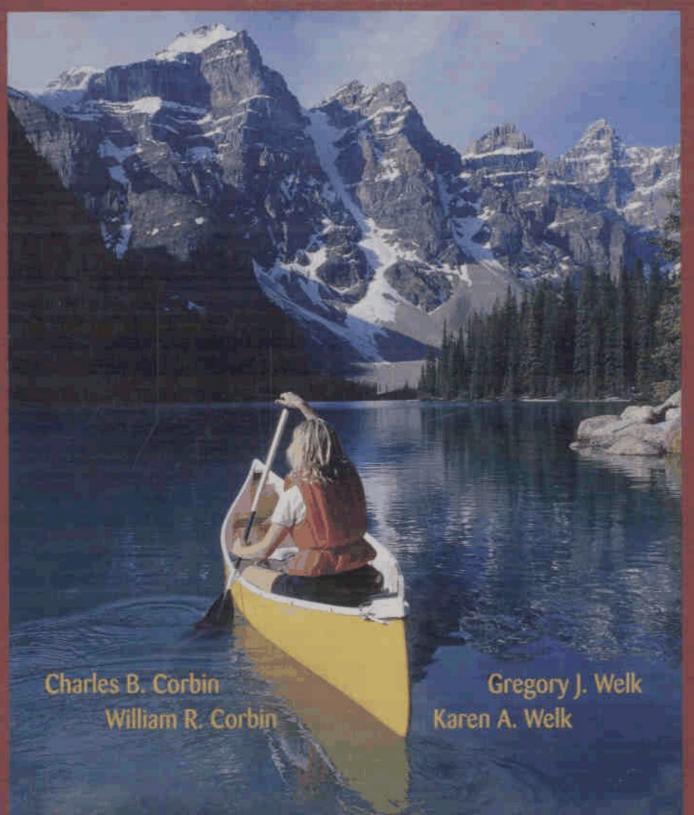
Concepts of PHYSICAL FITNESS

Active Lifestyles for Wellness

FOURTEENTH EDITION



Contents

Section I

Lifestyles for Health, Wellness, and Fitness 1

1 Health, Wellness, Fitness, and Healthy Lifestyles: An Introduction 1

National Health Goals 2

Health and Wellness 2

Physical Fitness 6

A Model for Achieving and Maintaining Lifelong Health, Wellness, and Fitness 9

Factors Influencing Health, Wellness, and Fitness 9

Healthy Lifestyles 12

The HELP Philosophy 13

Strategies for Action 14

Lab Resource Materials: The Healthy Lifestyle

Questionnaire 17

Lab 1A Wellness Self-Perceptions 19

2 Self-Management and Self-Planning Skills for Health Behavior Change 21

Making Lifestyle Changes 22

Factors That Promote Lifestyle Change 23

Self-Management Skills 27

Self-Planning for Healthy Lifestyles 27

Strategies for Action 32

Lab Resource Materials 36

Lab 2A The Stage of Change Questionnaire 37

Lab 2B The Self-Management Skills

Questionnaire 39

(sisterito) nell

An Introduction to Physical Activity 43

3 Preparing for Physical Activity 43
Factors to Consider Prior to Physical Activity 44
Factors to Consider during Daily Physical Activity 46

Physical Activity in the Heat and Cold 48
Physical Activity in Other Environments 51
Soreness and Injury 52
Attitudes about Physical Activity 52
Strategies for Action 55
Lab 3A Readiness for Physical Activity 57
Lab 3B The Warm-Up and Cool-Down 59
Lab 3C Physical Activity Attitude

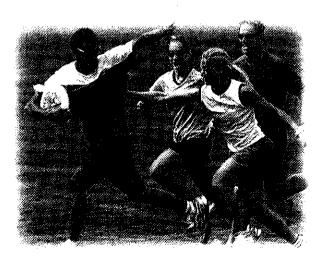
4 The Health Benefits of Physical Activity 63

Questionnaire 61

Physical Activity and Hypokinetic Diseases 64
Physical Activity and Cardiovascular Diseases 65
Physical Activity and the Healthy Heart 65
Physical Activity and Atherosclerosis 66
Physical Activity and Heart Attack 68
Physical Activity and Other Cardiovascular
Diseases 69

Physical Activity and Other Hypokinetic Conditions 71
Physical Activity and Aging 74
Physical Activity, Health, and Wellness 75
Strategies for Action 78

Lab 4A Assessing Heart Disease Risk Factors 81



5 How Much Physical Activity Is Enough? 83

The Principles of Physical Activity 84

The FIT Formula 86

The Physical Activity Pyramid 87

Understanding Physical Activity Guidelines 89

Physical Activity Patterns 90

Physical Fitness Standards 91

Strategies for Action 92

Lab 5A Self-Assessment of Physical

Activity 93

Lab 5B Estimating Your Fitness 95

The Physical Activity Pyramid 97

6 Lifestyle Physical Activity: Being Active in Diverse Environments 97

Adopting an Active Lifestyle 98

The Health Benefits of Lifestyle Physical Activity 99 How Much Lifestyle Physical Activity Is Enough? 101

Lifestyle Activity and the Environment 104

Strategies for Action 105

Lab 6A Planning and Self-Monitoring (Logging) Your Lifestyle Physical Activity 107

Lab 6B Evaluating Physical Activity Environments 109



7 Cardiovascular Fitness 111

Cardiovascular Fitness 112

Cardiovascular Fitness and Health Benefits 115

Threshold and Target Zones for Improving

Cardiovascular Fitness 116

Strategies for Action 123

Lab Resource Materials: Evaluating

Cardiovascular Fitness 125

Lab 7A Counting Target Heart Rate and Ratings

of Perceived Exertion 129

Lab 7B Evaluating Cardiovascular Fitness 131

8 Active Aerobics, Sports, and Recreational Activities 133

Physical Activity Pyramid: Level 2 134

Active Aerobic Activities 136

Active Recreation Activities 140

Active Sport Activities 140

Strategies for Action 143

Lab 8A The Physical Activity Adherence Questionnaire 145

Lab 8B Planning and Logging Participation in Active Aerobics, Sports, and Recreation 147

9 Flexibility 149

Flexibility Fundamentals 150

Factors Influencing Flexibility 151

Health Benefits of Flexibility and Stretching 152

Stretching Methods 154

How Much Stretch Is Enough? 156

Flexibility-Based Activities and Training Aids 158

Guidelines for Safe and Effective Stretching Exercise 159

Strategies for Action 159

Lab Resource Materials: Flexibility Tests 167

Lab 9A Evaluating Flexibility 169

Lab 9B Planning and Logging Stretching Exercises 171

10 Muscle Fitness and Resistance Exercise 173

Factors Influencing Strength and Muscular Endurance 174

Health Benefits of Muscle Fitness and Resistance Exercise 176

Types of PRE 177

Resistance Training Equipment 179

Progressive Resistance Exercise: How Much Is Enough? 180

Training Principles for PRE 183

Is There Strength in a Bottle? 184

Guidelines for Safe and Effective Resistance Training 187

Strategies for Action 189

Lab Resource Materials: Muscle Fitness Tests 201

Lab 10A Evaluating Muscle Strength: 1RM and Grip Strength 205

Lab 10B Evaluating Muscular Endurance 207

Lab 10C Planning and Logging Muscle Fitness Exercises: Free Weights or Resistance Machines 209

Lab 10D Planning and Logging Muscle Fitness Exercises: Calisthenics or Core Exercises 211

Section IV

Physical Activity: Special Considerations 213

11 Body Mechanics: Posture, Questionable Exercises, and Care of the Back and Neck 213

Anatomy and Function of the Spine 214

Good Posture Is Important for Neck and Back Health 215

Good Body Mechanics Is Important for Neck and Back Health 217

Causes and Consequences of Back and Neck Pain 219

Guidelines for Safe Physical Activity 222

Prevention of and Rehabilitation from Back and Neck Problems 223

Strategies for Action 226

Lab Resource Materials: Healthy Back Tests 243

Lab 11A The Healthy Back Tests and Back/Neck Questionnaire 245

Lab 11B Evaluating Posture 247

Lab 11C Planning and Logging Exercises: Care of the Back and Neck 249

12 Performance Benefits of Physical Activity 251

High-Level Performance and Training Characteristics 252

Training for Endurance and Speed 254

Training for Strength and Muscular Endurance 256

Training for Power 257

Training for Balance and Flexibility 258

Training for High-Level Performance: Skill-Related Fitness and Skill 259

Guidelines for High-Performance Training 261

Performance Trends and Ergogenic Aids 262

Strategies for Action 264

Lab Resource Materials: Skill-Related Physical

Fitness 267

Lab 12A Evaluating Skill-Related Physical Fitness 271

Lab 12B Identifying Symptoms of Overtraining 273

Section V

Nutrition and Body Composition 275

13 Body Composition 275

Understanding and Interpreting Body Composition Measures 276

Methods Used to Assess Body Composition 278

Health Risks Associated with Overfatness 280

Health Risks Associated with Excessively Low Body Fatness 282

The Origin of Fatness 283



The Relationship between Physical Activity and Body Composition 285

Strategies for Action 287

Lab Resource Materials: Evaluating Body Fat 291

Lab 13A Evaluating Body Composition: Skinfold Measures 299

Lab 13B Evaluating Body Composition: Height, Weight, and Circumference Measures 303

Lab 13C Determining Your Daily Energy Expenditure 305

14 Nutrition 309

Guidelines for Healthy Eating 310

Dietary Recommendations for Carbohydrates 314

Dietary Recommendations for Fat 315

Dietary Recommendations for Proteins 317

Dietary Recommendations for Vitamins 318

Dietary Recommendations for Minerals 321

Dietary Recommendations for Water and Other Fluids 321



Sound Eating Practices 322

Nutrition and Physical Performance 323

Strategies for Action 325

Lab 14A Nutrition Analysis 327

Lab 14B Selecting Nutritious Foods 331

15 Managing Diet and Activity for Healthy Body Fatness 333

Factors Influencing Weight and Fat Control 334

Guidelines for Losing Body Fat 335

Guidelines for Gaining Muscle Mass 340

Strategies for Action 341

Lab 15A Selecting Strategies for Managing Eating 343

Lab 15B Evaluating Fast-Food Options 345

Section VIII

Stress Management 347

16 Stress and Health 347

Sources of Stress 348

Reactions to Stress 350

Stress Responses and Health 352

Strategies for Action 355

Lab 16A Evaluating Your Stress Level 357

Lab 16B Evaluating Your Hardiness and Locus of Control 359

17 Stress Management, Relaxation, and Time Management 361

Physical Activity and Stress Management 362

Stress, Sleep, and Recreation 363

Time Management 364

Coping with Stress 366

Emotion-Focused Coping Strategies 368

Appraisal-Focused Coping Strategies (Cognitive Restructuring) 369

Problem-Focused Coping Strategies 370

Social Support and Stress Management 372

Strategies for Action 373

Lab 17A Time Management 375

Lab 17B Evaluating Coping Strategies 377

Lab 17C Relaxation Exercises 379

Lab 17D Evaluating Levels of Social Support 381

Making Informed Choices 383

18 Evaluating Fitness and Wellness Products: Becoming an Informed Consumer 383

Quacks and Quackery 384

Physical Activity and Exercise Equipment 385

Health and Fitness Clubs 388

Body Composition 388

Nutrition 389

Other Consumer Information 392

Books, Magazines, and Articles 392

The Internet 393

Strategies for Action 393

Lab 18A Practicing Consumer Skills: Evaluating Products 395

Lab 18B Evaluating a Health/Wellness or Fitness Club 397



19 Toward Optimal Health and Wellness: Planning for Healthy Lifestyle Change 399

Strategies for Action 401

Lab 19A Assessing Factors That Influence Health, Wellness, and Fitness 407

Lab 19B Planning for Improved Health, Wellness, and Fitness 409

Lab 19C Planning Your Personal Physical Activity Program 411

Appendixes

- A Metric Conversion Charts A-1
- **B** Calorie, Fat, Saturated Fat, Cholesterol, and Sodium Content of Selected Fast-Food Items A-4
- C Calorie Guide to Common Foods A-5
- Calories of Protein, Carbohydrates, and Fats in Foods A-7
- E Canada's Food Guide to Healthy Eating A-9

Selected References R-1

Credits C-1

Index I-1