on this project, and I want to extend a special thanks to all of them!

CONTRIBUTORS TO THE 12TH EDITION

Many colleagues, students, and staff members have provided the feedback, reviews, extra time, assistance, and encouragement that have helped me meet the rigorous demands of publishing this book over the years. Whether acting as reviewers, generating new ideas, providing expert commentary, or revising chapters, each of these professionals has added his or her skills to our collective endeavor.

I would like to thank specific contributors to chapters in this edition. In order to make a book like this happen on a relatively short timeline, the talents of many specialists in the field must be combined. Whether contributing creative skills in writing, envisioning areas that will be critical to the current and future health needs of students, using their experiences to make topics come alive for students, or utilizing their professional expertise to ensure scientifically valid information, each of these individuals was carefully selected to help make this text the best that it can be. I couldn't do it without their help! As always, I would like to give particular thanks to Dr. Patricia Ketcham (Oregon State University), who has helped with the Health: The Basics series since its earliest beginnings. As associate director of health promotion in Student Health Services on campus, with specialties in health promotion and health behavior and substance abuse, Dr. Ketcham provides a unique perspective on the key challenges facing today's students. She contributed to revisions of Chapter 7, Recognizing and Avoiding Addiction and Drug Abuse; Chapter 8, Drinking Alcohol Responsibly and Ending Tobacco Use; Focus On: Enhancing Your Body Image; Chapter 14, Preparing for Aging, Death, and Dying; and Chapter 16, Making Smart Health Care Choices. Dr. Susan Dobie, associate professor in the School of Health, Physical Education, and Leisure Services at University of Northern Iowa, used her background in health promotion and health behavior and in teaching a diverse range of students to provide a fresh approach to revisions of Chapter 5, Connecting and Communicating in the Modern World; Focus On: Understanding Your Sexuality; and Chapter 6, Considering Your Reproductive Choices. Dr. Erica Jackson, associate professor in the Department of Public & Allied Health Sciences at Delaware State University, applied her wealth of fitness knowledge to update and enhance Chapter 11, Improving Your Personal Fitness. Deborah Landforce, instructor at Lane Community College, utilized her extensive background in counseling, relationships, and spirituality to provide a fresh and engaging update to Focus On: Cultivating Your Spiritual Health. With her outstanding background in nutrition science and applied dietary behavior, Dr. Kathy Munoz, professor in the Department of Kinesiology and Recreation Administration at Humbolt State University, provided an extensive revision and updating of Chapter 9, Nutrition: Eating for a Healthier You. Laura Bonazzoli, who has been a key part of developing and refining many aspects of this book over the last editions, used her considerable knowledge and skills in providing major revisions of Chapter 1, Accessing Your Health; Focus On: Improving Your Financial Health; and Focus On: Understanding Complementary and Alternative Medicine.

REVIEWERS FOR THE 12TH EDITION

With each new edition of *Health: The Basics*, we have built on the combined expertise of many colleagues throughout the country who are dedicated to the education and behavioral changes of students. We thank the many reviewers who have made such valuable contributions to the past 11 editions of *Health: The Basics*. For the 12th edition, reviewers who have helped us continue this tradition of excellence include the following:

Tia Bennett, Northeastern State University Daniel Czech, Georgia Southern University Andy Harcrow, University of Alabama Sylvette La Touche-Howard, University of Maryland Theodore Murray, Monroe Community College Adam Parker, Angelo State University Carole Sloan, Henry Ford College Glenda Warren, University of the Cumberlands Brian Witkov, Salem State University Sharon Woodard, Wake Forest University

REVIEWERS FOR MASTERINGHEALTH™

We continue to thank the following members of the Faculty Advisory Board, who offered us valuable insights that helped develop MasteringHealth for the previous edition: Steve Hartman (Citrus College), William Huber (County College of Morris), Kris Jankovitz (Cal Poly), Stasi Kasaianchuk (Oregon State University), Lynn Long (University of North Carolina Wilmington), Ayanna Lyles (California University of Pennsylvania), Steven Namanny (Utah Valley University), Karla Rues (Ozarks Technical Community College), Debra Smith (Ohio University), Sheila Stepp (SUNY Orange), and Mary Winfrey-Kovell (Ball State University). For the 12th edition the following people contributed content:

Laura Bonazzoli Lorin Hawley Melanie Healy John Murdzek Dena Pistor Karla Rues Bruce Turchetta

> Many thanks to all! Rebecca J. Donatelle, PhD

Accessing Your Health



- 1 Describe the immediate and long-term rewards of healthy behaviors and the effects that your health choices may have on others.
- 2 Compare and contrast the medical model of health and the public health model, and discuss the six dimensions of health.
- 3 Identify modifiable and nonmodifiable personal and social factors that influence your health; discuss the importance of a global perspective on health; and explain how gender, racial, economic, and cultural factors influence health disparities.
- 4 Compare and contrast the health belief model, the social cognitive model, and the transtheoretical model of behavior change, and explain how you might use them in making a specific behavior change.
- 5 Identify your own current risk behaviors, the factors that influence those behaviors, and the strategies you can use to change them.