

14th
EDITION

Principles and Labs for Fitness & Wellness

Werner W. K. Hoeger

Sharon A. Hoeger

Amber L. Fawson

Cherie I. Hoeger



Australia • Brazil • Mexico • Singapore • United Kingdom • United States

Chapter Labs

Chapter 1

Physical Fitness and Wellness 1

- Lab 1A** Daily Physical Activity Log 35
- Lab 1B** Wellness Lifestyle Questionnaire 37
- Lab 1C** PAR-Q and Health History Questionnaire 40
- Lab 1D** Resting Heart Rate and Blood Pressure 42

Chapter 2

Behavior Modification 44

- Lab 2A** Exercising Control over Your Physical Activity and Nutrition Environment 72
- Lab 2B** Behavior Modification Plan 74
- Lab 2C** Setting SMART Goals 76

Chapter 3

Nutrition for Wellness 78

- Lab 3A** Nutrient Analysis 132
- Lab 3B** MyPlate Record Form 135

Chapter 4

Body Composition 137

- Lab 4A** Hydrostatic Weighing for Body Composition Assessment 160
- Lab 4B** Body Composition, Disease Risk Assessment, and Recommended Body Weight Determination 162

Chapter 5

Weight Management 164

- Lab 5A** Computing Your Daily Caloric Requirement 208
- Lab 5B** Weight-Loss Behavior Modification Plan 209
- Lab 5C** Calorie-Restricted Diet Plans 210
- Lab 5D** Healthy Plan for Weight Maintenance or Gain 214
- Lab 5E** Weight Management: Measuring Progress 216

Chapter 6

Cardiorespiratory Endurance 218

- Lab 6A** Cardiorespiratory Endurance Assessment 250

- Lab 6B** Caloric Expenditure and Exercise Heart Rate 252

- Lab 6C** Exercise Readiness Questionnaire 256

- Lab 6D** Cardiorespiratory Exercise Prescription 258

Chapter 7

Muscular Fitness: Strength and Endurance 260

- Lab 7A** Muscular Strength and Endurance Assessment 289
- Lab 7B** Strength-Training Program 291

Chapter 8

Muscular Flexibility 310

- Lab 8A** Muscular Flexibility Assessment 330
- Lab 8B** Posture Evaluation 332
- Lab 8C** Flexibility Development and Low Back Conditioning 334

Chapter 9

Fitness Programming and Skill Fitness 341

- Lab 9A** Personal Reflection on Exercise and Exercise Enjoyment 382
- Lab 9B** Assessment of Skill Fitness 386
- Lab 9C** Personal Fitness Plan 388

Chapter 10

Stress Assessment and Management Techniques 392

- Lab 10A** Stress Events Scale 419
- Lab 10B** Type A Personality and Hostility Assessment 421
- Lab 10C** Stress Vulnerability Questionnaire 423
- Lab 10D** Goals and Time Management Skills 425
- Lab 10E** Stress Management 429

Chapter 11

Preventing Cardiovascular Disease 431

- Lab 11A** Self-Assessment Coronary Heart Disease Risk Factor Analysis 464

Chapter 12

Cancer Prevention 466

Lab 12A Cancer Prevention Guidelines 496

Lab 12B Early Signs of Illness 497

Lab 12C Cancer Risk Profile 498

Chapter 13

Addictive Behavior 500

Lab 13A Addictive Behavior Questionnaires 531

Lab 13B Smoking Cessation Questionnaires 533

Chapter 14

Preventing Sexually Transmitted Infections 537

Lab 14A Self-Quiz on HIV and AIDS 557

Chapter 15

Lifetime Fitness and Wellness 559

Lab 15A Life Expectancy and Physiological Age Prediction
Questionnaire 578

Lab 15B Fitness and Wellness Community Resources 582

Lab 15C Self-Evaluation and Future Behavioral Goals 584

Contents

Chapter 1

Physical Fitness and Wellness 1

- Life Expectancy 4
- Leading Health Problems in the United States 6
 - Diseases of the Cardiovascular System 6
 - Cancer 7
 - Chronic Lower Respiratory Disease 7
 - Accidents 7
- Lifestyle as a Health Problem 9
- The Dose-Response Relationship between Physical Activity and Health 9
 - Exercise Is Medicine 12
- Additional Benefits of a Comprehensive Fitness Program 12
 - Health Benefits 12
 - Exercise and Brain Function 13
- Sitting Disease: A 21st-Century Chronic Disease 14
- Physical Activity and Exercise Defined 16
- Types of Physical Fitness 18
- Fitness Standards: Health versus Physical Fitness 18
 - Health Fitness Standards 19
 - Physical Fitness Standards 20
 - Which Program Is Best? 21
- Federal Guidelines for Physical Activity 21
- Monitoring Daily Physical Activity 23
 - Pedometers and Activity Trackers 23
 - Recommended Steps per Day 24
- Economic Benefits of Physical Activity 25
- Wellness 26
 - The Seven Dimensions of Wellness 26



© Fitness & Wellness, Inc.

- The Wellness Challenge for Our Day 30
- Wellness Education: Using This Book 30
 - A Personalized Approach 30
 - Exercise Safety 30
- Assessment of Resting Heart Rate and Blood Pressure 31
 - Mean Blood Pressure 33
- Assess Your Behavior 33
- Assess Your Knowledge 33
- Lab 1A** Daily Physical Activity Log 35
- Lab 1B** Wellness Lifestyle Questionnaire 37
- Lab 1C** PAR-Q and Health History Questionnaire 40
- Lab 1D** Resting Heart Rate and Blood Pressure 42

Chapter 2

Behavior Modification 44

- Living in a Toxic Health and Fitness Environment 46
 - Environmental Influence on Physical Activity 47
 - Environmental Influence on Diet and Nutrition 49
- Keys to Changing Behavior 52
- Personal Values and Behavior 52
- Your Brain and Your Habits 52
 - Changing Habits through Mindfulness and Repetition 53
 - Changing Habits by Focusing on Long-Term Values 54
- Planning and Willpower 54
 - Implementation Intentions 55
- Barriers to Change 55
- Self-Efficacy 56
 - Sources of Self-Efficacy 57
- Motivation and Locus of Control 57
- Behavior Change Theories 58
- The Transtheoretical Model of Change 60
 - Relapse 62
- The Process of Change 63
- Goal Setting and Evaluation 68
 - SMART Goals 68
 - Goal Evaluation 70
- Assess Your Behavior 70
- Assess Your Knowledge 70
- Lab 2A** Exercising Control over Your Physical Activity and Nutrition Environment 72
- Lab 2B** Behavior Modification Plan 74
- Lab 2C** Setting SMART Goals 76



© Fitness & Wellness Inc.

Chapter 3

Nutrition for Wellness 78

Nutrients	84
Carbohydrates	84
Simple Carbohydrates	84
Complex Carbohydrates	85
Fiber	86
Types of Fiber	87
Computing Daily Carbohydrate Requirement	87
Fats (Lipids)	88
Simple Fats	88
Compound Fats	93
Derived Fats	93
Proteins	93
Vitamins	96
Minerals	97
Water	97
A Healthy Diet	98
Nutrition Standards	99
Dietary Reference Intakes	99
Nutrient Analysis	101
Achieving a Balanced Diet	105
Choosing Healthy Foods	107
Vegetarianism	107
Nutrient Concerns	108
Nuts	110
Soy Products	110
Probiotics	110
Advanced Glycation End Products	111
Diets From Other Cultures	111
Mediterranean Diet	111
Ethnic Diets	112

Nutrient Supplementation	113
Antioxidants	114
Multivitamins	116
Vitamin D	116
Folate	118
Benefits of Foods	119
Functional Foods	120
Organic Foods	121
Genetically Modified Crops	122
Energy Substrates for Physical Activity	122
Energy (ATP) Production	122
Nutrition for Athletes	123
Carbohydrate Loading	123
Strenuous Exercise and Strength Training	124
Hyponatremia	124
Creatine Supplementation	125
Bone Health and Osteoporosis	125
Iron Deficiency	128
2015–2020 Dietary Guidelines for Americans	128
Key Recommendations	129
Physical Activity Recommendation	129
Proper Nutrition: A Lifetime Prescription for Healthy Living	130
Assess Your Behavior	131
Assess Your Knowledge	131
Lab 3A Nutrient Analysis	132
Lab 3B MyPlate Record Form	135

Chapter 4

Body Composition 137

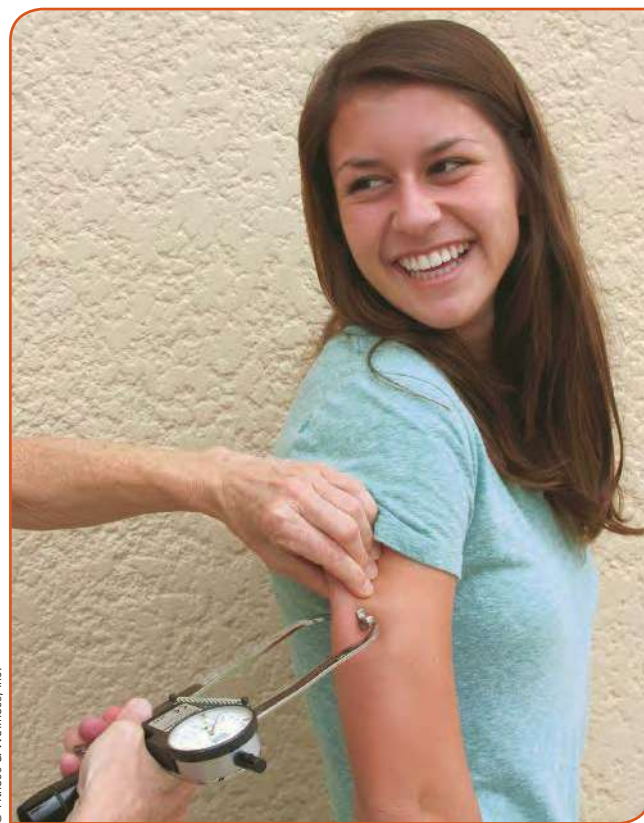
What Is Body Composition?	138
Essential and Storage Fat	140
Why Does Body Composition Matter?	140
Body Composition and Weight Loss	141
Avoiding Creeping Changes in Body Composition	141
Body Shape and Health Risk	141
Techniques to Assess Body Composition	142
Dual Energy X-ray Absorptiometry	143
Hydrostatic Weighing	143
Air Displacement	145
Skinfold Thickness	145
Girth Measurements	146
Bioelectrical Impedance	146
Metrics Used to Assess Body Size and Shape	149
Body Mass Index	149
Waist Circumference	153

- Waist-to-Height Ratio: “Keep your waist circumference to less than half your height.” 154
- Obtaining an Accurate Waist Measurement 155
- Determining Recommended Body Weight 156
 - Begin with Your Current Body Composition 156
 - Calculate Your Recommended Body Weight 157
- Importance of Regularly Assessing Body Composition 158
- Assess Your Behavior 158
- Assess Your Knowledge 159
- Lab 4A** Hydrostatic Weighing for Body Composition Assessment 160
- Lab 4B** Body Composition, Disease Risk Assessment, and Recommended Body Weight Determination 162

Chapter 5

Weight Management 164

- Weight Management in the Modern Environment 166
 - The Wellness Way to Lifetime Weight Management 167
- Overweight versus Obese 168
 - Body Weight Affects Wellness 168
- Tolerable Weight 169
 - Body Image and Acceptance 169
- The Weight Loss Dilemma 170
 - Health Consequences of Dieting 170
 - Diet Craze 171
 - Low-Carb Diets 171
 - Exercise-Related Weight Loss Myths 174
 - Adopting Permanent Change 175
- Mental and Emotional Aspects of Weight Management 175
 - Willpower versus Planning 175
 - Mindful Eating versus Distracted Eating 176
 - Avoiding Perfectionism 177
 - Feelings of Satisfaction versus Deprivation 177
 - Eating and the Social Environment 177
 - Overcoming Emotional Eating 177
- Physiology of Weight Loss 181
 - Energy-Balancing Equation 181
 - Setpoint Theory 182
 - Maintaining Metabolism and Lean Body Mass 184
 - Rate of Weight Loss in Men versus Women 185
 - Protein, Fats, Fiber, and Feeling Satisfied 186
- Losing Weight the Sound and Sensible Way 186
 - Estimating Your Daily Energy Requirement 186
 - Adjusting Your Fat Intake 187
 - Reducing Evening Eating 188
 - The Importance of Breakfast 189
 - Drink Water and Avoid Liquid Calories 190
 - Reducing Your Eating Occasions 190
 - Foods that Aid in Weight Loss 191
 - Monitoring Your Diet with Daily Food Logs 192
- Nondietary Factors that Affect Weight Management 193
 - Sleep and Weight Management 193
 - Light Exposure and BMI 193
 - Monitoring Body Weight 193
- Physical Activity and Weight Management 194
 - Physical Activity and Energy Balance 194
 - Physical Activity Predicts Success at Weight Management 195
 - Amount of Physical Activity Needed for Weight Loss 195
 - Exercise and Body Composition Changes 196
 - Overweight and Fit Debate 197
- Types of Exercise Recommended 198
 - Strength-Training Increases Lean Body Mass 198
 - The Roles of Exercise Intensity and Duration in Weight Management 199
- Healthy Weight Gain 202
- Behavior Modification and Adherence to a Weight Management Program 203
 - The Simple Truth 203
- Assess Your Behavior 206
- Assess Your Knowledge 206
- Lab 5A** Computing Your Daily Caloric Requirement 208
- Lab 5B** Weight-Loss Behavior Modification Plan 209



© Fitness & Wellness, Inc.



Chris Black

- Lab 5C** Calorie-Restricted Diet Plans 210
Lab 5D Healthy Plan for Weight Maintenance or Gain 214
Lab 5E Weight Management: Measuring Progress 216

Chapter 6

Cardiorespiratory Endurance 218

- Basic Cardiorespiratory Physiology: A Quick Survey 221
 Aerobic and Anaerobic Exercise 222
 Benefits of Aerobic Exercise 223
 Assessing Physical Fitness 225
 Responders versus Nonresponders 226
 Assessing Cardiorespiratory Endurance 226
 Components of VO_2 226
 Tests to Estimate VO_{2max} 227
 Interpreting the Results of Your VO_{2max} 233
 Predicting VO_2 and Caloric Expenditure from Walking and Jogging 234
 Ready to Start an Exercise Program? 235
 Guidelines for Developing Cardiorespiratory Endurance 235
 Intensity 236
 Type (Mode) 239
 Time (Duration) 239
 Frequency 241
 “Physical Stillness:” A Deadly Proposition 241
 Volume 242
 Progression Rate 242
 Rating the Fitness Benefits of Aerobic Activities 243

- Getting Started and Adhering to a Lifetime Exercise Program 244

 A Lifetime Commitment to Fitness 248

- Assess Your Behavior 248

- Assess Your Knowledge 248

- Lab 6A** Cardiorespiratory Endurance Assessment 250

- Lab 6B** Caloric Expenditure and Exercise Heart Rate 252

- Lab 6C** Exercise Readiness Questionnaire 256

- Lab 6D** Cardiorespiratory Exercise Prescription 258

Chapter 7

Muscular Fitness: Strength and Endurance 260

- Benefits of Strength-Training 263

 Improves Functional Capacity 263

 Improves Overall Health 263

 Increases Muscle Mass and Resting Metabolism 263

 Improves Body Composition 264

 Helps Control Blood Sugar 264

 Enhances Quality of Life as You Age 264

- Gender Differences 265

- Assessing Muscular Strength and Endurance 266

 Muscular Strength: Hand Grip Strength Test 267

 Muscular Endurance Test 267

 Muscular Strength and Endurance Test 267

 Basic Muscle Physiology 270

 Types of Muscle Hypertrophy 271

- Factors that Affect Muscular Fitness 272

 Neural Function 272

 Types of Muscle Fiber 272

 Overload 273

 Specificity of Training 273

 Training Volume 273

 Periodization 273

- Guidelines for Strength-training 274

 Type (Mode) of Training 274

 Intensity (Resistance) 277

 Time (Sets) 278

 Frequency 279

 Results in Strength Gain 280

- Dietary Guidelines for Muscular and Strength Development 280

- Strength-Training Exercises 281

 Exercise Variations 281

 Plyometric Exercise 281

 Core Strength-training 283

 Stability Exercise Balls 283

 Elastic-Band Resistive Exercise 284

- Exercise Safety Guidelines 285



iStockphoto.com/Christopher Furchter

- Setting Up Your Own Strength-Training Program 285
- Assess Your Behavior 288
- Assess Your Knowledge 288
- Lab 7A** Muscular Strength and Endurance Assessment 289
- Lab 7B** Strength-Training Program 291
- Strength-Training Exercises without Weights 293
- Strength-Training Exercises with Weights 297
- Stability Ball Exercises 307

Chapter 8

Muscular Flexibility 310

- Benefits of Good Flexibility 312
- Factors that Affect Flexibility 312
 - Joint Structure 313
 - Adipose Tissue 313
 - Muscular Elasticity and Genetics 313
 - Body Temperature 313
 - Age 313
 - Gender 313
 - Level of Physical Activity 313
- Assessing Flexibility 313
 - Interpreting Flexibility Test Results 316
- Guidelines for Developing Muscular Flexibility 318
 - Types of Stretching Exercises 318
 - Physiological Response to Stretching 319
 - Intensity 320
 - Time/Repetitions 320
 - Frequency 320
 - When to Stretch? 320
- Flexibility Exercises 321
 - Contraindicated Exercises 321
- Preventing and Rehabilitating Low Back Pain 323
 - Causes of Low Back Pain 323
 - Evaluating Body Posture 323
 - Effects of Stress 326

- When to Call a Physician 326
- Treatment Options 327
- Personal Flexibility and Low Back Conditioning Program 328
- Assess Your Behavior 329
- Assess Your Knowledge 329
- Lab 8A** Muscular Flexibility Assessment 330
- Lab 8B** Posture Evaluation 332
- Lab 8C** Flexibility Development and Low Back Conditioning 334
- Flexibility Exercises 336
- Exercises For the Prevention and Rehabilitation of Low Back Pain 338

Chapter 9

Fitness Programming and Skill Fitness 341

- Choosing an Exercise Program with Your Values in Mind 343
 - Being Flexible with Your Exercise Routine 344
- Exercise Prescription for Health and Fitness 345
 - Basic Exercise Training Principles 345
 - Interval Training 347
 - High-Intensity Interval Training 347
 - Ultra-Short Workouts 348
 - Cross-Training 350
 - Overtraining 350
 - Periodization 351
- Skill-Related Fitness 352
 - The Six Components of Skill-Related Fitness 352
 - Team Sports 356
 - Performance Tests for Skill-Related Fitness 356
- Exercise Programming for Sport or Event Participation 360
 - Sport-Specific Training 360
 - Preparing for Sports Participation 360
- General Exercise Considerations 363
 - Time of Day for Exercise 363
 - Exercise in Heat and Humidity 363
 - Exercise in Cold Weather 364
 - Exercising with the Cold or Flu 366
- Nutrition and Hydration during Exercise 366
 - Fluid Replacement during Exercise 366
 - Meal Timing during Exercise 367
- Exercise-Related Injuries 368
 - Muscle Soreness and Stiffness 368
 - Exercise Intolerance 368
 - Side Stitch 368
 - Shin Splints 369
 - Muscle Cramps 369
 - Acute Sports Injuries 369

Tailoring Exercise to Health Circumstances 370

- Asthma and Exercise 370
- Arthritis and Exercise 371
- Diabetes and Exercise 371
- Smoking and Exercise 372

Women's Health and Exercise 373

- Menstruation and Exercise 373
- The Female Athlete Triad 373
- Exercise and Dysmenorrhea 373
- Exercise during Pregnancy 373

Exercise and Aging 375

- Benefits of Lifelong Exercise 375
- Exercise Training for Seniors 375
- Body Composition in Seniors 378
- Exercise and Mental Health in Seniors 378
- Exercise Recommendations for Seniors 378

You Can Get It Done 378

Assess Your Behavior 381

Assess Your Knowledge 381

Lab 9A Personal Reflection on Exercise and Exercise Enjoyment 382

Lab 9B Assessment of Skill Fitness 386

Lab 9C Personal Fitness Plan 388



© Fitness & Wellness, Inc.

Chapter 10

Stress Assessment and Management Techniques 392

The Mind—Body Connection 394

- The Brain 394
- The Immune System 394

Stress 395

- Eustress and Distress 395
- Chronic Distress Leads to Illness 396

How the Body Adapts to Stress 396

- Alarm Reaction 396
- Resistance 396
- Exhaustion and Recovery 396

Sources of Stress 397

How Perception and Attitude Affect Health 398

- Self-Esteem 398
- Fighting Spirit 398

How Behavior Patterns Affect Health 399

Vulnerability to Stress 401

Sleep Management 402

- How Much Sleep Do I Need? 402
- What Happens If I Don't Get Enough Sleep? 402
- College Students Are Among the Most Sleep-Deprived 403
- Does It Help to "Catch up" on Sleep on Weekends? 403

Time Management 404

- Five Steps to Time Management 404
- Time-Management Skills 405

Managing Technostress 406

How the Body Responds to Stress 407

Coping with Stress 407

- Physical Activity 408
- Relaxation Techniques 411
- Meditation 416

Which Technique Is Best? 418

Assess Your Behavior 418

Assess Your Knowledge 418

Lab 10A Stress Events Scale 419

Lab 10B Type A Personality and Hostility Assessment 421

Lab 10C Stress Vulnerability Questionnaire 423

Lab 10D Goals and Time Management Skills 425

Lab 10E Stress Management 429

Chapter 11

Preventing Cardiovascular Disease 431

Cardiovascular Disease 434

Most Prevalent Forms of Cardiovascular Disease 434

- Stroke 434
- Coronary Heart Disease 435
 - Coronary Heart Disease Risk Profile 435
- Leading Risk Factors for Coronary Heart Disease 436
 - Physical Inactivity 437
 - Abnormal Electrocardiograms 439
 - Abnormal Cholesterol Profile 441
 - Elevated Triglycerides 447
 - Elevated Homocysteine 448
 - Inflammation 449
 - Diabetes 450
 - Hypertension (High Blood Pressure) 453
 - Excessive Body Fat 459
 - Tobacco Use 459
 - Tension and Stress 460
 - Personal and Family History 461
 - Age 461
- Cardiovascular Risk Reduction 462
 - Assess Your Behavior 463
 - Assess Your Knowledge 463
- Lab 11A** Self-Assessment Coronary Heart Disease Risk Factor Analysis 464

Chapter 12

Cancer Prevention 466

- How Cancer Starts 468
 - DNA Mutations 468
 - Tumor Formation 469
 - Metastasis 470
- Genetic versus Environmental Risk 471
- Incidence of Cancer 472
- Guidelines for Preventing Cancer 473
 - Ten Recommendations for a Cancer Prevention Lifestyle 473
 - How Can I Know Which Substances Cause Cancer? 476
- Dietary Changes 476
 - Vegetables 476
 - Vitamin D 477
 - Antioxidants 478
 - Phytonutrients 478
 - Fiber 478
 - Tea 479
 - Spices 479
 - Sugar 479
 - Dietary Fat 479
 - Processed Meat and Protein 479
 - Soy 481
 - Alcohol Consumption 481
 - Nutrient Supplements 481



© Fitness & Wellness, Inc.

- Excessive Body Weight 482
- Abstaining from Tobacco 482
- Avoiding Excessive Exposure to Sun 483
- Monitoring Estrogen, Radiation Exposure, and Potential Occupational Hazards 484
- Physical Activity 485
- Other Factors 485
- Early Detection 485
- Warning Signals of Cancer 486
- Cancer: Assessing Your Risks 486
 - Risk Factors for Common Sites of Cancer 486
- What Can You Do? 494
- Assess Your Behavior 494
- Assess Your Knowledge 494
- Lab 12A** Cancer Prevention Guidelines 496
- Lab 12B** Early Signs of Illness 497
- Lab 12C** Cancer Risk Profile 498

Chapter 13

Addictive Behavior 500

- Addiction 502
- How Addiction Develops 502



© Fitness & Wellness, Inc.

- Drugs and Dependence 503
 - Caffeine 504
 - Nonmedical Use of Prescription Drugs 505
 - Inhalant Abuse 506
 - Marijuana 506
 - Cocaine 507
 - Methamphetamine 508
 - MDMA (Ecstasy) 510
 - Heroin 510
 - New Psychoactive Substances 512
 - Synthetic Cannabinoids (Fake Pot or Spice) 512
- Alcohol 513
 - Effects on the Body 514
 - Addictive and Social Consequences of Alcohol Abuse 514
 - Alcohol on Campus 515
 - How to Cut Down on Drinking 516
- Treatment of Addictions 517
- Tobacco 517
 - Types of Tobacco Products 518
 - Effects on the Cardiovascular System 519
 - Smoking and Cancer 519
 - Effects of Secondhand Smoke 520

- Health Care Costs of Smoking 521
- Morbidity and Mortality 521
- Trends 521
- Why People Smoke 522
 - Smoking Addiction and Dependency 522
 - Why Do You Smoke? Test 522
 - Smoking Cessation 523
 - Do You Want to Quit? Test 523
 - Breaking the Habit 524
 - Quitting Cold Turkey 525
 - Cutting Down Gradually 525
 - Nicotine-Substitution Products 526
 - Life after Cigarettes 527
- Assess Your Behavior 529
- Assess Your Knowledge 529
- Lab 13A** Addictive Behavior Questionnaires 531
- Lab 13B** Smoking Cessation Questionnaires 533

Chapter 14

Preventing Sexually Transmitted Infections 537

- Types and Causes of Sexually Transmitted Infections 540
- Four Most Common Bacterial STIs 540
 - Chlamydia 541
 - Gonorrhea 541
 - Syphilis 542
 - Trichomoniasis 542
- Four Most Common Viral STIs 543
 - Human Papillomavirus (HPV) and Genital Warts 543
 - Genital Herpes 544
 - Hepatitis 545
 - HIV and AIDS 546
- Preventing Sexually Transmitted Infections 552
 - Wise Dating 552
 - Monogamous Sexual Relationship 552
- Assess Your Behavior 555
- Assess Your Knowledge 555
- Lab 14A** Self-Quiz on HIV and AIDS 557

Chapter 15

Lifetime Fitness and Wellness 559

- Life Expectancy and Physiological Age 562
- Conventional Western Medicine 563
 - Finding a Physician 563
 - Searching for a Hospital 563



© Fitness & Wellness, Inc.

Complementary and Alternative Medicine	564
Types of CAM Practices	565
Costs for CAM	566
CAM Shortcomings	566
Finding a CAM Practitioner	567

Integrative Medicine	568
Quackery and Fraud	568
Looking at Your Fitness Future	572
Health and Fitness Club Memberships	572
Personal Trainers	573
Purchasing Exercise Equipment	574
Self-Evaluation and Behavioral Goals for the Future	574
Self-Evaluation	574
Behavioral Goals for the Future	574
The Fitness and Wellness Experience and a Challenge for the Future	575
Assess Your Behavior	576
Assess Your Knowledge	577
Lab 15A Life Expectancy and Physiological Age Prediction Questionnaire	578
Lab 15B Fitness and Wellness Community Resources	582
Lab 15C Self-Evaluation and Future Behavioral Goals	584
Appendix A: Nutritive Value of Selected Foods	588
Notes and Suggested Readings	600
Answers to Assess Your Knowledge	612
Glossary	613
Index	622