

Health: The Basics

SIXTH CANADIAN EDITION

Health: The Basics

SIXTH CANADIAN EDITION

Rebecca J. Donatelle

Oregon State University

Angela M. Kolen-Thompson

St. Francis Xavier University

PEARSON

Toronto

Senior Acquisitions Editor: Lisa Rahn
Marketing Manager: Jenna Wulff
Program Manager: Darryl Kamo
Developmental Editor: Toni Chahley
Project Manager: Richard di Santo
Production Editor: Roxanne Klaas, S4Carlisle Publishing Services
Copy Editor: Charlotte Morrison-Reed
Proofreader: Chris Feldman
Compositor: S4Carlisle Publishing Services
Photo Researcher: Zoe Milgram, Q2A Bill Smith
Permissions Researcher: Electronic Publishing Services, Inc.
Art Director: Zena Denchik
Cover and Interior Designer: Anthony Leung
Cover Image: Fotolia

Credits and acknowledgments for material borrowed from other sources and reproduced, with permission, in this textbook appear on the appropriate page within the text. The image for the Assess Yourself feature is from George Doyle/Getty Images. The image for Student Health Today is from C Squared Studios/Getty Images/.

Original edition published by Pearson Education, Inc., Upper Saddle River, New Jersey, USA. Copyright © 2013 Pearson Education, Inc. This edition is authorized for sale only in Canada. If you purchased this book outside the United States or Canada, you should be aware that it has been imported without the approval of the publisher or the author.

Copyright © 2015, 2011, 2008, 2004, 2001, 1998 Pearson Canada Inc. All rights reserved. Manufactured 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 likewise. To obtain permission(s) to use material from this work, please submit a written request to Pearson Canada Inc., Permissions Department, 26 Prince Andrew Place, Don Mills, Ontario, M3C 2T8, or fax your request to 416-447-3126, or submit a request to Permissions Requests at www.pearsoncanada.ca.

10 9 8 7 6 5 4 3 2 1 [CKV]

Library and Archives Canada Cataloguing in Publication

Donatelle, Rebecca J., 1950-, author
Health: the basics/Rebecca J. Donatelle,
Oregon State University,
Angela M. Kolen-Thompson, St. Francis Xavier University.—Sixth Canadian edition.
Revision of: Health: the basics/Rebecca J. Donatelle, Angela M. Kolen-Thompson.—
5th Canadian ed.—Toronto: Pearson Canada, [2010], c2011.
Includes bibliographical references and index.
ISBN 978-0-321-89255-3 (pbk.)
1. Health—Textbooks. I. Kolen-Thompson, Angela Maria, 1966-, author II. Title.
RA776.H42 2014 613 C2013-906780-9

PEARSON

ISBN: 978-0-32-189255-3

BRIEF CONTENTS



PART I FINDING RHYTHM 1

- 1 Discovering Your Personal Rhythm for Healthy Living 1
- 2 Promoting and Preserving Your Psychosocial Health 26
- 3 Understanding and Coping with Life's Stressors 53

FOCUS ON SPIRITUAL HEALTH 76

PART II CHOOSING HEALTHY LIFESTYLES 85

- 4 Engaging in Physical Activity for Health, Fitness, and Performance 85
- 5 Eating for Optimal Health and Performance 117
- 6 Managing Your Weight: Finding a Healthy Balance 151

FOCUS ON BODY IMAGE 179

PART III CREATING HEALTHY AND CARING RELATIONSHIPS 189

- 7 Committing to Relationships and Sexual Health 189
- 8 Considering Your Reproductive Choices 222

FOCUS ON SEXUALLY TRANSMITTED INFECTIONS (STIs) 254

PART IV LIMITING RISKS FROM POTENTIALLY HARMFUL HABITS 261

- 9 Recognizing Use, Misuse, Abuse, and Addiction to Drugs and Behaviours 261
- 10 Using Alcohol and Caffeine Responsibly and Refraining from Tobacco Use 282
- 11 Understanding Illicit Drugs 311

FOCUS ON IMPROVING YOUR SLEEP 329

PART V PREVENTING AND MANAGING DISEASE 339

- 12 Reducing Risk for Cardiovascular Disease and Cancer 339
- 13 Controlling Risk for Infectious and Noninfectious Conditions 369

FOCUS ON DIABETES 409

PART VI FACING LIFE'S CHALLENGES 417

- 14 Choosing Healthy Living for the Environment 417
- 15 Preventing Violence, Abuse, and Injury 437
- 16 Becoming a Wise Consumer of Health Services 458
- 17 Preparing for Aging, Dying, and Death 478

FOCUS ON FINANCIAL HEALTH 500

CONTENTS



Preface xv

PART | FINDING RHYTHM 1

1 Discovering Your Personal Rhythm for Healthy Living 1

WHAT IS HEALTH? 2

Health and Sickness: Defined by Extremes 2
Health: More Than Not Being Sick 2
Health as Wellness: Putting Quality into Years 3
Health Promotion: Helping You Stay Healthy 5
Prevention: The Key to Future Health 6

SEX DIFFERENCES 6

IMPROVING YOUR HEALTH 7

Benefits of Achieving Optimal Health 7
STUDENT HEALTH TODAY 8
Preparing for Behaviour Change 8
Factors Influencing Behaviour Change 9
Your Beliefs and Attitudes 12
Do Beliefs and Attitudes Influence Behaviours? 12

POINT OF VIEW 14

Your Intentions to Change 15
Significant Others as Change Agents 15

BEHAVIOUR CHANGE TECHNIQUES 16

Shaping: Developing New Behaviours in Small Steps 16
Visualizing: The Imagined Rehearsal 17
Modelling 17
Controlling the Situation 17
Reinforcement 17
Changing Self-Talk 18

MAKING BEHAVIOUR CHANGE 18

Self-Assessment: Antecedents and Consequences 18
Analyzing the Behaviours You Want to Change 19
Decision Making: Choices for Change 19

ASSESS YOURSELF 20

2 Promoting and Preserving Your Psychosocial Health 26

DEFINING PSYCHOSOCIAL HEALTH 27

Intellectual Health: The Thinking You 28
Emotional Health: The Feeling You 29
Social Health: Interactions with Others 29
Spiritual Health: An Inner Quest for Well-Being 30

FACTORS INFLUENCING PSYCHOSOCIAL HEALTH 33

External Influences 33
Internal Influences 33
Resiliency and Developmental Assets 35

ENHANCING PSYCHOSOCIAL HEALTH 36

Developing and Maintaining Self-Esteem and Self-Efficacy 36
Forming Realistic Expectations 36
POINT OF VIEW 37
Getting Adequate Sleep 38
Understanding the Mind–Body Connection 38

WHEN THINGS GO WRONG 40

Depression 41
Seasonal Affective Disorder 42
Anxiety Disorders 43
Schizophrenia 44

SEX ISSUES IN PSYCHOSOCIAL HEALTH 44

Depression and Sex 44
PMS: Physical or Mental Disorder? 44

SUICIDE: GIVING UP ON LIFE 44

Warning Signals of Suicide 45
Taking Action to Prevent Suicide 45
STUDENT HEALTH TODAY 46

SEEKING PROFESSIONAL HELP 47

Types of Mental Health Professionals 47
Choosing a Therapist: Key Factors to Consider 48
What to Expect When You Begin Therapy 49

ASSESS YOURSELF 50

3 Understanding and Coping with Life's Stressors 53

WHAT IS STRESS? 54

The Mind–Body Connection: Physical Responses 55
Stress and Impaired Immunity 55
STUDENT HEALTH TODAY 56

THE GENERAL ADAPTATION SYNDROME 57

Alarm Phase 57
Resistance Phase 58
Exhaustion Phase 59

SOURCES OF STRESS 59

Psychosocial Sources of Stress 59
Other Forms of Psychosocial Stress 61
Environmental Stress 61
Self-Imposed Stress 61

STRESS AND THE POST-SECONDARY STUDENT 63

POINT OF VIEW 64

STRESS MANAGEMENT 64

- Dealing with Stress 65
- Managing Emotional Responses 67
- Learning to Laugh and Cry 68
- Managing Social Interactions 68
- Making the Most of Support Groups 68
- Taking Mental Action 68
- Taking Physical Action 69
- Learning Time Management 71
- Using Alternative Stress Management Techniques 71

ASSESS YOURSELF 73

FOCUS ON SPIRITUAL HEALTH 76

ASSESS YOURSELF 84

PART II CHOOSING HEALTHY LIFESTYLES 85

4 Engaging in Physical Activity for Health, Fitness, and Performance 85

PHYSICAL ACTIVITY FOR HEALTH, FITNESS, AND PERFORMANCE 86

BENEFITS OF REGULAR PHYSICAL ACTIVITY 88

- Improved Cardiorespiratory Endurance 88
- Improved Bone Health 89
- Improved Weight Management 89
- Improved Quantity and Quality of Life 89
- Improved Mental Health and Stress Management 90

IMPROVING CARDIORESPIRATORY ENDURANCE 90

CARDIORESPIRATORY FITNESS PROGRAMS 91

- Determining Exercise Frequency 91
- Determining Exercise Intensity 91
- Determining Exercise Time 92
- The Recovery Principle 92
- Frequency, Intensity, or Time? 92

IMPROVING MUSCULAR STRENGTH AND ENDURANCE 93

- Principles of Strength Development 93
- Types of Muscle Contractions 94
- Methods of Providing Resistance 95
- Getting Started 95

STUDENT HEALTH TODAY 97

IMPROVING YOUR FLEXIBILITY 97

- Types of Stretching Exercises 97

POINT OF VIEW 98

YOGA, TAI CHI, AND PILATES 98

Yoga 98

Tai Chi 99
Pilates 100

BODY COMPOSITION 100

PLANNING YOUR PHYSICAL FITNESS TRAINING PROGRAM 100

- Identifying Your Physical Fitness Goals 100
- Designing Your Physical Fitness Program 101

FITNESS-RELATED INJURIES 102

- Causes of Fitness-Related Injuries 102
- Prevention 102
- Common Overuse Injuries 103
- Exercising in the Heat 104
- Exercising in the Cold 105

ASSESS YOURSELF 106

ASSESS YOURSELF 107

5 Eating for Optimal Health and Performance 117

HEALTHY EATING 118

- Mediterranean 118
- Asian 118
- Western 119
- Monitoring Calories 119

EATING WELL WITH CANADA'S FOOD GUIDE 119

THE DIGESTIVE PROCESS 123

- Dietary Reference Intake vs. Recommended Nutrient Intake 123

OBTAINING ESSENTIAL NUTRIENTS 123

- Water 123
- Proteins 125
- Carbohydrates 126
- Fibre 127
- Fats 128
- Vitamins 130
- Minerals 133
- Sex Differences in Nutritional Needs 136

VEGETARIANISM 137

STUDENT HEALTH TODAY 138

EATING WELL AS A STUDENT 139

- Fast Foods: Eating on the Run 139
- Understanding Nutrition and Health Claims 140
- When Funds Are Short 142
- Healthy Eating in Residence 142

FOOD SAFETY CONCERNS 143

- Food-Borne Illness 143
- Food Additives 144
- Food Allergies 144
- Organic Foods 145
- Genetically Modified Food Crops 145

POINT OF VIEW 146

ASSESS YOURSELF 147

6 Managing Your Weight: Finding a Healthy Balance 151

OVERWEIGHT AND OBESITY 153

POINT OF VIEW 155

Determining the Right Weight for You 156
Assessing Your Body Fat Content 157

MANAGING YOUR WEIGHT 158

Keeping Weight Loss in Perspective 158
What Is a Calorie? 159
Physical Activity 159
Is Dieting Healthy? 160
Improving Your Eating Habits 161
Choosing to Eat Well 161
“Miracle” Diets 162
Low Carbohydrate Diets 162
Trying to Gain Weight 163

RISK FACTORS FOR OBESITY 163

Heredity and Genetic Factors 164
Endocrine Influences: The Hungry Hormones 164
Hunger, Appetite, and Satiety 165
Developmental Factors 165
Metabolic Rates and Weight 165
Psychosocial Factors 166
Eating Cues 166
Dietary Myth and Misperception 167
Lifestyle 167

SOCIAL BIAS AGAINST THE OVERWEIGHT 167

STUDENT HEALTH TODAY 168

THINKING THIN: BODY IMAGE DISORDERS 168

EATING DISORDERS 169

Anorexia Nervosa 169
Bulimia Nervosa 169
Binge Eating Disorder 170
Eating Disorder Not Otherwise Specified 170
Disordered Eating 170
Anorexia Athletica 170
Who Is at Risk? 171
Treating Eating Disorders 171
Helping Someone with an Eating Disorder 171

ASSESS YOURSELF 173

FOCUS ON BODY IMAGE 179

ASSESS YOURSELF 188

PART III CREATING HEALTHY AND CARING RELATIONSHIPS 189

7 Committing to Relationships and Sexual Health 189

COMMUNICATING: A KEY TO ESTABLISHING RELATIONSHIPS 190

Communicating How You Feel 190
Improving Communication Skills 190

CHARACTERISTICS OF INTIMATE RELATIONSHIPS 192

FORMING INTIMATE RELATIONSHIPS 193

Families: The Ties That Bind 193
Today's Family Unit 193
Establishing Friendships 194
Significant Others, Partners, Couples 195
This Thing Called Love 195

GENDER ISSUES 197

Why the Differences? 197
Picking Partners: Similarities and Differences between Genders 197

POINT OF VIEW 198

BARRIERS TO INTIMACY 198

Dysfunctional Families 198
Jealousy in Relationships 199

COMMITTED RELATIONSHIPS 199

Marriage 200
Cohabitation 200
Gay and Lesbian Partnerships 201

SUCCESS IN COMMITTED RELATIONSHIPS 201

Partnering Scripts 201
The Importance of Self-Nurturance 201
Elements of Good Relationships 202

STAYING SINGLE 202

HAVING CHILDREN 202

ENDING A RELATIONSHIP 203

The Warning Signs 203
Seeking Help: Where to Look 203
Trial Separations 204
Why Relationships End 204
Deciding to End Your Relationship 204
Coping with Loneliness 205

YOUR SEXUAL IDENTITY 205

Gender Identity and Roles 206

REPRODUCTIVE ANATOMY AND PHYSIOLOGY 206

Female Reproductive Anatomy and Physiology 206
Male Reproductive Anatomy and Physiology 210

EXPRESSING YOUR SEXUALITY 211

Human Sexual Response 211
Sexual Orientation 212
Developing Sexual Relationships 213
Sexual Expression: What Are Your Options? 213
What Is Right for Me? 215
Variant Sexual Behaviour 215

DIFFICULTIES THAT CAN HINDER SEXUAL FUNCTIONING 215

STUDENT HEALTH TODAY 216

Sexual Desire Disorders 216
Sexual Arousal Disorders 216
Orgasm Disorders 217
Sexual Pain Disorders 217
Drugs and Sex 217

ASSESS YOURSELF 218

8 Considering Your Reproductive Choices 222

MANAGING YOUR FERTILITY 223

Reversible Contraception 223

POINT OF VIEW 226

STUDENT HEALTH TODAY 229

Oral Contraceptives for Men? 232
Fertility Awareness Methods (FAM) 232
Permanent Contraception 234

ABORTION 235

Methods of Abortion 235

PLANNING A PREGNANCY 236

Emotional Health 236
Maternal Health 236
Paternal Health 237
Financial Evaluation 237
Contingency Planning 237
Decision Making about Unplanned Pregnancy 238

PREGNANCY 238

Prenatal Care 238
Alcohol and Drugs 239
A Woman's Reproductive Years 242
Pregnancy Testing 242
The Process of Pregnancy 242
Prenatal Testing and Screening 244

CHILDBIRTH 244

Where to Have Your Baby 244
Labour and Delivery 245
Prenatal Education 246
Drugs in the Delivery Room 246
Breastfeeding and the Postpartum Period 246
Complications 246

INFERTILITY 249

Causes in Women 249
Causes in Men 249

Treatment 249
Surrogate Motherhood 250
ASSESS YOURSELF 251

FOCUS ON SEXUALLY TRANSMITTED INFECTIONS (STIs) 254

ASSESS YOURSELF 259

PART IV LIMITING RISKS FROM POTENTIALLY HARMFUL HABITS 261

9 Recognizing Use, Misuse, Abuse, and Addiction to Drugs and Behaviours 261

DRUG USE, MISUSE, AND ABUSE 262

Individual Response: Set and Setting 262

DEFINING ADDICTION 263

The Physiology of Addiction 264
The Addictive Process 264
Signs of Addiction 265

ADDICTIVE BEHAVIOURS 265

Gambling 265
Shopping and Borrowing 266
Exercise Addiction 267
Technology Addictions 267

MANAGING AN ADDICTION 267

DRUG DYNAMICS 268

TYPES OF DRUGS 269

Routes of Administration of Drugs 270

DRUG INTERACTIONS 271

POINT OF VIEW 273

PRESCRIPTION DRUGS 273

Types of Prescription Drugs 273
Use of Generic Drugs 274

OVER-THE-COUNTER (OTC) DRUGS 275

Types of OTC Drugs 275

STUDENT HEALTH TODAY 277

ASSESS YOURSELF 278

10 Using Alcohol and Caffeine Responsibly and Refraining from Tobacco Use 282

ALCOHOL: AN OVERVIEW 283

Alcohol and the Post-Secondary Student 284
Rights versus Responsibilities 286

STUDENT HEALTH TODAY 287

THE PRODUCTION OF ALCOHOL 288

PHYSIOLOGICAL AND BEHAVIOURAL EFFECTS OF ALCOHOL 288

Behavioural Effects 288
Absorption and Metabolism 289
Immediate Effects 290
Long-Term Effects 292
Fetal Alcohol Spectrum Disorders 293
Drinking and Driving 294

ALCOHOLISM 294

How, Why, Whom? 295
The Causes of Alcoholism 295
Effects of Alcoholism on the Family 296
Costs to Society 296
Women and Alcoholism 297

RECOVERY 297

The Family's Role 297
Treatment Programs 297
Relapse 298

SMOKING 299

Tobacco and Its Effects 299
Smoking—A Learned Behaviour 300
Smokeless Tobacco 301
Environmental Tobacco Smoke 301

QUITTING 302

Breaking the Nicotine Addiction 302
Breaking the Habit 303
Benefits of Quitting 303

CAFFEINE 303

Caffeine Addiction 304
The Health Consequences of Long-Term Caffeine Use 305

POINT OF VIEW 307

ASSESS YOURSELF 308

11 Understanding Illicit Drugs 311

ILLICIT DRUGS 312

Cocaine 313
Amphetamines 315
Marijuana 316
Opiates 318

POINT OF VIEW 319

STUDENT HEALTH TODAY 320

Psychedelics 321
Deliriants 323
Designer Drugs 323
Steroids 324

SOLUTIONS TO THE PROBLEM 325

Harm Reduction 326

ASSESS YOURSELF 326

FOCUS ON IMPROVING YOUR SLEEP 329

ASSESS YOURSELF 338

PART V PREVENTING AND MANAGING DISEASE 339

12 Reducing Risk for Cardiovascular Disease and Cancer 339

CARDIOVASCULAR DISEASES 340

UNDERSTANDING YOUR CARDIOVASCULAR SYSTEM 340

TYPES OF CARDIOVASCULAR DISEASES 342

Atherosclerosis 342
Coronary Heart Disease 342
Stroke 344

STUDENT HEALTH TODAY 345

Hypertension 345
Arrhythmia, Congestive Heart Failure, and Congenital and Rheumatic Heart Disease 346

CONTROLLING YOUR RISKS FOR CARDIOVASCULAR DISEASES 346

Risks You Can Control 347
Obesity 349
Risks You Cannot Control 350

WOMEN AND CARDIOVASCULAR DISEASE 350

Risk Factors for Heart Disease in Women 350
Recognizing Heart Disease in Women 350

NEW WEAPONS AGAINST HEART DISEASE 351

Techniques of Diagnosing Heart Disease 351
Angioplasty versus Bypass Surgery 351
Thrombolysis 352

CANCER INCIDENCE AND MORTALITY 352

What Is Cancer? 354
What Causes Cancer? 354
Risks for Cancer 355

POINT OF VIEW 357

TYPES OF CANCER 358

Lung Cancer 358
Breast Cancer 358
Colorectal Cancers 360
Prostate Cancer 361
Skin Cancer 361
Testicular Cancer 362
Ovarian Cancer 363
Uterine Cancer 363
Leukemia 363
Oral Cancer 364

FACING CANCER 364

Detecting Cancer 364
New Hope in Cancer Treatments 365
Life after Cancer 365

ASSESS YOURSELF 365

13 Controlling Risk for Infectious and Noninfectious Conditions 369

INFECTIOUS DISEASE RISK FACTORS 370

Risk Factors You Cannot Control 370
Risk Factors You Can Control 371

THE PATHOGENS: ROUTES OF INVASION 371

Bacteria 371
Viruses 373

YOUR BODY'S DEFENCES: KEEPING YOU WELL 377

Physical and Chemical Defences 377
The Immune System: Your Body Fights Back 377
Fever 378
Pain 378
Vaccines: Bolstering Your Immunity 378

SEXUALLY TRANSMITTED INFECTIONS 379

POINT OF VIEW 381

Possible Causes: Why Me? 382
Modes of Transmission 382
Chlamydia 383
Pelvic Inflammatory Disease (PID) 384
Gonorrhoea 384
Syphilis 385
Pubic Lice 386
Venereal Warts 387

STUDENT HEALTH TODAY 388

Candidiasis (Moniliasis) 389
Trichomoniasis 389
General Urinary Tract Infections 389
Herpes 389

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS) 391

How HIV Is Transmitted 391
Reducing Your Risks for HIV 393
Symptoms of the Disease 394
Testing for HIV Antibodies 394
Preventing HIV Infection 394

NONINFECTIOUS DISEASES 394

RESPIRATORY DISORDERS 395

Allergy-Induced Problems 395
Hay Fever 395
Asthma 396
Emphysema 396
Chronic Bronchitis 397

NEUROLOGICAL DISORDERS 397

Headaches 397
Seizure Disorders 398

SEX-RELATED DISORDERS 399

Fibrocystic Breast Disease 399
Premenstrual Syndrome (PMS) 399
Endometriosis 399

DIGESTION-RELATED DISORDERS 400

Diabetes 400
Colitis and Irritable Bowel Syndrome (IBS) 401
Diverticulosis 401
Peptic Ulcers 401
Gallbladder Disease 401

MUSCULOSKELETAL DISEASES 402

Arthritis 402
Fibromyalgia 402
Systemic Lupus Erythematosus (SLE) 403
Low Back Pain (LBP) 403

OTHER MALADIES 403

Chronic Fatigue Syndrome (CFS) 403
Job-Related Disorders 404

ASSESS YOURSELF 405

FOCUS ON DIABETES 409

ASSESS YOURSELF 415

PART VI FACING LIFE'S CHALLENGES 417

14 Choosing Healthy Living for the Environment 417

OVERPOPULATION 419

AIR POLLUTION 420

Sources of Air Pollution 420
Smog 421
Acid Rain 421
Indoor Air Pollution 423
Ozone Layer Depletion 424
Global Warming 425

POINT OF VIEW 426

Reducing Air Pollution 426

WATER POLLUTION 427

Water Contamination 427
Chemical Contaminants 428

NOISE POLLUTION 429

LAND POLLUTION 430

Solid Waste 430
Hazardous Waste 430

RADIATION 430

STUDENT HEALTH TODAY 431

Ionizing Radiation 431
Nonionizing Radiation 432
Nuclear Power Plants 432

FOOD QUALITY 433

ASSESS YOURSELF 433

15 Preventing Violence, Abuse, and Injury 437

VIOLENCE IN CANADA 438

- Homicide 439
- Suicide 440
- Youth Violence 441
- The Violence of Hate 441
- Violence against Women 442
- Domestic Violence 443
- Violence against Children 444
- STUDENT HEALTH TODAY 446**
- Violence against Men 447
- Violence against Older Adults 447

SEXUAL VICTIMIZATION 448

- Sexual Assault 448

PREVENTING PERSONAL ASSAULTS 449

- Self-Defence against Sexual Assault 449
- Preventing Assaults in Your Home 452
- Preventing Assaults When You Are Away from Home 452

VIOLENCE AND HEALTH 453

- Injury Prevention 453
- Who Are the Victims of Unintentional Injury? 453
- POINT OF VIEW 454**
- ASSESS YOURSELF 455**

16 Becoming a Wise Consumer of Health Services 458

MAKING INFORMED HEALTH-CARE CHOICES 460

- Evaluating Online Medical Resources 460
- Financing Health Care 460
- Accepting Responsibility for Your Health Care 460
- Why Some False Claims May Seem True 461

SELF-HELP OR SELF-CARE 461

- When to Seek Help 462
- Being Proactive in Your Health Care 462
- STUDENT HEALTH TODAY 463**
- Assessing Health Professionals 464

CHOICES OF MEDICAL CARE 465

- Traditional (Allopathic) Medicine 466
- Allied Professionals 465
- Non-allopathic Medicine 466

TYPES OF MEDICAL PRACTICES 469

- Hospitals and Clinics 472

PROMISES AND PROBLEMS OF CANADA'S HEALTH-CARE SYSTEM 473

- Access 473
- Quality Assurance 473

- Detecting Fraud and Abuse in the System 473

HEALTH SERVICE ORGANIZATIONS: A NEW MODEL OF HEALTH CARE 473

- POINT OF VIEW 474**
- ASSESS YOURSELF 475**

17 Preparing for Aging, Dying, and Death 478

REDEFINING AGING 479

WHAT IS NORMAL AGING? 479

WHO ARE THE ELDERLY? 480

THEORIES ON AGING 480

- Biologic Theories 480
- Psychosocial Theories 481

CHANGES IN THE BODY AND MIND 482

- Physical Changes 482
- Mental Changes 485

HEALTH CHALLENGES OF OLDER CANADIANS 487

- Alcohol Use and Abuse 487
- Prescription Drug Use: Unique Problems for Older Canadians 487
- Over-the-Counter Remedies 487
- Physical Activity 487
- STUDENT HEALTH TODAY 488**
- Dietary Concerns 488
- Gender Issues: Caring for Older Canadians 488

UNDERSTANDING DEATH AND DYING 489

- Defining Death 489
- Denying Death 490

THE PROCESS OF DYING 491

- Coping Emotionally with Death 491
- Social Death 492
- Near-Death Experiences 492
- Coping with Loss 492
- What Is "Normal" Grief? 493
- Coping with Grief 494
- Worden's Model of Grieving Tasks 494
- When an Infant or a Child Dies 494

QUASI-DEATH EXPERIENCES 494

LIFE-AND-DEATH DECISION MAKING 494

- POINT OF VIEW 495**
- Palliative Care 496
- ASSESS YOURSELF 497**

FOCUS ON FINANCIAL HEALTH 500

- References 505
- Index 527

PREFACE



A LETTER TO READERS

Dear Readers,

I am pleased to present you with the Sixth Canadian Edition of *Health: The Basics*. This is my third opportunity to change and update this outstanding textbook; please know that I revise with you in mind—you, the post-secondary student.

Some of the health challenges you face today are different than when I entered university almost 30 years ago. However, some are the same too—managing stress, eating well, being physically active, protecting yourself from sexually transmitted infections, using the health-care system wisely, to name a few similarities.

Although we likely know more about what it takes to live healthily today, we also seem to face more trials in doing so. We know we should be physically active and we are well aware of the importance of eating at least 7 to 10 servings of vegetables and fruits each day, and yet, many of us cannot manage to do either. Some of us choose to drive short distances when walking or cycling would be a healthier—and the more environmentally friendly—option. Many believe that we must ‘work out’ to benefit from physical activity. Food choices can be challenging, especially given the abundance and availability of fast and convenience foods; media and advertising messages convince us that such foods will save us time.

Many of us also have an ‘all or none’ way of thinking. In other words, we may not recognize that each lifestyle choice—whether physical or mental—is important and contributes to our overall health and wellness. Further, our health results from a culmination of many different parameters and influences with each playing its role. Sometimes we think of and manage only the components related to our physical health, neglecting our social, emotional, intellectual, and spiritual dimensions.

You may be in Human Kinetics or Kinesiology, Physical Education, Nursing, Health Sciences, Business, or General Arts or Science. Regardless of your program of study, I invite you to engage with this textbook, your classmates, and your professor. Please read and think about how each opening scenario, introductory section, and detailed presentation of various Canadian statistics is relevant to you. How does each topic apply to you? Do you invest time thinking about a particular topic? Why or why not?

I challenge you to question the choices you make and the attitudes you have regarding your health and wellness. Are they the best for you, for right now? How can you make better decisions? When will you make better choices?

I also encourage you to question contemporary thinking about many health issues. For example, binge drinking. Why is it socially acceptable and expected to drink heavily in your college and university years? You might also query the societal and media pressures regarding body image. Why do we expect men and women to look a certain way? Why do we judge people based upon how they look? Question contemporary thinking about many issues, not just those I bring up here.

I encourage you to read and to reflect deeply. Learning can only happen with reflection. Further, I urge you to ask questions, questions that will help you to better understand yourself, questions that will help you to better understand health and wellness, questions that will encourage you to choose more wisely now while you are a student and later when you are not.

Finally, I suggest you approach this textbook with a sense of optimism and hopefulness, as well as an opportunity to be selfish. Reading this textbook, participating in class, and completing your assignments provides you with the chance to think about you and what is best for you and your health. As you read through this book, you will understand why I suggest you have a sense of optimism and hopefulness—that is a choice we all make.

Sunshine and smiles,

Angie

In revising the sixth Canadian edition, we listened to the comments and concerns of Canadian personal health educators and learned that we share the following goals for a personal health text:

- To prepare students to lead healthy lives, now and in the future, by providing knowledge, tools, and strategies to make responsible and appropriate decisions regarding their health.
- To include “high-interest” topics not always included in health texts, such as multicultural and sex-specific perspectives on health.
- To include current Canadian research, material, and statistics.
- To recognize that students learn in many ways and require strong pedagogical elements to help them synthesize information and build healthy attitudes and behaviours.
- To include practical, real-life applications to encourage students to think critically about their health and to apply the material to their own lives.
- To encourage self-awareness, integrity, respect, self-responsibility, and gratitude in the reader.

Inside the Book

- **Decision making through critical thinking** is the cornerstone of every chapter, beginning with the introduction of the **DECIDE model for decision making**, **Prochaska and DiClemente’s Stages of Change model**, and various behaviour change techniques in Chapter 1.
- **Personal reflection**, a hallmark feature woven throughout, includes *Consider This . . .* scenarios and reflective questions, *Student Health* and *Point of View* boxed features, and *Taking Charge* sections with the opportunity to *Assess Yourself* at the end of each chapter.
- An overriding **philosophy of self-responsibility**, including a better understanding and self-awareness behind the reasons why we do what we do (or do not do) in regards to our health and wellness, appears throughout each section of this book.
- Each part of the textbook concludes with **Focus On**, a three- to five-page feature that provides additional information on an engaging topic relevant to university and college students and their health.
- **Coverage of sex issues in health** is integrated throughout the text. Topics include sex bias in mental health treatment, women and heart disease, and how sex and gender roles may affect stress, stress management, and a person’s ultimate health status.
- Updated references in APA format help the reader connect more easily to the research and to the thinking that leads to making better choices regarding his or her health.
- Each chapter applies a **pedagogical framework** that stresses building health skills consistently. Students can personalize each chapter through the *Student Health* and *Point of View* textboxes within each chapter, as well as through the *Assess Yourself* and *Taking Charge* boxes at the end of each chapter.

New to the Sixth Canadian Edition

An extensive and thorough revision, the sixth Canadian edition of *Health: The Basics* reflects and exemplifies self-awareness, integrity, respect, self-responsibility, and gratitude. New pedagogical features emphasizing self-assessment and taking personal responsibility for health-related issues embody this perspective:

- **Focus On:** After the last chapter of each part, these three- to five-page features present in-depth information relevant to the topic(s) of the section, including spiritual health, body image, STIs, sleep, diabetes, and financial health.

focus on
Improving Your Sleep

Josh knew he was not ready for tomorrow's physics exam, but he went to his roommate's variety bookstore anyway. By the time it was over and he started to study, it was past 11:00 P.M. To keep himself awake, he drank a can of Mountain Dew, an energy drink, and then a cup of instant coffee as he plowed through the text, his notes, and the online study guide. Just before 4:00 A.M., he fell into bed exhausted. Instead of drifting quickly to sleep, his mind kept racing. Dynamics, optics, acoustics, and reactions tumbled around with disjointed memories of all the stressful situations he had been through in the past few days—losing his cell phone, his girlfriend dumping him, the argument he had with his dad. He glanced at the clock: it said 5:30 A.M. The exam was in 3 hours.

Sound familiar? If you have ever tackled an exam or written a paper on too little sleep, you can probably predict what happened to Josh. He flunked.

In a recent survey, nearly 42 percent of students reported that they had only gotten enough sleep to feel rested in the morning less than 2 days during the past week (American College Health Association, 2011). Not surprisingly, nearly 61 percent of these students said they felt tired, dragged out, or sleepy during the day 3 to 7 days of the week. It is not surprising then to think that today's students are sleep-deprived, particularly given that they are going to bed an average of 1 to 2 hours later and waking 1 to 1.6 hours earlier than students of their parents' generation (Lew, 2007). Between 15 and 30 percent of students report that they fall asleep in class on a regular basis, leading to an increased risk for low grade point to mention less enjoyment of their classes and overall educational experience (National Sleep Foundation, 2011).

One factor commonly implicated in reduced sleep time among college students is the Internet and its 24-hour access to online games, social networking sites, videos, news, and more. Other things that might keep students awake include academic pressures, relationship problems, an underlying sleep disorder, chronic pain and other disease symptoms, anxiety or depression, the use of drugs (including alcohol), and stress from a variety of sources, including the stress of juggling finances, classes, and homework with a job or responsibilities at home.

These statistics are equally telling for working adults. A recent poll from the National Sleep Foundation (2008) found that 70 percent of working adults get a good night's sleep on only a few nights per month. A newer study examining sleep patterns among different ethnic groups found that sleep deficiencies were common among all groups (National Sleep Foundation, 2010). Specifically, individuals of African descent reported the least amount of sleep, while individuals of an Asian heritage reported the greatest amount of sleep. Regardless of ethnicity, when there are not enough hours in the day to get down what we think we need to, what typically gets shortchanged is sleep.

- **Point of View boxes:** Each chapter features a *Point of View* box that offers perspectives on a controversial health issue and provokes students to consider where they stand.

POINT OF VIEW CONDOMS: HIS OR HERS?

If you are part of a sexually active heterosexual couple, or even "hooking up" regularly, preventing pregnancy may be one of your top priorities, particularly when you are in the midst of your post-secondary education and may not be prepared for the responsibilities a child brings. Condoms (as previously mentioned) can be used as a form of birth control and for STI protection too—though the women's condom is not as effective. So which one is better to use? That depends upon you and your partner. Do not both use one; the friction between the two condoms may cause one or both to break.

Read on—perhaps together—and decide which option works best for you, for now.

HERS

- The female condom is a lubricated plastic tube with flexible rings at either end. One end of the tube is sealed. To use this condom, you insert it into your vagina in such a way that the sealed end of the tube covers your cervix and the open end slightly covers your labia (the outer lips of your vagina; see Figure B.2). In this way, the condom blocks sperm from entering your cervix. The female condom is about 75 percent effective at preventing pregnancy.
- The female condom should be put in place prior to any genital-to-genital contact.
- Female condoms, similar to male condoms, cannot be reused and should be discarded after use (whether or not he ejaculates in situ).
- Female condoms, again similar to male condoms, are available without a prescription at your local pharmacy.
- Female condoms provide some protection against STIs, but are not as effective as male condoms.

HIS

- The male condom is made of latex, plastic, or an animal membrane such as lambskin. Latex condoms are the most effective at preventing the spread of STIs. Remove it from the package and roll it on an erect penis, leaving a little room at the top for ejaculate. In this way, sperm is prevented from entering the woman's womb. Condoms on their own use about 95 percent effective in preventing pregnancy. When a spermicide is also used, their efficacy rises to about 97 percent.
- The condom should be placed on the penis as soon as it is erect and prior to any oral-to-genital or genital-to-genital contact.
- A new condom is needed for each ejaculation; condoms cannot be reused.
- Condoms can be purchased without a prescription from your local pharmacy. They come in all shapes, sizes, colours, and materials. In terms of size, the standard size will fit most men (though extra-large ones are available as well as "snug" sizes that fit a bit tighter). Some condoms have a pre-designed ripple at the end to trap the ejaculate. Extra strength condoms are available for those who have trouble with condom breakage. Lubricated condoms can be purchased; often the lubricant contains spermicides which may provide some protection from pregnancy should the condom break. Flavored condoms are available and are designed primarily for oral sex.

Source: HHS/HR (2013), Sexual Health, Birth Control, and Condoms, Birth Control Health Cards, Retrieved on May 12, 2015 from www.wednet.com/sex/brth-control/birth-control-condoms/?page=1

- **Student Health Today boxes:** A *Student Health Today* box stimulates critical and personal thinking through the presentation of a student-related issue relevant to the chapter's topic.

Student Health TODAY

Marijuana and Studying

of more than 100 marijuana users between the ages of 18 to 44 years who had used at least 2 days a week in the past month and at least weekly in the past 6 months reported at least one marijuana-related problem (Day, Metrik, Spillane, & Kahler, 2013). The most frequent problems noted were "to procrastinate" and "to have a lower energy level" with these two factors combining and resulting in "lower productivity." Another study of marijuana users' functional brain activity performance highlighted the negative impact of chronic marijuana use (through not under the influence at the time of test) particularly related in the time to complete the task (Tropp Sneider, Gruber, Rogowska, Silveri, & Yurgelun-Todd, 2013). These two studies provide clear examples of how your school performance can be negatively impacted by your choice to use marijuana.

References

Day, M., Metrik, J., Spillane, N. S., & Kahler, C. W. (2013). Working memory and executive function-related problems among frequent users. *Drug and Alcohol Dependence, 131*, 104-111.

Tropp Sneider, J., Gruber, S. A., Rogowska, J., Silveri, M. M., & Yurgelun-Todd, D. A. (2013). A preliminary study of functional brain activities among marijuana users during performance of a verbal maze task. *Journal of Addiction, Volume 2013*, Article ID 481029, 12 pages.

- **Assess Yourself:** Every chapter and *Focus On* feature ends by encouraging the reader to "take charge" of his or her health. These textboxes include *Assess Yourself* questionnaires, a personal self-assessment tool.

assess YOURSELF

www.xxxxxxxx.com. Complete the questionnaire online with automatic scoring.

TAKING CHARGE: Managing Stress Behaviours

Stress is not something that you can run from or wish into non-existence. It is your response to stress that you need to manage. Learn about what causes you stress (assess yourself below). Learn how to cope with your response to the stressor and then determine if you have control over the stressor.

How Stressed Are You?

Each of you react differently to life's little challenges. Faced with a long line at the bank, you may get worked up for a few seconds before you shrug and move on. You also may be a hot reactor—one in five people are—and you may react to many such incidents which is an assault to your good health. When rating your stress, it is important to not only tally your life's stressors (Part One), but also to figure out whether you are particularly susceptible to stress (Part Two). (As university or college students, you should consider your job as being a student.) You can then read the interpretation and make efforts to manage your stress response more effectively in the future.

Part One

The Stress in Your Life
How often are the following potentially stressful situations a part of your daily life?

	1. Never	2. Rarely	3. Sometimes	4. Often	5. All the time
I work long hours.	1	2	3	4	5
There are signs my job is not secure.	1	2	3	4	5
Doing a good job goes unnoticed.	1	2	3	4	5
It takes all my energy just to make it through the day.	1	2	3	4	5
There are severe arguments at home.	1	2	3	4	5
A family member is seriously ill.	1	2	3	4	5
I am having problems with child care.	1	2	3	4	5
I do not have enough time for fun.	1	2	3	4	5
I am on a diet.	1	2	3	4	5
My family and friends count on me to solve their problems.	1	2	3	4	5
I'm expected to keep up a certain standard of living.	1	2	3	4	5
My neighbourhood is crowded or dangerous.	1	2	3	4	5
My home is a mess.	1	2	3	4	5
I cannot pay my bills on time.	1	2	3	4	5
I cannot save money.	1	2	3	4	5

Your Total Score

Below 38: You have a lower-stress life.
38 and above: You have a high-stress life.

- **Revised and Reorganized Part IV** – Part IV: Limiting Risks from Potentially Harmful Habits has been revised to include three distinct, yet related chapters. Chapter 9 focuses on Recognizing Use, Misuse, Abuse, and Addiction to Drugs and Behaviours with enhanced definitions and more examples to facilitate personal and critical reflection. Chapter 10, Using Alcohol and Caffeine Responsibly and Refraining from Tobacco Use, includes Canada’s recently released low-risk drinking guidelines, as well as an enhanced section on binge drinking. Chapter 11 now focuses exclusively on illicit drugs.
- **Significantly revised and updated references** reflect current research, statistics, and new developments in the field of health and wellness in Canada.

Key Changes to Each Chapter

Chapter 1 features expanded coverage of predisposing, enabling, and reinforcing factors of behaviour change, including new examples of each. Material on behaviour change has also been enhanced with practical, realistic suggestions for students that emphasize personal responsibility.

The spirituality section in **Chapter 2** has been expanded to include new information related to volunteerism and service learning, as well as an enhanced section on psychoneuroimmunology. New to this section is the inclusion of the importance of eating well for mental health.

The work-life balance section of **Chapter 3** has been heavily updated, including a name change to work-life rhythms to reflect the reality that there are ebbs and flows in the time dedicated to our work and life dependent upon current realities. More examples of psychosocial stress are provided and the time management section has been expanded.

Chapter 4 presents the latest physical activity guidelines for Canadians, as well as a more in-depth presentation of the health benefits of physical fitness. The cardiorespiratory fitness, flexibility, and body composition sections have been enhanced and more tests to determine personal level of physical fitness are included in this revised chapter.

New to **Chapter 5** are sections on antioxidants and gluten intolerance. Further, the section on genetically modified foods has been expanded. Average consumption of nutrients consumed by Canadians is included as well.

Chapter 6 starts with a new opening scenario. The reality of the status of overweight and obese Canadian adults is updated with the inclusion of the most recent available statistics. The sections about keeping weight loss in perspective, what is a calorie?, improving your eating habits, and hungry hormones have been augmented.

In **Chapter 7**, the description of the family unit is enhanced to reflect current realities in Canada. Further revisions and enrichments were made to *Becoming a Better Listener* and the section on menopause.

The latest understanding of methods of birth control, with considerable revision made to the topics of “the pill”, emergency contraception, and the cervical method, were undertaken in **Chapter 8**. Recommendations for exercise during pregnancy were amended, along with the section on miscarriage.

Chapter 9 opens with a new scenario and follows with expanded definitions and examples of drug use, misuse, and abuse. Similarly, enhancements were made to set, setting, and types of drugs. New to this chapter are sections on exercise addiction and inhalants.

Chapter 10 also begins with a new opening scenario; in addition, Canada’s new low-risk drinking guidelines have been added to this chapter. There are considerable modifications to the section on binge drinking, including the use of alcohol enemas and tampons. Further additions to this chapter include sections on energy drinks and the use of prescription drugs to assist in the smoking cessation process. The most recent data regarding Canadians’ use of alcohol and tobacco have been included in this chapter as well.

New to **Chapter 11** are visual presentations of past year and lifetime use of illicit drugs according to sex and province/territory. Also new to this chapter are sections on bath salts, methadone clinics, and safe injection sites. The section on marijuana has been expanded to include the medicinal uses of marijuana, as well as the risks of driving under the influence.

A heavier emphasis on lifestyle choices for preventing or delaying the onset of chronic disease is presented in the opening sections of **Chapter 12**. Warning signs for heart attack and stroke—for women and men—are included in this chapter, as well as the latest figures for cancer morbidity and mortality. The definitions and criteria regarding high blood pressure and high blood cholesterol have been modified to reflect current understanding.

Chapter 13 presents the most recent data available regarding the incidence and prevalence of infectious and noninfectious conditions. Enhancements were made to the sections on pubic lice and AIDS, and symptoms for chlamydia in men and women have been updated. Improvements were also made to the sections on asthma and premenstrual disorders.

The current status and understanding of indoor and outdoor air pollution, as well as acid rain, are presented in **Chapter 14**. The sections on PCBs and water contamination have been expanded.

Considerable revisions and enrichment of content have been made in **Chapter 15**, particularly regarding violence in Canada, hate crimes, domestic violence, violence against children, violence against the elderly, and self-violence or suicide. The section on preventing sexual assault has been enhanced from both the victim and perpetrator points of view.

New to **Chapter 16** is a section on herbal remedies and supplements, including a table of supplements with their potential risks and benefits and a table of herbs to avoid given their known health risks. The section on finding a personal physician has been enriched, as well as the section on non-allopathic medicine.

Chapter 17 has been revised with an intent to entice post-secondary education students to contemplate aging in their current lives. The definitions of aging are expanded, as well as some of the ‘symptoms’ of aging.

Hallmark Pedagogical Features

In addition to the features noted above, *Health: The Basics* continues to employ the following pedagogical features.

Learning Objectives: Each chapter begins with five learning objectives that provide a learning path of the important topics covered within the chapter.

Consider This . . . Chapter-Opening Scenarios: These practical, life-like scenarios introduce concepts in the chapter and can be a springboard to stimulating discussions. End-of-Chapter Application Exercises provide further discussion of the topic.

Discussion Questions: These questions encourage critical thinking about important concepts presented from a variety of angles.

Running Glossary of Key Terms: Key terms are boldfaced in the text and defined in boxes on the page where they first appear.

Instructor Supplements

Designed to facilitate lecture preparation and learning, a comprehensive set of ancillary material accompanies *Health: The Basics*, Sixth Canadian Edition.

MyHealthLab

MyHealthLab® is a course management system that makes it easy to organize classes, personalize students’ educational experience, and push learning to the next level.

Designed to help educators maximize class time, MyHealthLab® offers customizable, easy-to-assign, and automatically graded assessments and pedagogical tools that motivate students to learn outside of class, and arrive prepared for lecture.

With MyHealthLab®, professors can assign pre-lecture tests, case studies, self-assessment inventories, and more. MyHealthLab® facilitates the creation of questions, and the editing of any of the publisher’s questions or answers to match the precise language employed in the course. The system automatically grades every assignment that features machine-graded questions, and students’ results appear in the gradebook.

Instructor’s Manual

This comprehensive manual, filled with material to enhance the course, includes chapter outlines; discussion questions; student activities including individual, community, and diverse population/nontraditional categories; and additional references for further information.

Pearson MyTest

Pearson MyTest is a powerful assessment generation program that helps professors easily create and print quizzes and exams. The MyTest consists of more than 1400 questions made up of multiple-choice, true/false, fill-in-the-blank, matching, and essay formats. Each question is rated for difficulty level and for skill type as factual, applied, or conceptual. Answers and page references to the text are also provided with each question as feedback. Pearson’s MyTest test-generator allows educators to design, save, and generate classroom tests. The test program also permits the editing, addition, and deletion of questions.

PowerPoint Slides

Every chapter features a Microsoft PowerPoint® slide deck that highlights, illuminates, and builds on key concepts for lecture or online delivery. Educators can tailor each deck to their specifications.

Image Libraries

Image libraries help with the creation of vibrant lecture presentations. Most figures, tables, charts, photos, and *Assess Yourself* features from the text are provided in electronic format, organized by chapter for convenience. These images can be imported easily into Microsoft PowerPoint®.

CourseSmart for Instructors

CourseSmart goes beyond traditional expectations and provides instant, online access to the textbooks and course materials. You can save time with a digital eTextbook that allows you to search for the most relevant content at the very moment you need it. Whether it's evaluating textbooks or creating lecture notes to help students with difficult concepts, CourseSmart can make life a little easier. See how when you visit www.coursesmart.com/instructors/.

Student Supplements

MyHealthLab

MyHealthLab® offers a plethora of resources that allow students to assess their knowledge of the material and their progress.

eText

MyHealthLab® features an interactive eText of *Health: The Basics* that allows for easy highlighting, annotating, and searching with a Google®-based search function.

Students can also access their text via a tablet by downloading the free Pearson eText app and using their MyHealthLab® login credentials.



At the end of every chapter, students will find a QR code that provides access to Study on the Go, an unprecedented mobile integration between text and online content. Students can access text-specific resources, including quizzes and flashcards, by using their smartphones to scan the code.

Students can visit one of the sites below to download a free app to their smartphone. Once installed, the phone can scan the QR code and link to a website that leads to Pearson's Study on the Go resources for *Health: The Basics*, Sixth Canadian Edition.

ScanLife

<http://getscanlife.com>

NeoReader

<http://get.neoreader.com>

QuickMark

<http://www.quickmark.com.tw>

MyDietAnalysis

Powered by ESHA Research, Inc., MyDietAnalysis offers an accurate, reliable, easy-to-use program that helps students assess their lifestyles. Featuring a database of nearly 20 000 foods, the program assists in the tracking of diet and activity levels. Students can generate and submit reports electronically.

NOTE: Check with your professor if access to MyDietAnalysis comes with the purchase of a new copy of *Health: The Basics* textbook. If not, you can purchase access at www.mydietanalysis.com.

Behaviour Change Log Book and Wellness Journal, Second Edition

This assessment tool helps students track daily exercise and nutritional intake and create a long-term nutrition and fitness prescription plan. It also includes a Behaviour Change Contract and topics for journal-based activities. Please speak with a Pearson Sales Representative about packaging this booklet (ISBN 978032103177) with *Health: The Basics*, Sixth Canadian Edition.

Customizable Text Options

Pearson Custom Library (PCL)

For enrollments of at least 25 students, you can create your own textbook by choosing the chapters that best suit your own course needs. To begin building your custom text, visit www.pearsoncustomlibrary.com. You may also work with a dedicated Pearson Custom editor to create your ideal text—publishing your own original content or mixing and matching Pearson content. Contact your local Pearson Representative to get started.

ACKNOWLEDGMENTS

We thank the following people at Pearson Canada for their part in the sixth Canadian edition of *Health: The Basics*: acquisitions editor Lisa Rahn; developmental editor Toni Chahley; production editor Emily Bush; project manager Richard di Santo; copy editor Charlotte Morrison-Reed; and proofreader Chris Feldman.

We also thank the following reviewers whose helpful feedback helped shape this new edition:

Brenda Bruner, Nipissing University
Penny Deck, Simon Fraser University
Cathy Deyo, College of New Caledonia
Gareth Jones, University of British Columbia
Emilio Landolfi, University of the Fraser Valley
Patty McCrodan, Camosun College
Linda McDevitt, Algonquin College
Michelle Mueller, University of Alberta
Rick Muldoon, St. Clair College
Tien Nguyen, University of Ottawa
Noel Quinn, Sheridan College
Mandana Salijegheh, Simon Fraser University

And our thanks to the reviewers whose feedback helped shape the fifth Canadian edition:

Brenda Bruner, Queen's University
Penny Deck, Simon Fraser University
Joe Ellis, Sir Sanford Fleming College
Celine Homsy, John Abbott College
Gareth R. Jones, University of British Columbia–Okanagan
Jennifer Kuk, York University
Linda McDevitt, Algonquin College
Mary McKenna, University of New Brunswick
Chris Perkins, Lambton College
Deanna Schick, Trinity Western University
Tammy Whitaker-Campbell, Brock University
Sanni Yaya, University of Ottawa

