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CONCEPTS OF  
**Fitness & Wellness**

A Comprehensive Lifestyle Approach



# *Concepts of* **Fitness & Wellness**

*A Comprehensive Lifestyle Approach*

**ELEVENTH EDITION**

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CONCEPTS OF FITNESS AND WELLNESS: A COMPREHENSIVE LIFESTYLE APPROACH,  
ELEVENTH EDITION

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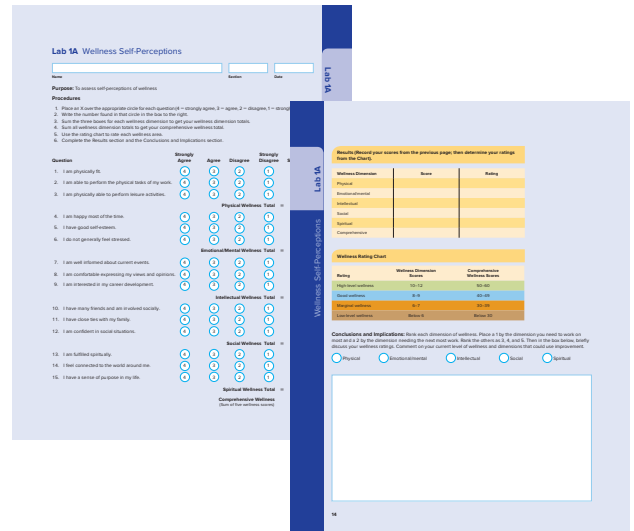
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# Thank You

Two words, *thank you*, can never be said enough to the many people who have helped the *Concepts* books to be successful, including the thousands of instructors and students who have taught and learned from these books for more than 50 years. We are proud that the *Concepts* books were among the first ever published for use in college fitness and wellness courses; that the *Surgeon General's Report on Physical Activity and Health* adopted definitions from the book; and that instructors have taught and learned from these books for nearly 50 years.

We listen to those who review our books and to our users, who provide comments by mail, phone, personal conversations, and email. Comments and critiques help us make our books better for both students and instructors. We want to thank the reviewers for the eleventh edition for their excellent input:

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## In Tribute

Dr. Ruth Lindsey  
1926–2005

On May 29, 2005, we lost a great leader and an outstanding advocate for healthy lifestyles, physical activity, and physical education. Our longtime coauthor and friend, Ruth Lindsey, will long be remembered as one of the original authors of *Concepts of Fitness and Wellness* and for her contributions to our profession.

## Dedication

The authors dedicate this new edition to our families (spouses, children, and grandchildren) for their support and sacrifices that enabled us to spend the time necessary to create this book.

## A Final Word

To list everyone who has made an impact on the *Concepts* texts over the years would take several book pages. Nevertheless, we feel that it is important to acknowledge those who have helped us. A list of those who have contributed to previous editions is available at [www.corbinconcepts.org](http://www.corbinconcepts.org), as are additional resources we have provided that support the use of *Concepts of Fitness and Wellness* in your course.

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# HELP: “Health is available to Everyone for a Lifetime, and it’s Personal”

## A proven philosophy for achieving lifetime fitness and wellness.

### LEARNING OBJECTIVES

After completing the study of this Concept, you will be able to:

- ▶ Describe the HELP philosophy and discuss its implications in making personal decisions about health, wellness, and fitness.
- ▶ Define the dimensions of health and wellness, and explain how they interact to influence health and wellness.
- ▶ Distinguish health-related and skill-related dimensions of physical fitness.
- ▶ Identify related national health goals and show how meeting personal goals can contribute to reaching national goals.

- Concise modules called “Concepts” give instructors flexibility and students a manageable framework for learning and mastering course content. Learning objectives introduce each Concept, guiding students on key points and how to assess their progress.

### A CLOSER LOOK

#### Blue Zones and Personal Responsibility

Lifestyles have a big impact on both quality and quantity of life. For his book *Blue Zones*, Dan Buettner researched communities across the world that had higher life expectancies and quality of life compared to other communities. The common characteristics in these healthy communities—including diet and activity—were identified and described as being important for healthy lifestyles. Although a healthy environment is

important, each person ultimately has to make wise choices and manage his or her own lifestyle, regardless of the setting. (See link in Suggested Resources and Readings.)

*Does your community provide a supportive environment for your health behaviors? Does the environment dictate your ability to be healthy, or is it your personal responsibility?*



- A Closer Look focuses on recent and sometimes controversial topics. Additional features include Technology Update (advances in technology) and In the News (late-breaking fitness and wellness information). Follow-up critical-thinking questions spur class discussion and personal reflection and are assignable within *Connect*.

## HELP Health is available to Everyone for a Lifetime, and it’s Personal

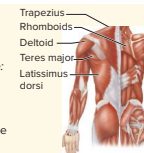
According to the National Institutes of Health, although genes do not necessarily cause diseases, they do influence our risk of developing diseases, such as cancer, heart disease, and addiction. Research on the interactions between our genes and our health is promising but controversial. (See link in Suggested Resources and Readings.)

*Would knowing you were genetically predisposed to a particular disease change the lifestyle decisions you make?*

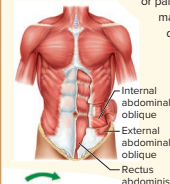


- HELP activities encourage students to reflect, think critically, and apply the HELP philosophy to their lives.

This exercise develops the muscles of the arms and shoulders. Hang (palms forward and shoulder-width apart) from a low bar (may be placed across two chairs), heels on floor, with the body straight from feet to head. Bracing the feet against a partner or fixed object is helpful. Pull up, keeping the body straight; touch the chest to the bar; then lower to the starting position. Repeat. *Note:* This exercise becomes more difficult as the angle of the body approaches horizontal and easier as it approaches the vertical. Variations: Perform so that the feet do not touch the floor (full pull-up). Or, perform with palms turned up. When palms are turned away from the face, pull-ups tend to use all the elbow flexors. With palms facing the body, the biceps are emphasized more.



This exercise develops the upper abdominal muscles. Lie on the floor with the knees bent and the arms extended or crossed with hands on shoulders or palms on ears. If desired, legs may rest on bench to increase difficulty. For less resistance, place hands at side of body (do not put hands behind head or neck). For more resistance, move hands higher. Curl up until the shoulder blades leave floor; then roll down to the starting position. Repeat. *Note:* Twisting the trunk on the curl-up develops the oblique abdominals.



- Detailed, updated illustrations show students exactly how to perform strength training and flexibility exercises, and the core muscles they are improving.

# A proven approach for *teaching* behavior change for health, wellness, and fitness



## Learn without Limits

McGraw-Hill *Connect*<sup>®</sup> gives students access to a wealth of online interactive activities and assignments—including interactive labs, videos with assessment, short essay questions, and auto-graded quizzes. *Connect* provides a highly interactive learning environment designed to help students connect to the resources they need to achieve success in the course. *Connect* gives instructors the tools to choose and create assignments, monitor student progress, and manage their course more easily and efficiently.

With *Connect*, the educational possibilities are limitless.

Quiz 4

Question #1 (of 7)

value: 10.00 points

### Video

Video Transcript

In the video reasons why people do or do not exercise are discussed. Choose one reason why you do not like to exercise and one reason why you do. In several sentences reflect on these reasons.

Rich text editor toolbar: B, I, U, ABC, list, link, unlink, undo, redo, A, color, background color, link icon.

Question #6 (of 7)

value: 10.00 points

### Key Terms

Match the term to the correct definition.

Trans fat		Dietary guideline that specifies the amount of a nutrient needed for almost all of the healthy individuals in a specific age and gender group
Adequate intake (AI)		Appropriate amounts of nutrients in the diet (AI, RDA, and UL)
Unsaturated fats		Dietary guideline established experimentally to estimate nutrient needs when sufficient data are not available to establish an RDA value
Fiber		Indigestible bulk in foods that can be either soluble or insoluble in body fluids
Dietary reference intake (DRI)		Maximum level of a daily nutrient that will not pose a risk of adverse health effects for most people
Recommended dietary allowance (RDA)		Monounsaturated or polyunsaturated fats that are usually liquid at room temperature and come primarily from vegetable sources
Saturated fats		Dietary fats that are usually solid at room temperature and come primarily from animal sources
Tolerable upper intake level (UL)		Fats that result when hydrogen is added to liquid oil to make it more solid

Reset

[report a content issue](#) [check my work](#)

Question #5 (of 7)

value: 10.00 points

### Technology Update

Technology Update: New Training Aids for Core Training

Core training is an immensely popular concept across the fields of sport, fitness, and rehabilitation. The popularity of core training programs and classes has led to an expanding array of core-training devices and functional fitness classes. One category of devices includes those that provide an unstable surface for challenging balance and stability. Rocker boards, air-filled domes, therapy balls, foam rollers, and sliding disks are a few examples. Participants creatively position themselves on these devices in various postures—standing, lunging, kneeling, or on hands and knees. A second category of devices includes equipment that provides a dynamic challenge to the arms or legs. Elastic tubing, stretch cords, vibrating wands, kettle bells and medicine balls are used to overload the extremities and elicit a corresponding and supportive contraction of the core stabilizers. Creative new devices enter the fitness market on a monthly basis, giving exercise participants fresh new ideas for their workout regimen.

The explosion of new training aides in stores, fitness centers, and clinics can be overwhelming to some people. Do you enjoy trying out new training devices or do you prefer to stick with your own regimen and routine? If you do use them, what makes them attractive to you? If you don't use them, what barriers prevent you from trying them?

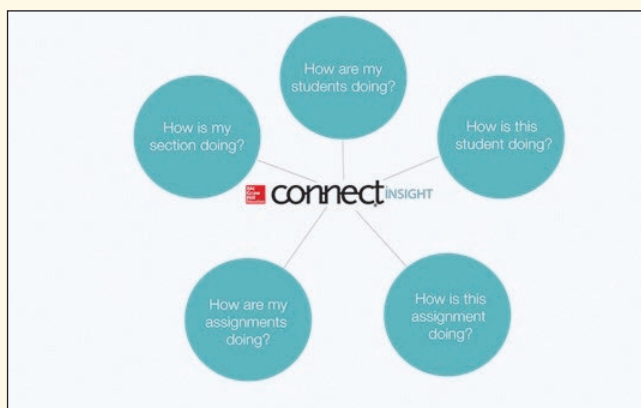
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Path:

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**McGraw Hill Education** | **SMARTBOOK®**

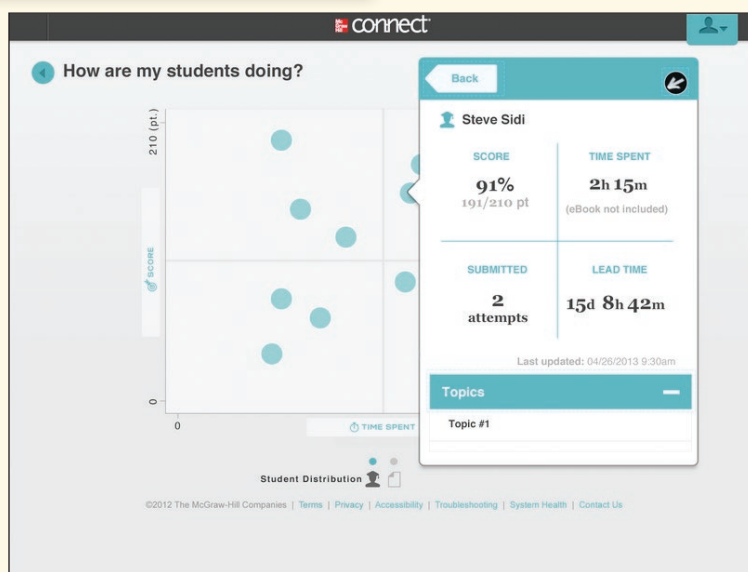
**Connect** now includes SmartBook, the first—and only—adaptive reading and study experience. As a student engages with SmartBook, the reading experience continuously adapts by highlighting content based on what the student knows and doesn't know. This ensures the focus is on the content he or she needs to learn, while simultaneously promoting long-term retention of material. Powered by the LearnSmart adaptive engine, SmartBook is unique because it focuses not only on addressing the learning moment, but also empowers students by helping them retain information over time so they come to class more prepared and engaged.



**McGraw Hill Education** | **connect INSIGHT®**

New to **Connect** is **Connect Insight™**, the first and only visual analytics tool of its kind—now available for both instructors and students. **Connect Insight** provides at-a-glance information regarding student performance, which is immediately actionable. By presenting assignment, assessment, and topical performance results together with a time metric that is easily visible for aggregate or individual results, **Connect**

**Insight** gives the user the ability to take a just-in-time approach to teaching and learning, which was never before available. **Connect Insight** presents data that empower students and help instructors improve class performance in a way that is efficient and effective.





## Highlights of the Eleventh Edition

The eleventh edition of *Concepts of Fitness and Wellness* is designed to deliver an integrated print and digital program that continues to be at the cutting edge of physical activity and health promotion, empowering students to take positive steps toward developing a lifelong commitment to healthy and active living. With its hallmark modular approach called “Concepts,” the new edition has been thoroughly updated and offers several features designed to enhance student learning.

Revised content in *Connect* adds new and exciting materials for easy use by students and instructors. A variety of updated and expanded *Connect* video activities help explain complex issues and provide opportunities for personal reflection and critical thinking. *Connect* icons throughout the text guide students to these and additional online assignments that help students apply the material. *LearnSmart*, a new adaptive learning resource, is designed to maximize productivity and efficiency in learning by facilitating the learning process from course prep to concept mastery.



Based on feedback from course instructors, a new Concept 2 covers the determinants of health, wellness, and fitness and Concept 3 focuses on self-management and self-planning skills. *Learning objectives* at the beginning of each Concept guide student learning. Increased attention has been placed on behavior change, including revisions in several lab activities. Each Concept also includes many features with engaging contemporary content that are useful for class discussions. *A Closer Look* provides information about new and sometimes controversial topics related to health, wellness, and fitness and encourages critical thinking. *Technology Update* describes advances in health and fitness technology and prompts exploration and personal evaluation. *In the News* highlights late-breaking health, wellness, and fitness information and provides opportunities for reflection. The *HELP* feature personalizes fitness and health issues to help students internalize the information. New key *Suggested Resources and Readings* at the end of each Concept provide students with additional online resources for further exploration and the end-of-text *References* highlight the latest research. A new *Healthy People 2020* chart at the beginning of this edition helps students understand the health goals discussed throughout.

Dynamic changes in the body of knowledge relating to health, wellness, and fitness are captured in the extensive updates to this edition. New recommendations from the National Academy of Medicine about fitness terminology and assessments have been incorporated. For example, the term *cardiorespiratory endurance* has replaced *cardiovascular fitness* and *power* is now classified as a health-related component of fitness. Changes in American College of Sports Medicine (ACSM) exercise testing and prescription

guidelines also prompted changes in exercise recommendations for several health-related fitness components. Additional examples of new and updated content follow:

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

- Updated information on the *Healthy People 2020* goals
- New content on the concept of *healthspan* versus lifespan
- Updated descriptions and terminology related to health-related fitness, including that *power* is now considered a health-related component of fitness
- New statistics about health, longevity, and wellness

### 2 Determinants of Lifelong Health, Wellness, and Fitness (New!)

- New Concept on the factors influencing health, wellness, and fitness
- Updated statistics on the leading causes of death
- Behavioral emphasis on the differences in the degree of control over dimensions
- Explanation of the new focus on health-related quality of life

### 3 Self-Management and Self-Planning Skills for Health Behavior Change

- Updated content on the stages of change
- New examples of self-management skills
- Expanded content on SMART goals

### 4 Preparing for Physical Activity

- Distinctions among stretch warm-up, dynamic warm-up, and traditional warm-up
- Updated stretching and warm-up guidelines for different activities
- Revised FIT formula information based on revised ACSM guidelines
- New content on behavioral strategies for change
- Updated recommendations about exercise at higher altitude and with pollution

### 5 The Health Benefits of Physical Activity

- Revised information about hypokinetic diseases
- Updated information on the links between inactivity and metabolic syndrome
- Rationale for activity promotion in schools, at worksites, and in clinical settings

### 6 How Much Physical Activity Is Enough?

- Revised FITT-VP model to capture ACSM “Volume” and “Progression” terms
- New statistics on adults meeting the U.S. physical activity guidelines

- Clarifications in the application of the physical activity pyramid

## **7 Moving from Inactivity to Moderate-Intensity Active Lifestyles**

- Clarification about the concept of METs and tracking of MET-minutes
- New information on sedentary behavior and independent risks from inactivity
- New lab activity on the assessment of sedentary behavior
- Updated information and features on activity monitors

## **8 Cardiorespiratory Endurance**

- Updated terminology (i.e., *cardiorespiratory endurance*)
- New content on the National Academy of Medicine (formerly IOM) guidelines and cardiorespiratory endurance
- Updates on the benefits of vigorous exercise and cardiorespiratory endurance
- Revisions and new descriptions of FIT principles for cardiorespiratory endurance

## **9 Vigorous Aerobics, Sports, and Recreational Activities**

- Revised descriptions of different aerobic exercises
- Updated information on patterns and trends in sports and recreation
- New content on the popularity of vigorous recreation and extreme sports

## **10 Muscle Fitness and Resistance Exercise**

- Expanded content and focus on health benefits of resistance exercise
- New information about power as a health-related fitness dimension
- Updated descriptions of absolute and relative strength and endurance
- Expanded content on plyometrics and functional fitness training methods
- Revised behavioral labs on planning and logging resistance exercises

## **11 Flexibility**

- New content on the distinctions between static and dynamic flexibility
- Updated information on links between flexibility and functional fitness
- Revised stretching recommendations based on new ACSM guidelines
- Revised behavioral lab activity on tracking and logging stretching

## **12 Body Mechanics: Posture, Questionable Exercises, and Care of the Back and Neck**

- Expanded content on the risks for microtrauma
- New exercise illustrations and descriptions
- Revised behavioral lab on planning and logging core and back exercises

## **13 Performance Benefits of Physical Activity**

- Expanded content on plyometrics and advanced power training
- Expanded content on functional fitness training
- Revised information about the links among fitness, skills, and performance

## **14 Body Composition**

- Updated information on the prevalence of obesity and extreme obesity
- New content on the health risks of obesity and the related benefits of activity
- New information on the American Medical Association's designation of obesity as a disease
- New content on revised obesity treatment guidelines

## **15 Nutrition**

- Summaries of recommendations from the Dietary Guidelines Advisory Committee
- Updated information on the descriptions and labeling of fiber
- Expanded content on the health benefits of fruits and vegetables
- Revised recommendations related to dietary fat and cholesterol, including information on the new FDA prohibition on trans fats

## **16 Managing Diet and Activity for Healthy Body Fatness**

- New content on public awareness of calorie needs
- Information about food policies and initiatives to promote healthy eating.
- Updated information on the benefits of light activity for weight control

## **17 Stress and Health**

- Updated statistics about stress and stressors
- New diagrams depicting the stress process
- New content on the effects of stress on health and wellness
- Summaries of new research on the sources of stress and the implications for health

## **18 Stress Management, Relaxation, and Time Management**

- Updated information about the benefits of physical activity for stress management

- Updated information on time use and the implications of stress
- Clarifications and examples of types of coping strategies
- New information on conscious relaxation and mindfulness

### **19 The Use and Abuse of Tobacco**

- Updated statistics on smoking patterns and trends
- Revised facts about secondhand smoke and the implications for policy changes
- New information on the marketing of tobacco and considerations with e-cigarettes

### **20 The Use and Abuse of Alcohol**

- New guidelines for defining binge drinking
- New statistics and risks related to drinking and driving
- Updated information on campus strategies related to alcohol abuse
- Explanation of new terminology for *alcohol use disorder*

### **21 The Use and Abuse of Other Drugs**

- New information about synthetic cannabinoids and legalized marijuana
- Implications of “generational forgetting” on drug use patterns
- Updated statistics and graphics on the costs of drug abuse in society

### **22 Preventing Sexually Transmitted Infections**

- Updated statistics on the prevalence of different sexually transmitted infections

- New section on the prevention and early treatment of STIs
- Updates on the issues and trends related to HPV vaccinations

### **23 Cancer, Diabetes, and Other Health Threats**

- Updated statistics on prevalence and death rates from various cancers
- New screening guidelines for breast and prostate cancers
- New content on skin cancer and labeling of sunscreen products
- Revised content and descriptions of diabetes

### **24 Evaluating Fitness and Wellness Products: Becoming an Informed Consumer**

- New examples of quackery in the health and fitness industry
- New warnings about tanning with sunlamps
- Explanation of consumer advocacy links through MedWatch

### **25 Toward Optimal Health and Wellness: Planning for Healthy Lifestyle Change**

- Updated content on the factors that influence health and wellness
- New tips on accessing health care effectively
- New information about health insurance coverage
- Technology considerations with genetic testing

## More Resources for Teaching with *Concepts of Fitness & Wellness*



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### Instructor Resources

Instructors can access the following resources through the Library tab in *Connect*:

- PowerPoint presentations
- Instructor's manual
- Test bank
- Image bank

# Healthy People 2020

*Healthy People 2020* outlines national health targets to achieve by 2020. The specific goals listed below are reflected throughout *Concepts of Fitness and Wellness*. As you meet your personal goals, you contribute to the achievement of these national health goals.

## General Health Goals

- Create a society in which all people live long, healthy lives.
- Promote quality of life, healthy development, and healthy behaviors (including being active, eating well, and avoiding destructive habits) across all stages of life.
- Attain high-quality, longer lives free of preventable disease, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Increase public awareness and understanding of the determinants of health, disease, and disability.
- Increase health literacy of the population.
- Increase participation in employee wellness programs.
- Increase percentage of high-quality health-related websites.
- Increase percentage of people with health-care providers who involve them in decisions about health care.
- Increase recycling and environmental health efforts.

## Fitness and Physical Activity Goals

- Reduce proportion of adults who do no leisure-time activity.
- Increase proportion of adults who meet guidelines for moderate to vigorous aerobic activity.
- Increase proportion of adults who meet guidelines for muscle fitness activity.
- Increase proportion of people who regularly perform exercises for flexibility.
- Increase access to employee-based exercise facilities and programs.
- Increase proportion of trips made by walking.
- Increase proportion of youth who meet guidelines for TV viewing and computer use and overuse (overuse is 2 hours a day or more).
- Increase schools with activity spaces that can be used in non-school hours.
- Increase percentage of physicians who counsel or educate patients about exercise.
- Decrease activity limitations, especially in older adults and disabled.

## Hypokinetic Disease Goals

- Increase overall cardiovascular health; reduce heart disease, stroke, high blood pressure, and high blood cholesterol; increase screening; increase awareness; and increase emergency treatment by professionals or bystanders.

- Reduce cancer incidence and death rates, increase cancer patient longevity, increase survivor's quality of life, and increase cancer screening.
- Reduce diabetes incidence and death rates; increase diabetes screening, education, and care.
- Reduce osteoporosis (related hip fractures), pain of arthritis, and limitations from chronic back pain.
- Increase percentage of college students receiving risk factor information.
- Increase young adult awareness of CHD signs and symptoms.
- Reduce rate of sunburn among young people (tanning).

## Body Composition/Weight Control Goals

- Increase proportion of adults with healthy weight.
- Reduce childhood overweight and obesity.
- Reduce disordered eating among adolescents.
- Increase worksites that offer nutrition and weight management classes and counseling.
- Increase physician counseling on nutrition and weight management.
- Increase BMI measurement by primary doctors.
- Increase weight-control efforts and activity levels of adults with high LDL.

## Nutrition Goals

- Increase policies that give retail food outlets incentives to carry foods that meet dietary guidelines.
- Increase the contribution of fruits in the diet.
- Increase the variety and contribution of vegetables in the diet.
- Increase the contribution of whole grains in the diet.
- Reduce consumption of saturated fat in the diet.
- Reduce consumption of sodium.
- Increase consumption of calcium.
- Reduce iron deficiency.
- Reduce consumption of calories from solid fats and added sugars.
- Decrease the consumption of sugar-sweetened beverages.
- Increase food safety (variety of areas).

## Mental and Emotional Health Goals

- Reduce depression and increase screening for depression.
- Increase screening for and treatment of mental health problems.
- Reduce suicide and suicide attempts.
- Increase availability of worksite stress-reduction programs.
- Reduce rates of depression and disordered eating.
- Increase levels of social support among adults.
- Increase the proportion of primary care facilities that provide mental health treatment.

# Healthy People 2020

## Safety and Injury Prevention Goals

- Reduce sports and recreation injuries.
- Reduce injuries from overexertion.
- Reduce emergency department visits for nonfatal injuries.
- Increase the proportion of public and private schools that require students to wear appropriate protective gear when engaged in school-sponsored physical activities.
- Reduce injuries and accidental deaths (automobile, assault, drowning, firearms-related, homicides, motorcycle, pedestrian, poisonings).

## Goals Related to Tobacco Use

- Increase the number of current smokers who try to quit.
- Reduce smoking during pregnancy.
- Increase the percentage of smoke-free homes.
- Reduce initiation of tobacco use among youth.
- Increase state and federal taxes on tobacco products.
- Reduce teen exposure to tobacco advertising.
- Increase tobacco screening in health-care settings.
- Increase indoor smoking bans in public places.
- Reduce secondhand-smoke exposure.

## Goals Related to Sexually Transmitted Infections

- Promote responsible sexual behaviors to prevent sexually transmitted infections (STIs) and their complications.
- Reduce incidence of chlamydia, gonorrhea, syphilis, genital herpes, human papillomavirus (HPV), pelvic inflammatory disease (PID), and hepatitis B.
- Increase proportion tested for HIV.
- Increase percentage of sexually active women who are tested for chlamydia.
- Increase the number of health insurance plans that cover contraceptives.
- Increase proportion of young people who abstain from sexual intercourse, use condoms during sexual activity, and avoid risky sexual behaviors.

- Increase the percentage of pregnancies that are intended.
- Increase percentage of adolescents who receive formal instruction on reproduction before age 18.

## Goals Related to Drug Use

- Reduce substance abuse to protect the health, safety, and quality of life for all, especially children.
- Reduce deaths and injuries caused by drug-related motor vehicle crashes.
- Increase availability of specialty treatment for substance abuse.
- Increase effectiveness of drug-abuse treatment programs.
- Reduce proportion of youth offered drugs or sold drugs at school.
- Reduce nonmedical use of prescription drugs.
- Reduce medical emergencies that occur from adverse events associated with medicines.
- Increase the age of onset and proportion of young people who remain drug free.
- Increase the proportion of adolescents who disapprove of substance abuse.
- Reduce steroid use by adolescents.
- Reduce adverse events from medical products.
- Reduce substance abuse to protect the health, safety, and quality of life for all, especially children.

## Goals Related to Alcohol Use

- Reduce deaths and injuries caused by alcohol-related motor vehicle crashes.
- Reduce alcohol-related injuries and ER visits.
- Reduce the frequency of driving while intoxicated.
- Increase the proportion of adolescents who remain alcohol free.
- Reduce binge drinking and average alcohol consumption.
- Increase the number of adolescents who disapprove of alcohol consumption.

*Concepts of*  
**Fitness & Wellness**

*A Comprehensive Lifestyle Approach*

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

## LEARNING OBJECTIVES

After completing the study of this Concept, you will be able to:

- ▶ Describe the HELP philosophy and discuss its implications in making personal decisions about health, wellness, and fitness.
- ▶ Define the dimensions of health and wellness, and explain how they interact to influence health and wellness.
- ▶ Distinguish health-related and skill-related dimensions of physical fitness.
- ▶ Identify related national health goals and show how meeting personal goals can contribute to reaching national goals.



*Good health, wellness, fitness, and healthy lifestyles are important for all people.*





Health and wellness are available to everyone for a lifetime.

**N**inety-nine percent of American adults say that “being in good health” is of primary importance. Good health—for them and those they care about—is more important than money and other material things. Having good health, wellness, and fitness can make us feel good, look good, and enjoy life fully. *Concepts of Fitness and Wellness* is designed to help you achieve good health by providing information to help you make good decisions. You will also learn essential **self-management skills**. With practice, use of these skills promotes healthy lifestyles that lead to good health, wellness, and fitness throughout life. An overview of basic self-management skills is provided in a later Concept.

## The HELP Philosophy

**The HELP philosophy provides a basis for making healthy lifestyle change possible.** The acronym—HELP—characterizes an important part of the philosophy: *Health* is available to *Everyone* for a *Lifetime*—and it’s *Personal*. The HELP philosophy aids you as you apply the

principles and guidelines that help you adopt positive lifestyles. The labs provide experiences for learning behavioral skills needed to maintain these lifestyles.

**A personal philosophy that emphasizes health can lead to behaviors that promote it.** The *H* in HELP stands for *health*. One theory that has been extensively tested indicates that people who believe in the benefits of healthy lifestyles are more likely to engage in healthy behaviors. The theory also suggests that people who state intentions to put their beliefs into action are likely to adopt behaviors that lead to health, wellness, and fitness.

**Everyone can benefit from healthy lifestyles.** The *E* in HELP stands for *everyone*. Anyone can change a behavior or lifestyle. Nevertheless, many adults feel ineffective in making lifestyle changes. Physical activity is not just for athletes—it is for all people. Eating well is not just for other people—you can do it, too. All people can learn stress-management techniques and practice healthy lifestyles.

**Healthy behaviors are most effective when practiced for a lifetime.** The *L* in HELP stands for *lifetime*. Young people sometimes feel immortal because the harmful effects of unhealthy lifestyles are often not immediate. As we age, however, unhealthy lifestyles have cumulative negative effects. Thus, adopting and sustaining healthy habits early in life is important for long-term health, wellness, and fitness.

**Healthy lifestyles should be based on personal needs.** The *P* in HELP stands for *personal*. Each person has unique needs regarding health, wellness, and fitness. People also vary in attitudes, perceptions, and personal characteristics that influence healthy lifestyles. You will be provided with information about a variety of self-management skills, but it is up to each individual to take personal responsibility for learning and using these skills.

**You can adopt the HELP philosophy.** As you progress through these Concepts, consider ways that you can implement the HELP philosophy. In each Concept, HELP boxes are provided to stimulate your thinking about key health issues.

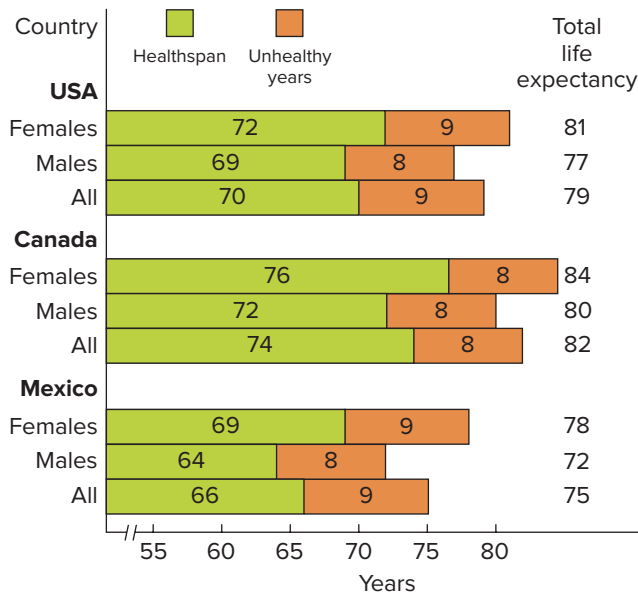
## National Health Goals

**Healthy People 2020 (HP2020) is a comprehensive set of health promotion and disease prevention objectives with the primary intent of improving the nation’s health.** The objectives, developed by experts from hundreds of national health organizations and published in 2010, provide benchmarks to determine progress over the period from 2010 to 2020. The objectives also serve as goals to motivate and guide people in making sound health

decisions as well as to provide a focus for public health programs.

In addition to helping change the health of society at large, HP2020 goals have implications for personal health behavior change. Societal changes can occur only when individuals adjust personal behaviors and work together to make changes that benefit other people. Not all objectives will have personal implications for each individual, but increased societal awareness of the objectives may lead to future changes in the health of our country. The four primary or overarching goals of HP2020 are described in the sections that follow to provide context for these societal goals.

**A primary goal of HP2020 is to help all people have high-quality, longer lives free of preventable disease, injury, and premature death.** This goal makes distinctions between the terms **lifespan** and **healthspan**. *Lifespan* refers to the number of years you live. Over the past century, the lifespan (life expectancy) of Americans has increased by 60 percent. The expected lifespan for three North American countries is shown in Figure 1. According to *World Factbook*, Canada ranks 13th, the United States 50th, and Mexico 72nd in expected lifespan. The term *healthspan* refers to the number of healthy years in your life. It includes years free of illness and debilitating conditions and years of wellness (years with a good quality of life). The green bars in Figure 1 depict the relative healthspan in each country and the orange shows years with poor health and low quality of life. Although unhealthy years occur more often toward the end of the lifespan they can happen at any time. Increasing both lifespan and healthspan is an overarching goal of HP2020. *Concepts of Fitness*



**Figure 1 ►** Healthspan and lifespan for many North Americans.

Sources: World Health Organization and National Center for Health Statistics.

**HELP** Health is available to Everyone for a Lifetime, and it's Personal

The *Healthy People 2020* goals represent the U.S. goals for health and health promotion. The goals focus on promoting quality of life, healthy development, and healthy behaviors across all stages of life and in all segments of the population. Although the goals are set at the national level, they have implications for determining state and local funding, programming, and policy development.

*Do you think these public health goals can work to ultimately influence individual behavior? Similarly, do you think your individual choices and behaviors ultimately influence (or have an impact on) progress toward societal goals?*



and *Wellness* has a similar goal: to help you maximize the portion of your lifespan that is lived in good health (that is, healthspan).

**Achieving health equity, eliminating disparities, and improving the health of all groups is another primary goal of HP2020.** Health varies greatly with ethnicity, income, gender, and age. As defined in HP2020, a health disparity is “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage.” To reduce health disparities, it is important to address underlying causes.

**Another primary goal of HP2020 is to create social and physical environments that promote good health for all.** The environment, both social and physical, has much to do with quality and length of life. Social environment refers to norms and values that influence our behavior, whereas physical environment refers to characteristics or features that may allow the healthier choice to be the easier choice. These features are known as “social determinants of health” and will be discussed in more detail later.

**Self-Management Skills** Skills that you learn to help you adopt healthy lifestyles and adhere to them.

**Health** Optimal well-being that contributes to one’s quality of life. It is more than freedom from disease and illness, though freedom from disease is important to good health. Optimal health includes high-level mental, social, emotional, spiritual, and physical wellness within the limits of one’s heredity and personal abilities.

**Lifespan** The number of years you live (life expectancy).

**Healthspan** The number of healthy years in your life. It includes years free of illness and debilitating conditions and years of wellness (years with a good quality of life).



## In the News

### Healthiest Places to Live

Each year a number of organizations conduct surveys to determine which American cities rate highest in well-being and/or physical fitness. The Gallup-Healthways Well-Being Index®, for example, surveys samples of U.S. residents on a daily basis in order to capture changes in perceptions of health and well-being over time. Many other

news agencies (e.g., *Time* and CNN) provide annual ratings and lists of the healthiest places to live based on a variety of criteria.

*Do healthier people simply seek out healthier environments (and healthier cities) or are there unique attributes that help make an area or city healthier? How does your city rate?*



Physical activity is for everyone regardless of ability of disability.

The final primary goal of HP2020 is to promote quality of life, healthy development, and healthy behaviors across all stages of life. Healthy days decrease as we age. Young adults experience more healthy days each month than older adults. Over the past two decades, there has been a steady decline in healthy days for the average person, no doubt because of the increase in the number of older adults in our society. Increasing healthy days is still a goal for all.

## Health and Wellness

**Health is more than freedom from illness and disease.** Over 60 years ago, the World Health Organization defined health as more than freedom from illness, disease, and debilitating conditions. Prior to that time, you were considered to be “healthy” if you were not sick. HP2020 refers to quality of life in two of its four primary goals, highlighting the importance of the wellness component of health.

Figure 2 illustrates the modern concept of health. This general state of being is characterized by freedom from disease and debilitating conditions (outer circle), as well as wellness (center circle).

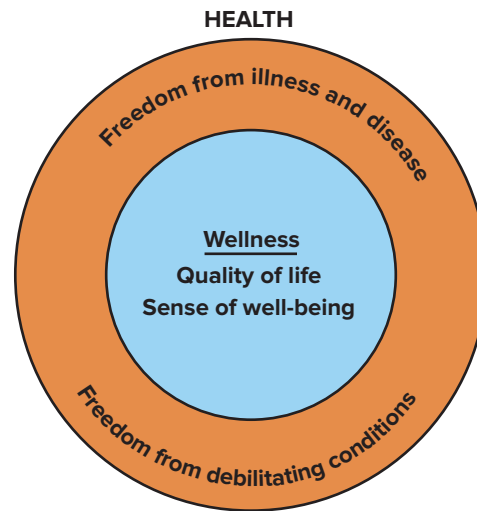


Figure 2 ► A model of optimal health, including wellness.

**Wellness is the positive component of optimal health.** Disease, **illness**, and debilitating conditions are negative components that detract from optimal health. Death can be considered the ultimate opposite of optimal health. **Wellness**, in contrast, is the positive component of optimal health. It is characterized by a sense of well-being reflected in optimal functioning, health-related **quality of life**, meaningful work, and a contribution to society. HP2020 goals use the term *health-related quality of life* to describe a general sense of happiness and satisfaction with life.

**Health and wellness are personal.** Every individual is unique—and health and wellness are influenced by each person’s unique characteristics. Making comparisons to other people on specific characteristics may produce feelings of inadequacy that detract from one’s profile of total health and wellness. Each of us has personal limitations and strengths. Focusing on strengths and learning to accommodate weaknesses are essential keys to optimal health and wellness.

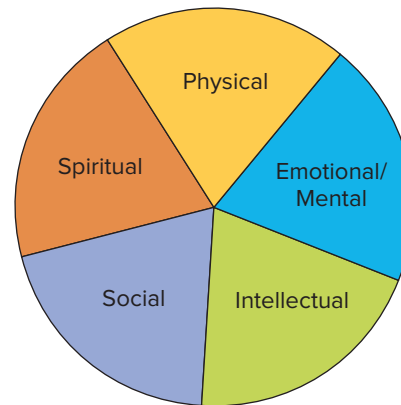


**Health and wellness are multidimensional.** The dimensions of health and wellness include physical, emotional/mental, intellectual, social, and spiritual. Table 1 describes the various dimensions, and Figure 3 illustrates the importance of each one for optimal health and wellness. Some

people include environmental and vocational dimensions in addition to the five shown in Figure 3. Health and wellness are to be personal factors, so environmental and vocational wellness are not included in Tables 1 and 2. However, the environment (including your work environment) is very important to overall personal wellness, and for this reason, environmental factors are prominent in the model of wellness described later.

**Table 1 ▶** Definitions of Health and Wellness Dimensions

<b>Physical health</b> —Freedom from illnesses that affect the physiological systems of the body, such as the heart and the nervous system. A person with physical health possesses an adequate level of physical fitness and physical wellness.
<b>Physical wellness</b> —The ability to function effectively in meeting the demands of the day’s work and to use free time effectively. Physical wellness includes good physical fitness and the possession of useful motor skills. A person with physical wellness is generally characterized as fit instead of unfit.
<b>Emotional/mental health</b> —Freedom from emotional/mental illnesses, such as clinical depression, and possession of emotional wellness. The goals for the nation’s health refer to mental rather than emotional health and wellness. However, mental health and wellness are conceptually the same as emotional health and wellness.
<b>Emotional/mental wellness</b> —The ability to cope with daily circumstances and to deal with personal feelings in a positive, optimistic, and constructive manner. A person with emotional wellness is generally characterized as happy instead of depressed.
<b>Intellectual health</b> —Freedom from illnesses that invade the brain and other systems that allow learning. A person with intellectual health also possesses intellectual wellness.
<b>Intellectual wellness</b> —The ability to learn and to use information to enhance the quality of daily living and optimal functioning. A person with intellectual wellness is generally characterized as informed instead of ignorant.
<b>Social health</b> —Freedom from illnesses or conditions that severely limit functioning in society, including antisocial pathologies.
<b>Social wellness</b> —The ability to interact with others successfully and to establish meaningful relationships that enhance the quality of life for all people involved in the interaction (including self). A person with social wellness is generally characterized as involved instead of lonely.
<b>Spiritual health</b> —The one component of health that is totally composed of the wellness dimension; it is synonymous with spiritual wellness.
<b>Spiritual wellness</b> —The ability to establish a values system and act on the system of beliefs, as well as to establish and carry out meaningful and constructive lifetime goals. Spiritual wellness is often based on a belief in a force greater than the individual that helps her or him contribute to an improved quality of life for all people. A person with spiritual wellness is generally characterized as fulfilled instead of unfulfilled.



**Figure 3 ▶** The dimensions of health and wellness.

**Table 2 ▶** The Dimensions of Wellness

Wellness Dimension	Negative-----	Positive
Physical	Unfit -----	Fit
Emotional/mental	Depressed -----	Happy
Intellectual	Ignorant -----	Informed
Social	Lonely-----	Involved
Spiritual	Unfulfilled -----	Fulfilled
Total outlook	Negative -----	Positive

**Illness** The ill feeling and/or symptoms associated with a disease or circumstances that upset homeostasis.

**Wellness** The integration of many different components (physical, emotional/mental, intellectual, social, and spiritual) that expand one’s potential to live (quality of life) and work effectively and to make a significant contribution to society. Wellness reflects how one feels (a sense of well-being) about life, as well as one’s ability to function effectively. Wellness, as opposed to illness (a negative), is sometimes described as the positive component of good health.

**Quality of Life** A term used to describe wellness. An individual with quality of life can enjoyably do the activities of life with little or no limitation and can function independently. Individual quality of life requires a pleasant and supportive community.

**Wellness reflects how one feels about life, as well as one's ability to function effectively.** A positive total outlook on life is essential to each of the wellness dimensions. As illustrated in Table 2, a “well” person is satisfied in work, is spiritually fulfilled, enjoys leisure time, is physically fit, is socially involved, and has a positive emotional/mental outlook. He or she is happy and fulfilled.

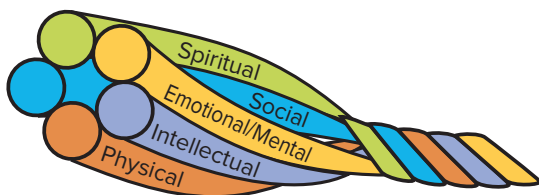
The way one perceives each dimension of wellness affects one's total outlook. Researchers use the term *self-perceptions* to describe these feelings. Many researchers believe that self-perceptions about wellness are more important than actual circumstances or a person's actual state of being. For example, a person who has an important job may find less meaning and job satisfaction than another person with a much less important job. Apparently, one of the important factors for a person who has achieved high-level wellness and a positive outlook on life is the ability to reward himself or herself. Some people, however, seem unable to give themselves credit for their successes. The development of a system that allows a person to perceive the self positively is essential, along with the adoption of positive **lifestyles** that encourage improved self-perceptions. The questionnaire in Lab 1A will help you assess your self-perceptions of the various wellness dimensions. For optimal wellness, it is important to find positive feelings about each dimension.



### Health and wellness are integrated states of being.

The segmented pictures of health and wellness shown in Figure 3 and Tables 1 and 2 are used only to illustrate the multidimensional nature of health and wellness. In reality, health and wellness are integrated states of being that can best be depicted as threads woven together to produce a larger, integrated fabric. Each dimension relates to each of the others and overlaps all the others. The overlap is so frequent and so great that the specific contribution of each thread is almost indistinguishable when looking at the total (Figure 4). The total is clearly greater than the sum of the parts.

**It is possible to possess health and wellness while being ill or possessing a debilitating condition.** Many illnesses are curable and may have only a temporary effect



**Figure 4** ► The integration of wellness dimensions.

on health. Others, such as Type I diabetes, are not curable but can be managed with proper eating, physical activity, and sound medical treatment. Those with manageable conditions may, however, be at risk for other health problems. For example, unmanaged diabetes is associated with a high risk for heart disease and other health problems.

Debilitating conditions, such as the loss of a limb or loss of function in a body part, can contribute to a lower level of functioning or an increased risk for illness and thus to poor health. On the other hand, such conditions need not limit wellness. A person with a debilitating condition who has a positive outlook on life may have better overall health (a long healthspan) than a person with a poor outlook on life but no debilitating condition.

Just as wellness is possible among those with illness and disability, evidence is accumulating that people with a positive outlook are better able to resist the progress of disease and illness than are those with a negative outlook. Thinking positive thoughts has been associated with enhanced results from various medical treatments and surgical procedures.

### Wellness is a term used by the uninformed as well as experts.

Unfortunately, some individuals and groups have tried to identify wellness with products and services that promise benefits that cannot be documented. Because well-being is a subjective feeling, unscrupulous people can easily make claims of improved wellness for their product or service without facts to back them up.

*Holistic health* is a term that is similarly abused. Consider that optimal health includes many areas; thus, the term *holistic* (total) is appropriate. In fact, the word *health* originates from a root word meaning “wholeness.” Unfortunately, questionable health practices are sometimes promoted under the guise of holistic health. Care should be used when considering services and products that make claims of wellness and/or holistic health to be sure that they are legitimate.

## Physical Fitness

**Physical fitness is a multidimensional state of being.** Physical fitness is the body's ability to function efficiently and effectively. It consists of at least six health-related and five skill-related dimensions, each of which contributes to total quality of life. Physical fitness is associated with a person's ability to work effectively, enjoy leisure time, be healthy, resist **hypokinetic diseases or conditions**, and meet emergency situations. It is related to, but different from, health and wellness. Although the development of physical fitness is the result of many things, optimal physical fitness is not possible without regular physical activity.



**The health-related dimensions of physical fitness are directly associated with good health.** The six dimensions of health-related physical fitness are body composition, cardiorespiratory endurance, flexibility, muscular endurance, power, and strength (see Figure 5 on next page). Each health-related fitness dimension has a direct relationship to good health and reduced risk for hypokinetic diseases. This is why they are emphasized in personal fitness programs.

Possessing a moderate amount of each dimension of health-related fitness is essential to disease prevention and health promotion, but it is not essential to have exceptionally high levels of fitness to achieve health benefits. High levels of health-related fitness relate more to performance than to health benefits. For example, moderate amounts of strength are necessary to prevent back and posture problems, whereas high levels of strength contribute most to improved performance in activities such as football and jobs involving heavy lifting.



**The skill-related dimensions of physical fitness are associated more with performance than with good health.** The dimensions of skill-related physical fitness are agility, balance, coordination, reaction time, and speed (see Figure 6 later in the chapter). They are called

skill-related because people who possess them find it easy to achieve high levels of performance in motor skills, such as those required in sports and in specific types of jobs. Power, a dimension that requires both strength and speed, was formerly considered a skill-related dimension of fitness but new evidence has linked power with good health.

Skill-related fitness has been called “sports fitness” or “motor fitness,” but note that it is multidimensional and highly specific. For example, coordination could be hand-eye coordination, such as batting a ball; foot-eye coordination, such as kicking a ball; or many other possibilities. The five dimensions of skill-related fitness identified here are those commonly associated with successful sports and work performance. Additional information and self-assessments on skill-related fitness are included in later concepts to help you understand the nature of total physical fitness and make important decisions about lifetime physical activity.

**Metabolic fitness is a nonperformance dimension of total fitness.** Physical activity can provide health benefits that are independent of changes in traditional health-related fitness measures. Physical activity promotes good **metabolic fitness**, a state associated with reduced risk for many chronic diseases. People with a cluster of low metabolic fitness characteristics are said to have metabolic syndrome (also known as Syndrome X). Metabolic syndrome is discussed in more detail in a later Concept.



## A CLOSER LOOK

### Changing Fitness Terminology

Fitness is a multidimensional construct, but the terminology and dimensions evolve as new research is done. The Institute of Medicine (IOM) report recommended the use of the term “*cardiorespiratory endurance*” instead of the previously used term “*cardiovascular fitness*.” This term better captures the integration of the cardiovascular and respiratory systems. Endurance is used because it refers to the ability to sustain performance for extended periods of time. The IOM report also recommended that “*power*” be classified as a health-related dimension of fitness instead of as a skill-related dimension, as it has been viewed previously. The rationale for the change is that it is now clear that power relates to good bone health and other health factors, especially in youth and older adults.

*It is important to perform both aerobic exercise (for cardiorespiratory endurance) and resistance exercise (for musculoskeletal fitness and power). Which do you find easier to perform? Why is it important to do both?*



**Lifestyles** Patterns of behavior or ways an individual typically lives.

**Physical Fitness** The body’s ability to function efficiently and effectively. It consists of health-related physical fitness and skill-related physical fitness, which have at least 11 components, each of which contributes to total quality of life. Physical fitness also includes metabolic fitness and bone integrity. Physical fitness is associated with a person’s ability to work effectively, enjoy leisure time, be healthy, resist hypokinetic diseases, and meet emergency situations. It is an important part of the physical aspects of both health and wellness but it also impacts the other dimensions. Although the development of physical fitness is the result of many things, optimal physical fitness is not possible without regular exercise.

**Hypokinetic Diseases or Conditions** *Hypo-* means “under” or “too little,” and *-kinetic* means “movement” or “activity.” Thus, *hypokinetic* means “too little activity.” A hypokinetic disease or condition is one associated with lack of physical activity or too little regular exercise. Examples include heart disease, low back pain, Type II diabetes, and obesity.

**Metabolic Fitness** A positive state of the physiological systems commonly associated with reduced risk for chronic diseases such as diabetes and heart disease. Metabolic fitness is evidenced by healthy blood fat (lipid) profiles, healthy blood pressure, healthy blood sugar and insulin levels.



Figure 5 ► Dimensions of health-related physical fitness.



**Figure 6** ► Dimensions of skill-related physical fitness.