

1 Introduction to Physical Fitness and Wellness 1

- Lifestyle, Health, and Quality of Life 4**
- 2007 ACSM/AHA Physical Activity and Public Health Recommendations 6**
 - Importance of Increased Physical Activity 6
- Wellness 7**
- Physical Fitness 8**
 - Health-Related Fitness 8
 - Skill-Related Fitness 9
 - Physiological Fitness 9
- Benefits of Fitness and Wellness 10**
- National Health Objectives for the Year 2010 12**
- The Path to Fitness and Wellness 13**
- Behavior Modification 13**
 - Changing Behavior 14
 - Motivation and Locus of Control 16
- Behavior Modification Principles 18**
 - Self-Analysis 18
 - Behavior Analysis 18
 - Goal Setting 18
 - Social Support 18
 - Monitoring 18
 - A Positive Outlook 19
 - Reinforcement 19
- SMART Goals 19**
 - Goal Evaluation 20
- A Word of Caution Before You Start Exercise 21**
- Web Interactive 21**
- Assess Your Behavior 21**
- Assess Your Knowledge 21**
- Activity 1.1 Behavior Modification: Stages of Change 23**
- Activity 1.2 Clearance for Exercise Participation 25**

2 Assessment of Physical Fitness 27

- Responders Versus Nonresponders 28**
- Fitness Assessment Battery 29**
 - Health Fitness Standard 29
 - Physical Fitness Standard 30
- Cardiorespiratory Endurance 30**
 - Assessing Cardiorespiratory Endurance 32
- Muscular Strength and Endurance 34**
 - Muscular Strength and Muscular Endurance 35
 - Determining Strength 35

- Muscular Flexibility 39**
 - Assessing Flexibility 40
 - Interpreting Flexibility Tests 43
- Body Composition 43**
 - Assessing Body Composition 45
- Effects of Exercise and Diet on Body Composition 53**
- Web Interactive 53**
- Assess Your Behavior 54**
- Assess Your Knowledge 54**
- Activity 2.1 Personal Fitness Profile 57**
- Activity 2.2 Computation Form for Recommended Body Weight, Body Mass Index (BMI), and Waist Circumference (WC) 59**

3 Exercise Prescription 61

- Monitoring Daily Physical Activity 62**
- Readiness for Exercise 64**
- Exercise Prescriptions 65**
- Cardiorespiratory Endurance 65**
 - Cardiorespiratory Exercise Prescription 65
- Muscular Strength and Endurance 70**
 - Overload Principle 70
 - Specificity of Training 71
 - Strength-Training Prescription 71
 - Strength-Training Exercises 75
 - Strength-Training Exercise Guidelines 75
 - Core Strength Training 76
 - Designing Your Own Strength-Training Program 76
 - Dietary Recommendations for Strength Development 77
- Flexibility 77**
 - Muscular Flexibility Prescription 77
 - Designing a Flexibility Program 80
- Pilates Exercise System 80**



Preventing and Rehabilitating Low Back Pain 80
Contraindicated Exercises 83
Getting Started 83
Setting Fitness Goals 84
Web Interactive 85
Assess Your Behavior 85
Assess Your Knowledge 86
Activity 3.1 Daily Physical Activity Log 87
Activity 3.2 Exercise Readiness 89
Activity 3.3 Exercise Prescription Forms 91
Activity 3.4 Goal-Setting Form and Exercise Logs 95

4 Evaluating Fitness Activities 99

Aerobic Activities 99

Walking 100
 Hiking 101
 Jogging 101
 Aerobics 102
 Swimming 103
 Water Aerobics 104
 Cycling 105
 Spinning® 106
 Cross-Training 107
 Rope Skipping 108
 Cross-Country Skiing 108
 In-Line Skating 109
 Rowing 109
 Stair Climbing 110
 Racquet Sports 110

Rating the Fitness Benefits of Aerobic Activities 111

Skill-Related Fitness 111
Team Sports 114
Tips to Enhance Your Aerobic Workout 114
Web Interactive 115
Assess Your Behavior 116



© Fitness & Wellness, Inc.

Assess Your Knowledge 116
Activity 4.1 My Personal Fitness Program 117

5 Nutrition for Wellness 119

The Essential Nutrients 120

Carbohydrates 120
 Fats 122
 Proteins 123
 Vitamins 123
 Minerals 124
 Water 124

Nutrition Standards 125

Dietary Reference Intakes 125
 Daily Values 126

Dietary Guidelines 127

Determining Fat Content in the Diet 127

Balancing the Diet 128

Nutrient Analysis 130

Vegetarianism 130

Nutrient Supplementation 131

Antioxidants 132
 Multivitamins 134
 Vitamin D 134
 Folate 135

Benefits of Foods 135

Probiotics 136
 Fish 136

Eating Disorders 136

Anorexia Nervosa 137
 Bulimia Nervosa 138
 Binge-Eating Disorder 139
 Treatment 139

2005 Dietary Guidelines for Americans 139

A Lifetime Commitment to Wellness 140

Web Interactive 140

Assess Your Behavior 141

Assess Your Knowledge 141

Activity 5.1 Nutrient Analysis 143

6 Weight Management 145

Tolerable Weight 148

Fad Dieting 148

Principles of Weight Management 150

Energy-Balancing Equation 150
 Diet and Metabolism 150

Exercise: The Key to Successful Weight Management 152

The Myth of Spot-Reducing 154
 Exercise Safety 154

Low-Intensity Versus High-Intensity Exercise for Weight Loss 155

Designing Your Own Weight-Loss Program 156

Estimating Your Caloric Intake 156

Monitoring Your Diet Through Daily Food Logs 158

Using Low-Fat Entrees 159

Behavior Modification and Adherence to a Lifetime Weight Management Program 159

You Can Do It! 161

Web Interactive 161

Assess Your Behavior 162

Assess Your Knowledge 162

Activity 6.1 Daily Caloric Requirement: Computation Form 165

Activity 6.2 Daily Food Intake Record 167

7 Stress Management 171

The Mind/Body Connection 172

Stress 172

The Body's Reaction to Stress 172

Adaptation to Stress 173

Alarm Reaction 174

Resistance 174

Behavior Patterns 174

Vulnerability to Stress 177

Sources of Stress 179

Coping with Stress 179

Time Management 181

Relaxation Techniques 183

Physical Activity 183

Progressive Muscle Relaxation 184

Breathing Techniques 186

Meditation 186

Yoga 187

Visual Imagery 188

Which Technique Is Best? 189

Web Interactive 189

Assess Your Behavior 189

Assess Your Knowledge 190

Activity 7.1 Stress Analysis 191

8 A Healthy Lifestyle Approach 193

A Wellness Lifestyle 194

Spiritual Well-Being 194

Causes of Death 195

Diseases of the Cardiovascular System 195

Types of Cardiovascular Disease and Their Prevalence 195

Risk Factors for CHD 196



© Bloomimage/Corbis

Cancer 209

Guidelines for Preventing Cancer 210

Other Risk Factors for Cancer 214

Chronic Lower Respiratory Disease 215

Accidents 215

Substance Abuse 215

Alcohol 215

Illegal Drugs 216

Treatment for Chemical Dependency 218

Sexually Transmitted Infections 218

HIV/AIDS 218

Guidelines for Preventing STIs 219

Web Interactive 220

Assess Your Behavior 221

Assess Your Knowledge 221

Activity 8.1 Managing Cardiovascular Disease and Cancer Risks 223

9 Relevant Fitness and Wellness Issues 225

Wellness Behavior Modification Issues 225

Safety of Exercise Participation and Injury Prevention 226

Special Considerations for Women 235

Hormone Replacement Therapy 241

Nutrition and Weight Control 243

Exercise and Aging 246

Fitness/Wellness Consumer Issues 248

What's Next? 253

Web Interactive 253

Assess Your Behavior 253

Assess Your Knowledge 254

Activity 9.1 Fitness and Wellness Lifestyle Self-Evaluation 255

Appendixes

A Strength-Training Exercises 258

B Flexibility Exercises 267

C Exercises for the Prevention and Rehabilitation of Low Back Pain 269

D Contraindicated Exercises 271

E Selective Nutrient Content of Common Foods 273



© Rob & Sas/Corbis

Notes 289

Answer Key 293

Glossary 294

Index 299

(Faint, mirrored text from the reverse side of the page, including titles like 'A Wellness Lifestyle Approach...', 'Spiritual Well-Being', 'Causes of Death', etc.)