



Twelfth Edition

Concepts of Fitness and Wellness

A Comprehensive Lifestyle Approach

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Education

Charles B. Corbin | Gregory J. Welk | William R. Corbin | Karen A. Welk

Concepts of **Fitness and Wellness** *A Comprehensive Lifestyle Approach*

TWELFTH EDITION

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

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Concepts of Fitness and Wellness includes magazine-like features that help students integrate and apply information they may see in the news or read about on the Internet. These features have follow-up activities available in *Connect* and can be assigned online.

- **A Closer Look** provides information about new and sometimes controversial topics related to health, wellness, and fitness and encourages critical thinking.
- **Technology Update** describes emerging health and fitness technology, innovations, and research.
- **In the News** highlights late-breaking health, wellness, and fitness events, trends, and information.
- **HELP** personalizes fitness and health issues through brief narratives that relate to the defining elements of the HELP Philosophy (H: Health, E: Everyone, L: Lifetime, P: Personal)



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Lab Activities

All end-of-concept Lab Activities are available in *Connect* and can be edited, assigned, completed, submitted, and graded online. Lab Resource Materials (extra materials for use in completing Lab Activities) are available for all fitness self-assessments.

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

Purpose: To evaluate your muscle strength using 1RM and to determine the best amount of resistance to use for various strength exercises.

Procedures: 1RM is the maximum amount of resistance you can lift for a specific exercise. Testing yourself to determine how much you can lift only one time using traditional methods can be triggering and even dangerous. The procedure you will perform here allows you to estimate 1RM based on the number of times you can lift a weight that is less than 1RM.

Evaluating Strength Using Estimated 1RM


1. Use a resistance machine for the leg press and arm or bench press for the evaluation part of this lab.
2. Estimate how much weight you can lift two or three times. Be conservative; it is better to start with too little weight than too much. If you lift a weight more than 10 times, the procedure should be done again on another day when you are rested.
3. Using correct form, perform a leg press with the weight you have chosen. Perform as many times as you can up to 10.
4. Use Chart 1 in Lab Resource Materials to determine your 1RM for the leg press. Find the weight used in the left-hand column and then find the number of repetitions you performed across the top of the chart.
5. Your 1RM score is the value where the weight row and the repetitions column intersect.
6. Repeat this procedure for the arm or bench press using the same technique.
7. Record your 1RM scores for the leg press and bench press in the Results section.
8. Next divide your 1RM scores by your body weight in pounds to get a "strength per pound of body weight" (1RM/body weight) score for each of the two exercises.
9. Determine your strength rating for your upper body strength (arm press) and lower body (leg press) using Chart 2 in Lab Resource Materials. Record in the Results section. If time allows, assess 1RM for other exercises you choose to perform (see Lab 10C).
10. If a grip dynamometer is available, determine your right-hand and left-hand grip strength using the procedures in Lab Resource Materials. Use Chart 3 in Lab Resource Materials to rate your grip (isometric).

Results

Arm press: (or bench press)	Wt. selected <input style="width: 40px;" type="text"/>	Reps <input style="width: 40px;" type="text"/>	Estimated 1RM <input style="width: 80px;" type="text"/>	
	(Chart 1, Lab Resource Materials, page 171)			
	Strength per lb body weight <input style="width: 80px;" type="text"/>		Rating <input style="width: 80px;" type="text"/>	
	(Chart 2, Lab Resource Materials, page 172)			
Leg press:	Wt. selected <input style="width: 40px;" type="text"/>	Reps <input style="width: 40px;" type="text"/>	Estimated 1RM <input style="width: 80px;" type="text"/>	
	(Chart 1, Lab Resource Materials, page 171)			
	Strength per lb body weight <input style="width: 80px;" type="text"/>		Rating <input style="width: 80px;" type="text"/>	
	(Chart 2, Lab Resource Materials, page 172)			
Grip strength:	Right grip score <input style="width: 40px;" type="text"/>		Right grip rating <input style="width: 80px;" type="text"/>	
	Left grip score <input style="width: 40px;" type="text"/>		Left grip rating <input style="width: 80px;" type="text"/>	
	Total score <input style="width: 40px;" type="text"/>		Total rating <input style="width: 80px;" type="text"/>	
	(Chart 3, Lab Resource Materials, page 174)			


Seated Press (Arm Press)

This test can be performed using a seated press (see below) or using a bench press machine. When using the seated press, position the seat height so that arm handles are directly in front of the chest. Position backrest so that hands are at comfortable distance away from the chest. Push handles forward to full extension and return to starting position in a slow and controlled manner. Repeat. Note: Machine may have a foot lever to help position, raise, and lower the weight.



Leg Press

To perform this test, use a leg press machine. Typically, the beginning position is with the knees bent at right angles with the feet placed on the press machine pedals or a foot platform. Extend the legs and return to beginning position. Do not lock the knees when the legs are straightened. Typically, handles are provided. Grasp the handles with the hands when performing this test.



Conclusions and Implications: In several sentences, discuss your current strength, whether you believe it is adequate for good health, and whether you think that your "strength per pound of body weight" scores are representative of your true strength.

Evaluating Muscle Strength: 1RM and Grip Strength

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50 Years of Success!

With the publication of this twelfth edition of *Concepts of Fitness and Wellness*, we celebrate the 50th anniversary of the publication of the first of the many *Concepts* books. The first book in this continuous franchise was published in 1968. Since that time, *Concepts of Physical Fitness*, published in 17 editions and winner of the McGuffey Award for Textbook Longevity, and *Concepts of Fitness and Wellness* have carried on the tradition started a half century ago. We are proud of the success of

50th
Anniversary
Edition



the *Concepts* books and are thankful to those who have adopted these texts and who contributed to their success.

Into the Future

While we are pleased with our 50 years of success, it is our intent to continue to be at the forefront of the science movement that underlies the content of *Concepts of Fitness and Wellness*. Dr. Chuck Corbin, the founding author and past president of the prestigious National Academy of Kinesiology, continues to be actively involved in all facets of authorship. Dr. Greg Welk, a fellow in the National Academy of Kinesiology and an established fitness and wellness scholar, shares the leadership on the project and plays an increasing role in all aspects of content development. Dr. Will Corbin, a professor of clinical psychology with expertise in health psychology, leads the content related to stress management, alcohol, tobacco, drugs, and sexually transmitted infections. Dr. Karen Welk, an established physical therapist, provides expertise in flexibility, strength and conditioning, back care, and contraindicated exercises. Collectively, the author team addresses the research and technical jargon in a manageable format that provides instructors and students with access to the latest information about health, wellness, and fitness. Our goal is to achieve another 50 years of success.

In Tribute

We continue to pay tribute to Dr. Ruth Lindsey (1926–2005), one of the original authors of *Concepts of Fitness and*

Wellness. She was a great leader and an outstanding advocate for healthy lifestyles, physical activity, and physical education and will long be remembered for her contributions to the *Concepts* program and our profession.

Dedication

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

Thank You

We are always listening to our users and to those who review *Concepts of Fitness and Wellness*. We greatly appreciate their feedback, which helps us make *Concepts* an even better resource for both students and instructors. We want to thank the instructors who provided insights regarding their course needs, which helped guide this edition's revisions:

Bob Amsberry, *Wartburg College*
Randall Anastasio, *University of South Alabama*
Janelle Anderson, *Arizona State University*
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Kim Wathen, *Lansing Community College*
Greg S. Wimer, *Armstrong State University*.

To list everyone who has had an impact on the *Concepts* texts over the years would take several pages. Nevertheless, we feel that it is important to acknowledge those who have helped us. A list of the many contributors is available at www.corbinconcepts.org, as are additional resources we have provided that support the use of *Concepts of Fitness and Wellness* in your course. Thank you all!

Charles B. Corbin
Gregory J. Welk
William R. Corbin
Karen A. Welk
www.corbinconcepts.org



Courtesy Charles Corbin



Courtesy Greg and Karen Welk



Courtesy William Corbin



Courtesy Greg and Karen Welk

Educational Foundations

Fundamental to the success of any textbook is a strong educational foundation. First, it is important to have a strong philosophical foundation. *Concepts of Fitness and Wellness* is based on the “HELP” philosophy, which reinforces the power of personal behavior change and the self-management skills necessary for adopting and maintaining healthy lifestyles. Next, well-defined learning objectives are critical to understanding and applying the concepts that are clearly highlighted throughout *Concepts of Fitness and Wellness*. Finally, a strong visual program reinforces the content and facilitates multisensory learning.

Integrated HELP Philosophy

Health is available to **E**veryone
for a **L**ifetime, and it's **P**ersonal.

The HELP philosophy directs the content in *Concepts of Fitness and Wellness*, focusing on helping students achieve sound health (including fitness and wellness) through the adoption of healthy lifestyles. Particular emphasis is placed on various

self-management skills that make it easier to sustain these lifestyle behaviors over time. The various lab activities in each Concept are designed to provide opportunities to learn these skills. Ultimately, the goal is for students to learn to prepare personal programs of health behavior change that address their own needs and interests.

Concepts-Based Framework

A novel and defining aspect of *Concepts of Fitness and Wellness* is the “concepts-based” approach to education. Specific learning objectives are provided at the beginning of each Concept to help focus and guide students to the most important information. Content within each Concept is organized into thematic sections and each includes several more concise “concepts” or principles. Carefully worded statements introduce each of these mini-sections to help students retain the key messages in the Concept. This modularized approach to learning offers advantages for student learning and retention since the important information is introduced and then directly reinforced.

LEARNING OBJECTIVES

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

- ▶ Identify the determinants of health, wellness, and fitness, and explain how they each contribute to health, wellness, and fitness.
- ▶ Differentiate between factors over which you have lesser and greater control.
- ▶ Use health behavior change strategies to carry out self-assessments of personal lifestyles and wellness perceptions.

Many factors are important in developing lifetime health, wellness, and fitness, and some are more in your control than others. A model that

summarizes many of the factors that contribute to health, wellness, and fitness is provided in [Figure 1](#). Central to the model are health, wellness, and fitness because these are the states of being (shaded in green and gold) that each of us wants to achieve.

connect
VIDEO 1

Learning Objectives (left) introduce each concept and modularized “Concept Statements” (right) help guide student learning.

Visual Enhancements for Learning

Students learn using many different types of sensory input. Accordingly, the visuals in *Concepts of Fitness and Wellness* include photos with concept-relevant captions, figures that convey conceptual materials in an easy-to-understand format, and exercise illustrations that show exactly how to perform exercises for important dimensions of health-related fitness.



Engaging graphics, diagrams, and exercise illustrations facilitate student learning.

Highlights of the Twelfth Edition: Innovations for Enhanced Learning

The twelfth edition of *Concepts of Fitness and Wellness* is designed to deliver a flexible and personalized approach to fitness and wellness education. The materials provide an integrated print and digital solution that enables instructors (and students) to explore options for applying the information.

Connect® Is Proven Effective

McGraw-Hill Connect® is a digital teaching and learning environment that improves performance over a variety of critical outcomes; it is easy to use; and it is proven effective. Connect empowers students by continually adapting to deliver precisely what they need, when they need it, and how they need it, so your class time is more engaging and effective. Connect for *Concepts of Fitness and Wellness* offers a wealth of interactive online content, including labs and self-assessments, video activities on timely health topics, and practice quizzes with immediate feedback.

New to this edition are assignable and assessable **Concept Clips**, which help students master key fitness and wellness concepts. Using colorful animation and easy-to-understand audio narration, Concept Clips provide step-by-step presentations to promote student comprehension. Topics include the stages of change model, diabetes types and metabolism, nutrition facts labels, the cardiorespiratory system, and the stress response.

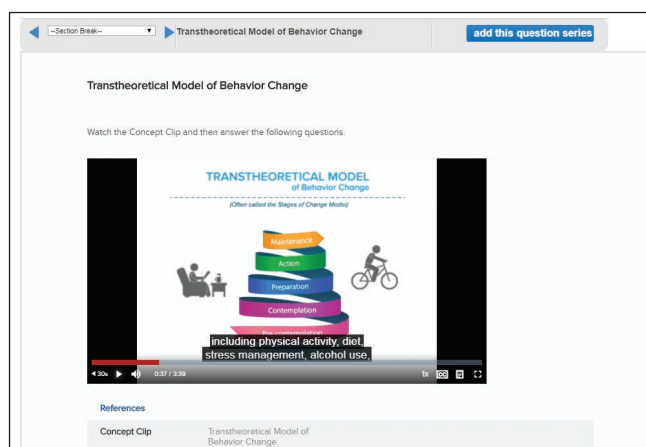
Also new are **Newsflash** activities, which tie current news stories to key fitness and wellness fitness concepts. After interacting with a contemporary news story, students are assessed on their understanding and their ability to make the connections between real-life events and course content. Examples of Newsflash topics include food fads, stress and obesity, Pilates, and risks of sedentary behavior.

Personalized Learning



Available within Connect, **SmartBook®** makes study time as productive and efficient as possible by identifying and closing knowledge gaps. SmartBook identifies what an individual student knows and doesn't know based on the student's confidence level, responses to questions, and other factors. SmartBook builds an optimal, personalized learning path for each student, so students spend less time on concepts they already understand and more time on those they don't. As a student engages with SmartBook, the reading experience continuously adapts by highlighting the most impactful content a student needs to learn at that moment in time. This ensures that every minute spent with SmartBook is returned to the student as the most value-added minute possible. The result? More confidence, better grades, and greater success.

New to this edition, SmartBook is now optimized for smart phones and tablets and accessible for students with disabilities using interactive features.



Advance Reporting

Connect Insight® is Connect's one-of-a-kind visual analytics dashboard—available for both instructors and students—that 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 capability 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.

Dietary Analysis Tool

NutritionCalc Plus is a suite of powerful dietary self-assessment tools that help students track their food intake and activity and analyze their diet and health goals. Students and instructors can trust the reliability of the ESHA database while interacting with a robust selection of reports. This tool is provided at no additional charge inside Connect for Concepts of Fitness and Wellness, twelfth edition.



Highlights of the Twelfth Edition: Personal Responsibility, Self-Management, and Concept Updates

This edition of *Concepts of Fitness and Wellness* has been thoroughly updated with new elements aimed at enhancing student learning. Readers will find an even stronger focus on personal responsibility and self-management skills as these are critical for adopting and sustaining healthy lifestyles. Each Concept begins with **Learning Objectives** and a new element **Why It Matters!** to introduce key themes that help students see the direct relevance of the material. Each Concept ends with a new section **Using Self-Management Skills** to help the reader apply the information to everyday life. Updated descriptions in the **Strategies for Action** section then introduce the specific lab activities that provide opportunities to practice and learn these self-management skills.

The educational features in each Concept have also been completely updated, with new links and questions available in **Connect** to promote personal exploration of the content. A variety of video vignettes are embedded within the eBook and linked to Connect activities to help explain complex issues and provide opportunities for personal reflection and critical thinking. Updated **LearnSmart** lessons provide an adaptive learning resource that helps ensure that students master the intended learning objectives. Accessible and relevant resources and books are provided in the **Suggested Resources and Readings**, while scientific references are provided at the end-of-text **References** section. Although the content and resources provide a comprehensive framework for effective education, students have a variety of opportunities to learn and apply the information in ways that best match their interests and needs.

Each Concept includes many boxed 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.

Dynamic changes in the body of knowledge relating to health, wellness, and fitness are captured in the extensive

updates to this edition. Details of the most recent nutrition guidelines and highlights of the new 2018 *Physical Activity Guidelines for Americans* are presented throughout. Changes in the American College of Sports Medicine (ACSM) exercise testing and prescription guidelines also prompted changes in exercise recommendations for several health-related fitness areas. Similarly, new regulations from the Food and Drug Administration (FDA) influence food labeling, tobacco, and drug policies and how products are marketed. Insights from medical research also led to changes in screening and treatment for various conditions. Other new research findings and public health updates are woven through each of the Concepts. Some of the updates are highlighted below:

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

- Updates on the *Healthy People Initiative* (2020 and beyond)
- Updated statistics about health, longevity, and wellness
- Recent data regarding quality of life satisfaction and CDC population questionnaires
- Expanded emphasis on assessments and consumer skills in self-management section

2 Determinants of Lifelong Health, Wellness, and Fitness

- Refined model of factors influencing health, wellness, and fitness
- Mention of the CDC's Healthy Community Design Initiative to promote healthy environments
- Updated discussion of Americans' health status, including a recent report comparing developing countries
- Emphasis on the importance of personal actions and interactions in the self-management section

3 Self-Management Skills for Health Behavior Change

- Reformatted and expanded descriptions of self-management skills
- New perspectives on SMART goals
- Emphasis on self-planning skills in the self-management section

4 Preparing for Physical Activity

- Updated section on exercise screening guidelines, including the new PAR-Q+
- Updated material on the treatment of injuries (RICE model)
- New discussion on water versus fluid replacement drinks and their benefits
- New information on smartphone apps that help monitor environmental conditions
- Emphasis on building knowledge and balancing attitudes in the self-management section



5 The Health Benefits of Physical Activity

- New sections on descriptions/implications of sedentary behavior
- Overview of the American Heart Association's *Life's Simple 7* lifestyles
- Updates from the 2018 *Physical Activity Guidelines for Americans*
- Revised guidelines for hypertension
- Updated information on the benefits of muscular fitness
- Discussion of new technologies researchers are using to track health data
- Emphasis on building knowledge and changing beliefs in the self-management section

6 How Much Physical Activity Is Enough?

- New information from the 2018 *Physical Activity Guidelines for Americans*
- Clarifications about the “weekend warrior” approach to physical activity
- Updated statistics on adults meeting the latest physical activity guidelines
- Emphasis on building confidence and motivation in the self-management section

7 Adopting an Active Lifestyle

- New sections on terminology and guidelines related to sedentary behavior
- New content on the health risks of sedentary behavior, including mention of “is sitting the new smoking?”
- Emphasis on planning and monitoring in the self-management section

8 Cardiorespiratory Endurance

- New information based on the 2018 *Physical Activity Guidelines for Americans*
- Updates on studies that indicate the powerful benefits of vigorous exercise
- New explanation of online target heart rate calculators
- More detailed discussion on high-intensity interval training (HIIT)
- Discussion of research on developing medication to replace exercise
- Emphasis on monitoring and assessment in the self-management section

9 Vigorous Aerobics, Sports, and Recreational Activities

- New section clarifying the nature of vigorous exercises
- Updated information on patterns and trends in sports and recreation
- Highlights of the ACSM fitness trend report

- New discussion of “Fitness in the Parks” and group fitness trends
- New data on wearable fitness technology
- Emphasis on building confidence, motivation, and monitoring in the self-management section

10 Muscle Fitness and Resistance Exercise

- New information about health benefits from resistance exercise
- New descriptions of the multidimensionality of muscle fitness
- New discussion of “smart clothes”
- Emphasis on planning and assessment in the self-management section

11 Flexibility

- Completely updated section on the factors that influence flexibility
- Completely updated section on flexibility, injuries, and rehabilitation
- Revised section on stretching methods
- New section on functional fitness, posture, and flexibility-based activities
- Emphasis on consumer and performance skills in the self-management section

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

- Revised section on descriptions and roles of the core musculature
- Revised content on causes and consequences of back and neck pain
- New content on the prevention of (and rehabilitation from) back and neck problems
- Updated explanations for why posture is important for back and neck health
- Emphasis on planning, assessment, and changing beliefs in the self-management section

13 Performance Benefits of Physical Activity

- New content on the importance of more focused and structured training for high-level performance
- New information on concussion awareness and education
- New discussion of WHOOP technology monitoring rest and recovery
- Emphasis on planning and consumer skills in the self-management section

14 Body Composition

- Updated information on the prevalence of obesity and extreme obesity

- New content on how to understand and interpret information about the obesity epidemic
- Consequences of the designation of obesity as a disease
- Updated content on obesity treatment guidelines
- Emphasis on assessment considerations in the self-management section

15 Nutrition

- Clarifications and descriptions of the latest *Dietary Guidelines for Americans*
- New section “Understanding Contemporary Nutrition Terms, Issues, and Food Preferences” that includes content on glucose intolerance and genetically modified foods
- Updated information on the FDA’s prohibition on trans fats
- Emphasis on building knowledge, confidence, and motivation in the self-management section

16 Managing Diet and Activity for Healthy Body Fatness

- New information on consumer weight loss programs
- Updated content on losing body fat
- Strategies for confronting an obesogenic environment
- Emphasis on overcoming barriers, social support, and relapse prevention in the self-management section

17 Stress and Health

- New content on stress in contemporary society
- Updated information on the sources of stress
- Clarification on how stress affects health and wellness
- Emphasis on assessment and balancing attitudes in the self-management section

18 Stress Management, Relaxation, and Time Management

- Completely reorganized content to improve flow of information
- Updated descriptions and information on the principles of stress management
- New research on the impact of online social networks
- Emphasis on coping and consumer skills in the self-management section

19 The Use and Abuse of Tobacco

- Updated statistics on smoking patterns and trends
- New information on the impact of the media and marketing of tobacco
- Updated information on issues with e-cigarettes
- Emphasis on building self-confidence and motivation in the self-management section

20 The Use and Abuse of Alcohol

- Updated statistics and risks related to drinking and driving
- Updated information on campus strategies related to alcohol abuse
- Recent debates about college drinking and Greek life
- New apps designed to assist addiction treatment
- Emphasis on self-assessment and self-monitoring skills

21 The Use and Abuse of Other Drugs

- Completely reorganized structure to improve flow of information
- Updated statistics and graphics on the costs of drug abuse in society
- Patterns, trends, and consequences associated with legalized marijuana
- Emphasis on consumer skills in the self-management section

22 Preventing Sexually Transmitted Infections

- Updated statistics on the prevalence of different sexually transmitted infections
- Updates on progress with HIV treatment and vaccine development
- New discussion of the “Me Too” movement and sexual misconduct
- New information on the CDC’s “Talk, Test, and Treat” STI-prevention campaign
- Emphasis on communication skills in the self-management section

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
- Emphasis on consumer skills and assessment in the self-management section

24 Evaluating Fitness and Wellness Products: Becoming an Informed Consumer

- Updates on quackery in the health and fitness industry
- Updated guidelines on use of vitamin and mineral supplements
- New examples of fraud in the dietary supplement industry
- Features and drawbacks of online personal training resources

- New information on the FDA's MedWatch alert system to report consumer fraud
- Emphasis on communication skills in the self-management section

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

- Updates on access to medical care and the physician's role in health
- Summary of self-management skills and links to enabling, predisposing, and reinforcing factors influencing behavior
- New research on the effects of optimism
- New data on Americans accessing health care
- New research on positive patient results from female doctors
- Emphasis on planning skills and practice in the self-management section

More Resources for Teaching with *Concepts of Fitness and Wellness*

Your Course, Your Way

McGraw-Hill Create[®] is a self-service website that allows you to create customized course materials using McGraw-Hill Education's comprehensive, cross-disciplinary content and digital products. You can even access third-party content such as readings, articles, cases, videos, and more.

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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

All test questions are available within TestGen[™] software. PowerPoint presentations are WCAG compliant.

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.

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Why it Matters!

Ninety-nine percent of American adults say that “being in good health” is of primary importance. In fact, people rate personal health (and health of loved ones) as being more important than money and other material things. This is because good health, wellness, and fitness can make us feel good, look good, and enjoy life fully. *Concepts of Fitness and Wellness* is specifically designed to help you learn the cognitive and behavioral skills needed to help you achieve good health, wellness, and fitness throughout life. In this first Concept you will learn about the distinctions between health, wellness, and fitness.

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 and sustain healthy lifestyles. Throughout this edition, you will learn a variety of **self-management skills** that are critical for healthy living. The labs in each Concept provide opportunities to practice and apply these skills so that you can use them throughout your life. An overview of basic self-management skills is provided in a later Concept.

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.



Health and wellness are available to everyone for a lifetime.
©BananaStock/Getty Images

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.

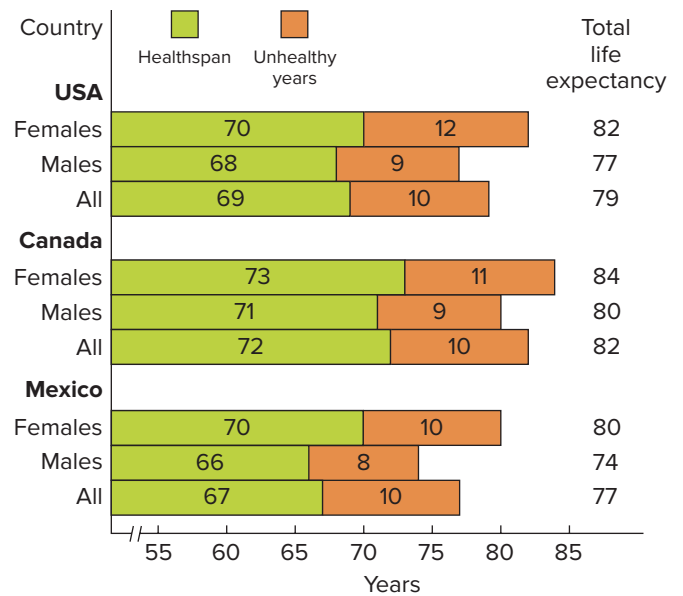
Self-Management Skills Skills that you learn to help you adopt healthy lifestyles and adhere to them.

National Health Goals

The **Healthy People Initiative** is a national public health program that establishes a comprehensive set of health promotion and disease prevention objectives with the primary intent of improving the nation's health. The objectives, developed by hundreds of experts from many different national organizations, provide benchmarks for determining health progress over each decade. 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. A complete list of *Healthy People* objectives (also referred to as goals) that relate to the content in *Concepts of Fitness and Wellness* is provided in this Concept to help you focus on relevant personal health goals.

In addition to helping change the health of society at large, the *Healthy People* objectives 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.

A primary goal of the Healthy People Initiative is to help all people have high-quality, longer lives free of preventable disease, injury, and premature death. This goal makes distinctions between **lifespan** (life expectancy)



*Values rounded to nearest year.

Figure 1 ► Estimated healthspan and lifespan for many North Americans.*

Source: World Health Organization

and **healthspan** (healthy life expectancy). Lifespan refers to the number of years you live. Healthspan is the number of years in your life during which you experience good health that is free of chronic diseases and debilitating conditions that limit your daily activities and your wellness (quality of life).

Over the past century, the lifespan (life expectancy) of Americans has increased by 60 percent. As lifespan has increased, so has the number of unhealthy years. The expected lifespan for North American countries is shown in Figure 1. The green bars in Figure 1 depict the relative healthspan in each country and the orange bars show the number of years with poor health and low quality of life. The United States ranks 31st in expected lifespan compared to other countries in the world. Among North American countries, the United States ranks behind Canada (12th) and ahead of Mexico

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

National Health Goals: The Healthy People Initiative

The *Healthy People 2020* goals (established in 2010) represent the U.S. goals for health and health promotion. More than 1,200 objectives are currently specified, and in 2020, new *Healthy People 2030* goals will be established. Although there are some differences in the nature of the goals, the overarching vision of the *Healthy People Initiative* has remained the same over time: “a society in which all people achieve their full potential for health and well-being across the lifespan.” Although the goals are set at the national level, they have implications for determining state and local funding, programming, and policy development.

The HELP philosophy emphasizes that health, wellness, and fitness are for everyone. Do you think public health goals can influence individual behavior? Conversely, do you think your individual choices and behaviors ultimately influence (or have an impact on) progress toward societal goals?

connect
ACTIVITY

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).

Healthy People Initiative: Goals for the Nation

The health goals listed in this table are from the *Healthy People Initiative* that establishes health goals for Americans. The specific goals listed below are those that are covered in *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.

Healthy People Initiative

- 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.

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.
- Decrease the percentage of unintended pregnancies.
- 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.



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 American Fitness Index from the American College of Sports Medicine (ACSM) and the Gallup-Healthways Well-Being Index® are examples. A variety of criteria such as personal health behaviors, chronic health problems, recreational

facilities, and community environmental factors are used to determine ratings. Search “well-being index” or “American Fitness Index” to learn more.

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?

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ACTIVITY

(47th). Although unhealthy years occur more often toward the end of the lifespan, they can happen at any time. Of concern is the fact that U. S. life expectancy *decreased* in recent years after more than 50 years of increases. Experts indicate that the dramatic increase in deaths from drug overdoses is one of the principal reasons for the recent decrease in life expectancy. Although these are national statistics, a goal of *Concepts of Fitness and Wellness* is to help you personally increase both your lifespan and your healthspan.



Regular physical activity can improve one's sense of well-being.
©Paul Bradbury/Getty Images

Achieving health equity, eliminating disparities, and improving the health of all groups is another primary goal of the *Healthy People Initiative*. Health varies greatly with ethnicity, income, gender, and age. As defined in the *Healthy People Initiative*, 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 national health goal 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.

The final primary goal of the *Healthy People Initiative* is to promote health, wellness, and healthy behaviors across all stages of life. Health and wellness are products of a healthy lifestyle. Young adults generally have good health, but unhealthy lifestyles eventually take a toll and contribute to compromised health and wellness later in life. The subsequent sections will describe important distinctions between (and dimensions of) health, wellness, and fitness.

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.

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VIDEO 1

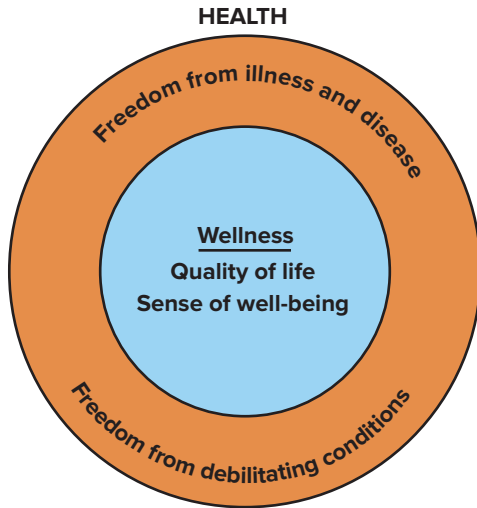


Figure 2 ► A model of optimal health, including wellness.

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

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. The term *health-related quality of life* also reflects 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 health and wellness dimensions include physical, emotional/mental, intellectual, social, and spiritual (see Figure 3). Each is important to optimal health and wellness.

Table 1 describes the various dimensions. Some people include environmental and vocational dimensions in addition to the five shown in Figure 3. Health and wellness are personal factors, so environmental and vocational health and wellness are not included in Table 1. However, the environment

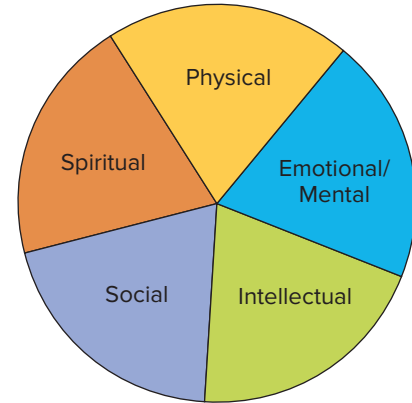


Figure 3 ► The dimensions of health and wellness.

(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.

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



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.

Table 1 ► Definitions of Health and Wellness Dimensions

Physical health —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.
Physical wellness —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.
Emotional/mental health —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.
Emotional/mental wellness —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.
Intellectual health —Freedom from illnesses that invade the brain and other systems that allow learning. A person with intellectual health also possesses intellectual wellness.
Intellectual wellness —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.
Social health —Freedom from illnesses or conditions that severely limit functioning in society, including antisocial pathologies.
Social wellness —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.
Spiritual health —The one component of health that is totally composed of the wellness dimension; it is synonymous with spiritual wellness.
Spiritual wellness —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.

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

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 living with a debilitating condition. Many illnesses are curable and may have only a temporary effect on health. Others, such as Type 1 diabetes, are not curable but can be managed with proper nutrition, 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.

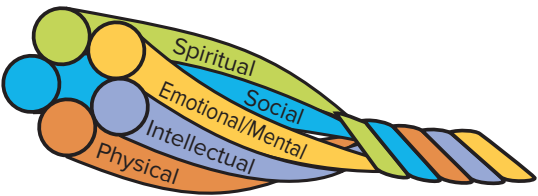


Figure 4 ► The integration of wellness dimensions.



A CLOSER LOOK

Population Surveys of Wellness and Quality of Life

Although the prevalence of obesity and chronic disease in adults is quite high, most adults still report a relatively high level of wellness. For example, a national poll indicates that 87 percent of Americans are very satisfied or somewhat satisfied with their overall quality of life. This finding suggests that even people experiencing the negative component of overall health—the presence of disease or illness—can experience wellness. Public health agencies use a variety of different measures to assess

wellness (well-being), including questionnaires measuring overall life satisfaction, happiness, social support, and personal autonomy. (See Suggested Resources and Readings).

To what extent do you think your overall wellness is dependent on “freedom from disease and illness”? Do you think that maintaining wellness can help you cope with illness and disease?

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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.

The term *holistic health* is similarly abused. Optimal health includes many dimensions; 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 (Figures 5 and 6), 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



The health-related dimensions of fitness are associated with enhanced health and wellness.

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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.

Lifestyles Patterns of behavior or ways an individual typically lives.

Physical Fitness The body’s ability to function efficiently and effectively. It consists of at least 11 health-related physical fitness and skill-related physical fitness components, each of which contributes to total quality of life. Physical fitness also includes metabolic fitness and bone integrity. 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 2 diabetes, and obesity.

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VIDEO 4



Figure 5 ► Dimensions of health-related physical fitness.

(Body Composition): ©Comstock Images/Stockbyte/Getty Images; (Muscular Endurance): ©Thinkstock Images/Stockbyte/Getty Images; (Cardiorespiratory Endurance): ©Stockbyte/Getty Images; (Strength): ©Monkey Business Images/Shutterstock; (Power): ©Ryan McVay/Photodisc/Getty Images; (Flexibility): ©Tom Grill/Corbis/Getty Images



Figure 6 ► Dimensions of skill-related physical fitness.

(Agility): ©Karl Weatherly/Stockbyte/Getty Images; (Reaction Time): ©John Lund/Drew Kelly/Blend Images LLC; (Coordination): ©Karl Weatherly/Photodisc/Getty Images; (Speed): ©JupiterImages/Brand X/Alamy Stock Photo; (Balance): ©Mangostar/Shutterstock

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). All health-related fitness dimensions have 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.

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VIDEO 5

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). 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.

Bone integrity is often considered to be a nonperformance measure of fitness. Traditional definitions do not include bone integrity as a part of physical fitness, but some experts feel they should. Like metabolic fitness, bone integrity cannot be assessed with performance measures the way most



There are many ways to train to improve functional fitness.

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health-related fitness parts can. Regardless of whether bone integrity is considered a part of fitness or a component of health, strong, healthy bones are important to optimal health and are associated with regular physical activity and sound diet.

The many components of physical fitness are specific but are also interrelated. Physical fitness is a combination of several aspects, rather than a single characteristic. A fit person possesses at least adequate levels of each of the health-related, skill-related, and metabolic fitness components. Some relationships exist among various fitness characteristics, but each component of physical fitness is separate and different from the others. For example, people who possess exceptional strength may not have good cardiorespiratory endurance and those who have good coordination do not necessarily possess good flexibility.

Functional fitness is important for people of all ages. **Functional fitness** refers to the ability to perform activities of daily life. For adults, this includes performing work and household tasks as well as leisure activities without undue fatigue. It also includes having adequate fitness to meet the demands of emergency situations. For youth, functional fitness includes the ability to function in school and leisure activities without undue fatigue. For older adults, functional fitness plays key roles in enabling independence and in minimizing risks of falls.

Good physical fitness is important, but it is not the same as physical health and wellness. Good fitness contributes to the physical dimension of health and wellness by reducing risk for chronic diseases and by reducing the consequences of many debilitating conditions. Good fitness also contributes indirectly to other dimensions by helping us look our best, feel good, perform daily tasks, and enjoy life. However, other physical factors can also influence health and wellness. For example, having good physical skills enhances quality of life by allowing us to participate in enjoyable activities, such as tennis, golf, and bowling. Although fitness can assist us in performing these activities, regular practice is also necessary. Another example is the ability to fight off viral and bacterial infections. Although

fitness can promote a strong immune system, other physical factors can influence our susceptibility to illness.

Using Self-Management Skills

Self-assessment is one of many self-management skills that can be learned to enhance lifelong healthy behaviors. Skills refer to the abilities you need in order to perform a specific task. Serving a tennis ball or typing on a computer are examples of physical or motor skills. Solving a math problem is an example of a mental or cognitive skill. A different set of skills—known as self-management skills—helps you adopt behaviors to enhance lifelong health, wellness, and fitness. *Self-assessment* (a specific self-management skill) refers to the ability to collect and evaluate personal information that will help you create a plan for improving your health, wellness, and fitness. You will conduct a variety of self-assessments as you work your way through this edition. For example, you will complete assessments for each dimension of health-related fitness and answer questionnaires to determine your wellness status, risk factors, attitudes, and health behavior patterns. To most effectively use self-assessments, consider the following guidelines:

- **Follow the same procedures each time you self-assess.** Read and follow the instructions to know how to do a self-assessment properly. Having written descriptions of the best way to perform an assessment reminds you of the proper techniques for assessment. Heeding an instructor's advice and following written descriptions of assessments helps ensure that each assessment is done the same way.
- **Use the same equipment or questionnaire each time you self-assess.** For example, when assessing your weight, use the same scale every time. Even if the scale isn't completely accurate, using the same scale helps you record fluctuations in weight over time. When assessing wellness with a questionnaire, use the same form each time to achieve consistent comparisons.
- **Practice.** Like all skills, self-assessment skills can be improved with practice. For example, if you regularly assess your fitness, you will get better at it and achieve more consistent results.
- **Be honest with yourself.** Many self-assessments require you to provide personal answers to questions. The results of your self-assessments are for your own use in establishing baseline information so that you can determine if you are improving your health, wellness, and fitness over time. The results will be meaningful only if you provide honest answers.

Use good consumer skills to evaluate information you read and hear about health, wellness, and fitness. The popularity and importance of health-related issues in our society make consumers vulnerable to mis-information, quackery, and fraud. A key to reducing your risk and to advancing your knowledge is to use good sources of information. See Technology Update for information about sound health-related websites.



Technology Update

Health Websites

The Internet provides a tremendous number of sources of information about health, wellness, and fitness. However, all online sources are not equally credible or useful. The best way to get accurate information is to use reliable sources. Focus on government agencies (.gov), prominent medical and public health associations, and established nonprofit agencies (.org). The first sites that come up in searches may not be the best, so check the source. A brief list of some prominent and credible Internet sites is provided below. Additional organizations and websites are referenced in other sections.

- Academy of Nutrition and Dietetics (AND)
- American College of Sports Medicine (ACSM)
- American Heart Association (AHA)
- American Medical Association (AMA)
- Center for Science in the Public Interest
- Centers for Disease Control and Prevention (CDC)
- Federal Trade Commission (FTC)
- Food and Drug Administration (FDA)
- Gallup-Healthways
- Harvard Health Publications
- Health Canada
- Healthy People 2020
- Mayo Clinic Health Letter
- MedlinePlus
- National Academy of Medicine (NAM)
- National Institutes of Health (NIH)
- Pew Research Center—Health
- President's Council on Fitness, Sports and Nutrition
- Quackwatch
- Robert Wood Johnson Foundation
- Society of Health and Physical Educators (SHAPE America)
- U.S. Consumer Information Center
- WebMD
- World Health Organization (WHO)

Do you consider the quality of sources when you access health-related information on the Internet? What features should you look for to ensure credibility?

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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, and healthy blood sugar and insulin levels.

Functional Fitness The ability to perform activities of daily life.



Strategies for Action: Lab Information

An initial self-assessment of your wellness will provide information for future self-comparison. In Lab 1A, you will estimate your wellness using a Wellness Self-Perceptions Questionnaire, which assesses the five wellness dimensions. Assessing each dimension will help you see areas of strengths and

weaknesses and determine areas of priority as you set goals and make plans for improving. Answering the same questions at a later date can help you see if you have made progress. As each person makes progress toward improving wellness, collectively we move closer to the *Healthy People* goal of living long, high-quality lives.

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ACTIVITY

Suggested Resources and Readings

The websites for the following sources can be accessed by searching online for the organization, program, or title listed. Specific scientific references are available at the end of this edition of *Concepts of Fitness and Wellness*.

- American College of Sports Medicine. American Fitness Index.
- Centers for Disease Control and Prevention. Well-Being Concepts.
- Centers for Disease Control and Prevention. National Health Information Survey. Online Information.
- Central Intelligence Agency. (2017). *The World Factbook*. Washington, DC: CIA.
- Gallup Poll. Well-Being Index.
- Johns Hopkins Medicine Library. *Reliable Health Information on the Internet* (pdf).
- National Academies of Sciences, Engineering, and Medicine. (2017). *Global Health and the Future Role of the United States*. Washington, DC: National Academies Press (pdf).
- National Institutes of Health. MedlinePlus Consumer Health Resources.
- Office of Disease Prevention and Health Promotion. *Healthy People 2020*.
- Office of Disease Prevention and Health Promotion. *Healthy People 2030*.
- Trust for America's Health. *Blueprint for a Healthier America 2016* (pdf).
- U.S. Department of Health and Human Services. HealthFinder.gov.
- U.S. Office of Disease Prevention and Health Promotion (Health.gov) (health literacy).
- World Health Organization. *World Health Statistics 2017*.

Lab 1A Wellness Self-Perceptions

Name

Section

Date

Purpose: To assess self-perceptions of wellness.

Procedures

1. Place an X over the appropriate circle for each question (4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree).
2. Write the number found in that circle in the box to the right.
3. Sum the three boxes for each wellness dimension to get your wellness dimension totals.
4. Sum all wellness dimension totals to get your comprehensive wellness total.
5. Use the rating chart to rate each wellness area.
6. Complete the Results section and the Conclusions and Implications section.

Question	Strongly Agree	Agree	Disagree	Strongly Disagree	Score
1. I am physically fit.	(4)	(3)	(2)	(1)	<input type="text"/>
2. I am able to perform the physical tasks of my work.	(4)	(3)	(2)	(1)	<input type="text"/>
3. I am physically able to perform leisure activities.	(4)	(3)	(2)	(1)	<input type="text"/>
Physical Wellness Total =					<input type="text"/>
4. I am happy most of the time.	(4)	(3)	(2)	(1)	<input type="text"/>
5. I have good self-esteem.	(4)	(3)	(2)	(1)	<input type="text"/>
6. I do not generally feel stressed.	(4)	(3)	(2)	(1)	<input type="text"/>
Emotional/Mental Wellness Total =					<input type="text"/>
7. I am well informed about current events.	(4)	(3)	(2)	(1)	<input type="text"/>
8. I am comfortable expressing my views and opinions.	(4)	(3)	(2)	(1)	<input type="text"/>
9. I am interested in my career development.	(4)	(3)	(2)	(1)	<input type="text"/>
Intellectual Wellness Total =					<input type="text"/>
10. I have many friends and am involved socially.	(4)	(3)	(2)	(1)	<input type="text"/>
11. I have close ties with my family.	(4)	(3)	(2)	(1)	<input type="text"/>
12. I am confident in social situations.	(4)	(3)	(2)	(1)	<input type="text"/>
Social Wellness Total =					<input type="text"/>
13. I am fulfilled spiritually.	(4)	(3)	(2)	(1)	<input type="text"/>
14. I feel connected to the world around me.	(4)	(3)	(2)	(1)	<input type="text"/>
15. I have a sense of purpose in my life.	(4)	(3)	(2)	(1)	<input type="text"/>
Spiritual Wellness Total =					<input type="text"/>
Comprehensive Wellness (Sum of five wellness scores)					<input type="text"/>

Results (Record your scores from the previous page; then determine your ratings from the Chart).

Wellness Dimension	Score	Rating
Physical		
Emotional/mental		
Intellectual		
Social		
Spiritual		
Comprehensive		

Wellness Rating Chart

Rating	Wellness Dimension Scores	Comprehensive Wellness Scores
High-level wellness	10–12	50–60
Good wellness	8–9	40–49
Marginal wellness	6–7	30–39
Low-level wellness	Below 6	Below 30

Conclusions and Implications: Rank each dimension of wellness. Place a 1 by the dimension you need to work on most and a 2 by the dimension needing the next most work. Rank the others as 3, 4, and 5. Then in the box below, briefly discuss your wellness ratings. Comment on your current level of wellness and dimensions that could use improvement.



Physical



Emotional/mental



Intellectual



Social



Spiritual

Determinants of Lifelong Health, Wellness, and Fitness

LEARNING OBJECTIVES


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

- ▶ Identify the determinants of health, wellness, and fitness, and explain how they each contribute to health, wellness, and fitness.
- ▶ Differentiate between factors over which you have lesser and greater control.
- ▶ Use health behavior change strategies to carry out self-assessments of personal lifestyles and wellness perceptions.

Many factors contribute to health, wellness, and fitness, and some are more in your control than others.

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Why it Matters!

Your health, wellness, and fitness are influenced by many factors. These factors are often referred to as *determinants*. A key point is that you have more control over some determinants than others. In this Concept you will learn about the various determinants and how they contribute to your personal health, wellness, and fitness.

and fitness because these are the states of being (shaded in green and gold) that each of us wants to achieve. Around the periphery are the factors that influence these states of being. Those shaded in dark blue are the factors over which you have the least control (heredity, age, and disability). Those shaded in light blue (environmental factors and health-care system) are factors over which you have some control but less than the factors shaded in red (personal actions and interactions and cognitions and emotions). Those shaded in light red are the factors over which you have greatest control (healthy lifestyles).

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VIDEO 1

Determinants of Health, Wellness, and Fitness

Many factors are important in developing lifetime health, wellness, and fitness, and some are more in your control than others. A model that summarizes many of the factors that contribute to health, wellness, and fitness is provided in Figure 1. Central to the model are health, wellness, and physical fitness.

Determinants over Which You Have Little or Some Control

Heredity (human biology) is a determinant over which we have little control. Experts estimate that human biology, or heredity, accounts for 16 percent of all health problems, including early death. Heredity influences each dimension of health-related physical fitness, including our

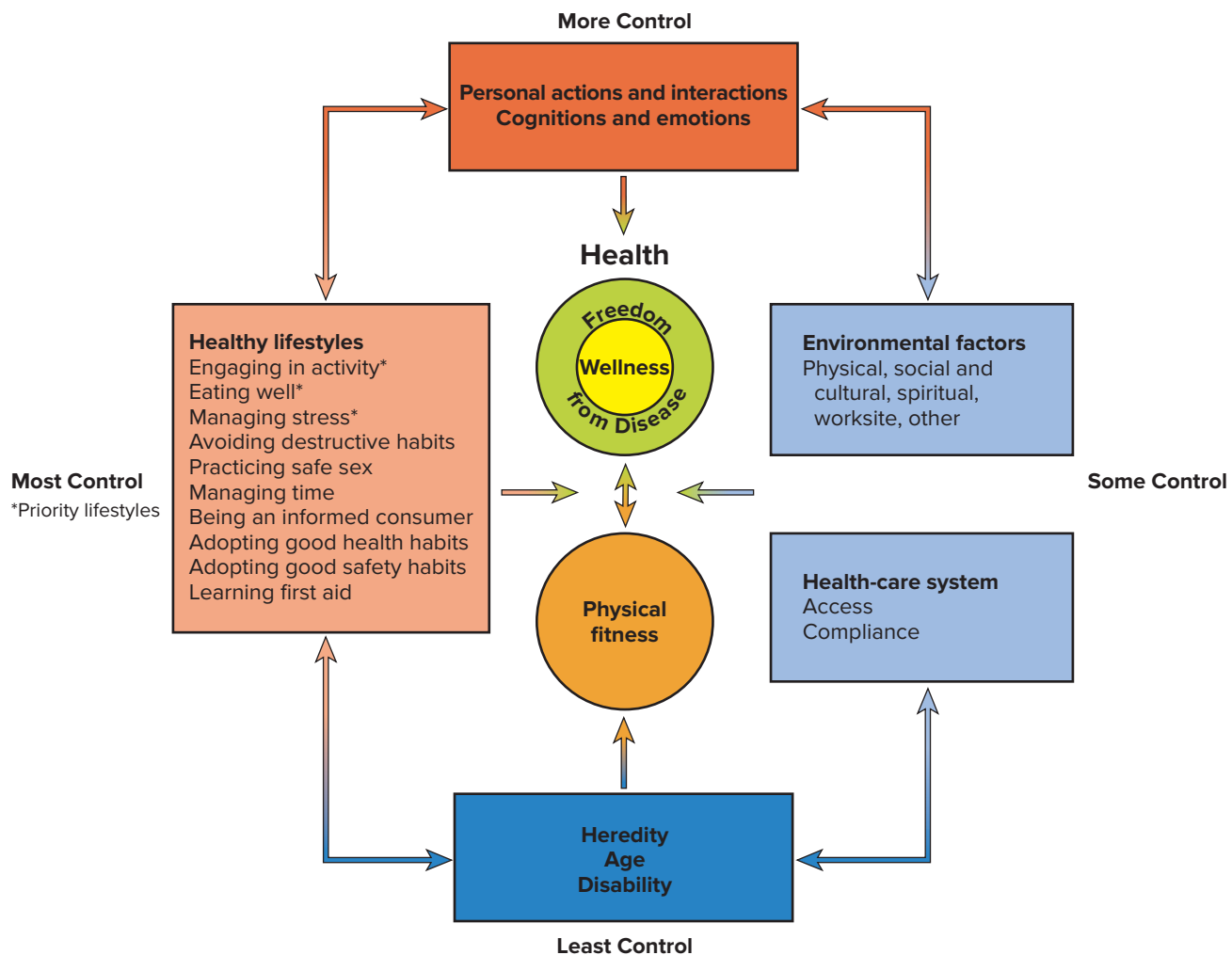


Figure 1 ► Determinants of health, wellness, and fitness.

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

Genetic Testing

Your genes do not necessarily cause diseases but they do influence your risk of developing certain diseases as well as your predisposition to addiction. The interaction between our genes and our environments and experiences is a complex one that is still being studied. Many companies offer genetic testing to identify potential risks as well as complete ancestral profiles based on DNA. (See Suggested Resources and Readings.)

The HELP philosophy emphasizes that health is highly personal. Would knowing you were genetically predisposed to a particular disease change the lifestyle decisions you make?

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tendencies to build muscle and to deposit body fat. Based on their genetics, individuals also respond and adapt differently to healthy lifestyles. Even more important is that predispositions to certain diseases are inherited. Some hereditary conditions are untreatable (e.g., congenital heart defects) while others are manageable with proper medical supervision and appropriate lifestyles (e.g., diabetes). Heredity is clearly a determinant over which you have little control (illustrated in dark blue in Figure 1) but you can take some preventive steps by being aware of your family history and by making efforts to manage factors that you can control.

Health, wellness, and fitness are influenced by age, but healthy lifestyles can delay and moderate the effect. In 2030, when all of the post–World War II baby boomers will be over the age of 65, adults 65 or older will make up 20 percent of the population. The number of people over 85 will triple by 2050. Data also indicate that there are more than 100,000 people over the age of 100 in the United States. The definition of *old* is clearly relative to your personal age, but societal perceptions of what constitutes “old age” are also changing. One survey reported that 25 percent of the population view that old age doesn’t begin until a person hits 80 years or more.

Age is clearly a factor over which we have no control (shaded in dark blue in Figure 1) and it does directly influence our health status. The major health and wellness concerns of older adults include losing health, losing the ability to care for oneself, losing mental abilities, running out of money, being a burden to family, and being alone. Chronic pain is also a major problem among older adults with nearly 30 percent of adults over 65 experiencing chronic pain, as opposed to 3 percent of those under 30. The important message is that healthy lifestyles can dramatically reduce the effects of aging on health, wellness, and fitness. Thus, it is



Disabilities need not limit one’s ability to experience an active, fulfilling life.

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important to adopt and maintain healthy lifestyles to somewhat counter “normal” aging effects.

Disabilities can affect, but do not necessarily limit, health, wellness, and fitness. Disabilities typically result from factors beyond your control (shaded in dark blue in Figure 1). Many types of disabilities affect health, wellness, and fitness. An objective disability (e.g., loss of a limb, impaired intellectual functioning) can make it difficult to function in certain circumstances but need not limit health, wellness, and fitness. All people have a limitation of one kind or another. Societal efforts to help all people function within their limitations can help everyone, including people with disabilities, to have a positive outlook on life and experience a high quality of life.

The health-care system affects our ability to overcome illness and improve our quality of life. Approximately 10 percent of unnecessary deaths occur as a result of disparities in the health-care system. The quality of life for those who are sick and those who tend to be sick is influenced greatly by the type of medical care they receive. Health care is not equally available to all. Each year, thousands of people die because they lack health insurance. Uninsured individuals may not seek health care, and the quality of the care they do

receive may not be high. Chronic conditions that go undetected can become untreatable or lead to additional complications. The passage of the Patient Protection and Affordable Care Act (shortened to the Affordable Care Act, or ACA) addressed this issue by enabling all Americans to have health insurance. According to the National Center for Health Statistics, the number of uninsured Americans dropped from 16 percent in 2010 to a record low of 8.8 percent in 2016.

Even with coverage, many people fail to seek medical help when warranted, and others fail to follow medical advice. For example, they do not take prescribed medicine or do not follow up with treatments. Men are less likely to seek medical advice than women and this is a problem since some treatable conditions lead to bigger problems or become untreatable over time. This is why it is important to follow recommendations for regular screenings and seek medical advice when warranted.

Wellness as evidenced by quality of life is also influenced by the health-care system. Traditional medicine, sometimes referred to as the **medical model**, has focused primarily on the treatment of illness with medicine, rather than illness prevention and wellness promotion. Efforts to educate health-care personnel about techniques for promoting wellness have been initiated in recent years. Still, it is often up to the patient to find information about health promotion. For example, a patient with risk factors for heart disease might be advised to eat better or to exercise more, but little specific information may be offered. While you don't have full control over medical care, you do have some control over your access, use, and adherence to medical advice (see the light blue box in Figure 1).

The environment is a major determinant affecting our health, wellness, and fitness. Environmental determinants account for nearly one-fourth of all early deaths and affect quality of life in many ways. We do have more control over environmental factors than heredity, but you can't control all aspects of the environment. You do have some control

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VIDEO 2



A bit of extra effort can help build physical activity into your daily routine

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over how you interact with your environments and the extent with which you take advantage of available healthy opportunities. (See the light blue box in Figure 1.)

You can exert personal control by seeking out healthy environments that might enable you to be more active or to eat healthier. You can also look to avoid unhealthy or unsafe environments. Many people actively consider aspects of their environment when considering places to live or work since it



A CLOSER LOOK

Determinants of Health in the United States

The United States is one of the wealthiest countries in the world but far from the healthiest. The report *U.S. Health in International Perspective: Shorter Lives, Poorer Health* found that Americans are less healthy than people in 16 other developed countries. This is attributed to a number of key determinants, including health systems (e.g., differences in access to health care), health behaviors (e.g., poor diet and exercise habits),

social and economic conditions (e.g., education system and high poverty), and unhealthy environments (e.g., walkability and fast food). (See Suggested Resources and Readings.)

What do you think is the most important determinant? Which of the determinants do you personally have most control over? Which one do you have least control over?

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In the News

Healthy Community Design

Aspects of the “built environment”—the environment we live and work in—can directly impact our health. For example, access to healthy foods and the availability of walking routes make it easier to make healthy choices. The Centers for Disease Control and Prevention (CDC) has launched the Healthy Community Design Initiative as part of a broader campaign that is focused on improving environments

for better health. Search “CDC Healthy Places” to learn more. (See Suggested Resources and Readings.)

How does the environment influence your ability to be active and to eat healthfully? What can you do to find healthier opportunities wherever you live?

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has such a strong influence on their lifestyle. Circumstances may make it impossible for you to make the choices you would prefer, but it is important to at least be aware of the impact of your environment on your health and well-being. Also, consider broader influences on wellness from social, spiritual, and intellectual environments.

Determinants over Which You Have Greater Control

Personal actions, interactions, cognitions, and emotions all have an effect on health, wellness, and fitness. While you have no control over heredity, age, and disability (and limited control over health care and the environment), you can act (and interact) in ways to positively influence your lifestyle (shaded in dark red in Figure 1). You can use your cognitive abilities to learn about your family history and use that information to limit the negative influences of heredity. You can learn how to adapt to disabilities and personal limitations, as well as to the aging process. You can research the health-care system and seek out healthy opportunities and options even in unhealthy environments.

Your personal interactions also influence your health, wellness, and fitness. You are not alone in this world. Your various environments, and how you interact with them, influence you greatly. You have a choice about the environments in which you place yourself and the people with whom you interact in these environments.

Humans have the ability to think (cognitions) and to use critical thinking to make choices and to determine the actions they take and the interactions they engage in. Emotions also affect personal actions and interactions. A major goal of *Concepts of Fitness and Wellness* is to help you use your cognitive abilities to solve problems and make good decisions about good health, wellness, and fitness, as well as to help you be in control of your emotions when taking action and making decisions that affect your health.

None of us makes perfect decisions all of the time. Sometimes we take actions and make choices based on inadequate

information, faulty thinking, pressure from others, or negative influences from our emotions. While the focus of Concepts that follow is on healthy lifestyles, all of the factors that influence health, wellness, and fitness are important to consider. The goal is to help you consider all factors and to make informed decisions that will lead to healthful behaviors.

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VIDEO 3

Lifestyle change, more than any other determinant, is the best way to prevent illness and early death in our society. Statistics show that more than half of early deaths are the result of chronic diseases caused by unhealthy lifestyles. Many of these chronic diseases are targeted in the Healthy People report, and many of the new health objectives focus on them. As shown in Figure 1, these lifestyles affect health, wellness, and physical fitness. The double-headed arrow between health/wellness and physical fitness illustrates the interaction between these factors. Physical fitness is important to health and wellness development and vice versa.

The major causes of early death have shifted from infectious diseases to chronic lifestyle-related conditions. Scientific advances and improvements in medicine and health care have dramatically reduced the incidence of infectious diseases over the past 100 years (see Table 1). Diphtheria and polio, both major causes of death in the 20th century, have been virtually eliminated in Western culture. Smallpox was globally eradicated in 1977.

Infectious diseases have been replaced with chronic lifestyle-related conditions as the major causes of death. Four of the top seven current causes of death (heart disease, cancer, stroke, and diabetes) fall into this category. While heart disease remains the leading killer among all adults, National Cancer Institute

Medical Model The focus of the health-care system on treating illness with medicine, with little emphasis on prevention or wellness promotion.

Table 1 ► Major Causes of Death in the United States

Current Rank	Cause	1900 Rank	Cause
1	Heart disease	1	Pneumonia*
2	Cancer	2	Tuberculosis*
3	Respiratory disease	3	Diarrhea/enteritis*
4	Accidents	4	Heart disease
5	Stroke	5	Stroke
6	Alzheimer disease	6	Liver disease
7	Diabetes	7	Injuries
8	Influenza/pneumonia*	8	Cancer
9	Kidney disease	9	Senility
10	Suicide	10	Diphtheria*

*Infectious diseases: The only diseases among the top 10 that are primarily infectious in nature today are influenza/pneumonia

Source: Data from the Centers for Disease Control and Prevention (CDC).

statistics indicate that cancer is the leading cause of death for adults under the age of 85. Death rates have recently decreased for 8 of the top 10 causes of death. The incidence of kidney disease was unchanged, and suicide increased 1 percent.

HIV, formerly in the top 10, has dropped from this list primarily due to the development of new treatments and prevention methods. It remains eighth among those aged 25–44. Many conditions in the top 10 list are sometimes referred to as chronic, or lifestyle-related, because healthy lifestyles can help reduce associated risks.

Healthy lifestyles are critical to wellness. Unhealthy lifestyles are the principal causes of modern-day illnesses, but healthy lifestyles (on the other hand) can result in the improved feeling of wellness that is critical to optimal health. The CDC uses the term *health-related quality of life* to describe the wellness benefits of healthy lifestyles. This well-being, or wellness, is associated with social, emotional/mental, spiritual, and physical functioning. Being physically active and eating well are two healthy lifestyles that can improve well-being and add years of quality living. Many of the healthy lifestyles associated with good physical fitness and optimal wellness will be discussed in detail later. The Healthy Lifestyle Questionnaire in Lab 2A gives you the opportunity to assess your current lifestyles.

Regular physical activity, sound nutrition, and stress management are priority healthy lifestyles. Three of the lifestyles listed in Figure 1 are considered to be priority

healthy lifestyles: engaging in regular **physical activity** or **exercise**, eating well, and managing stress. There are several reasons for placing priority on these lifestyles. First, they affect the lives of all people. Second, they are lifestyles in which large numbers of people can make improvement. Finally, modest changes in these behaviors can make dramatic improvements in individual and public health.

The other healthy lifestyles listed in Figure 1 are also important for good health. The reason they are not emphasized as priority lifestyles is that they do not affect everyone as much as the first three do. Many healthy lifestyles will be discussed in the Concepts that follow, but the focus is on the priority healthy lifestyles because virtually all people can achieve positive wellness benefits if they adopt them.

The “actual causes” of most deaths are due to unhealthy lifestyles. As illustrated in Table 1, chronic diseases (e.g., heart diseases, cancer) are the direct causes of most deaths in our society. Public health experts have used epidemiological statistics to show that unhealthy lifestyles such as tobacco use, inactivity, and poor eating actually cause the chronic diseases and for this reason are referred to as the “actual causes of death.” A recent report of the National Research Council and the National Academy of Medicine indicates that inactivity and poor nutrition (combined) are the leading actual cause of death in the United States (see Table 2). Tobacco use,

**Table 2 ► Actual Causes of Death in the United States**

Rank	Actual Cause	Percentage of Deaths
1	Inactivity/poor nutrition	18
2	Tobacco use	15
3	Alcohol misuse	3
4	Medical errors	3
5	Toxic agents	2.5
6	Microbial agents	2
7	Firearms	1.5
8	Sexual behavior	1
9	Motor vehicles	1
10	Illicit drug use	<1

Note: Other factors account for the remaining 52 percent of the causes.

Source: National Research Council and Institute of Medicine (2015)



Technology Update

Online Health Information: Podcasts

Numerous health agencies post short audio podcasts to provide updated and credible information to professionals and consumers on health, wellness, and fitness topics. However, popular podcasts about “health” may not always be the most accurate or appropriate; thus, when searching online, pair your search with credible organizations to find better information. Examples of agencies with credible podcasts include the American Council on Exercise (ACE), the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), Johns Hopkins Medical Center, the *Journal of the American Medical Association*, Mayo Clinic, Medscape, National Public Radio (NPR), USA.gov, and the U.S. Department of Agriculture (USDA).

Do you think you would use podcasts for health-related information? Why or why not?



previously the leading cause of actual death, is now the second leading cause. Tobacco use has decreased over the past several decades, but poor dietary habits and lack of adequate exercise have increased. Destructive habits (tobacco use, alcohol misuse, illicit drug use, and unsafe sexual behavior) account for 20 percent, factors related to health care (medical errors and microbial agents) account for 5 percent, and accidents (firearms, toxic agents, motor vehicles) account for 5 percent of premature deaths in the United States. Most of these are determinants over which you have considerable control.

Using Self-Management Skills

Manage your personal actions and interactions to overcome barriers to healthy living. There are many reasons why people with good intentions fail to be active or fail to adhere to healthy lifestyles. In this Concept, you learned that environments can either enhance or inhibit healthy behaviors. However, by doing some research and planning ahead, you can take steps to address barriers and challenges imposed by your environment and become physically active.

- **Find convenient and safe places to be physically active.** Safety is a major deterrent to walking and biking for some people, but many communities have websites that provide information about safe places to participate in sports and active recreation. Search online for information about

bike, walking, or jogging paths and well-lighted parks for evening activity.

- **Consider walking inside when the weather is bad.** Extremely cold or hot weather can be a significant barrier to being active. However, malls and “big-box” stores can be alternative places to walk that are safe and climate controlled.
- **Advocate for safe and healthy environments.** Taking control over your health often necessitates being an advocate for change. The results may not be immediate, but advocating for parks or biking paths can lead to better opportunities for physical activity. Requesting healthier food choices at restaurants or grocery stores can also lead to gradual shifts in what is promoted or available.

Use self-management skills to adopt and sustain a variety of healthy lifestyles. Consider how to apply these specific self-management skills to help take positive actions related to health, wellness, and fitness.

- **Manage your time effectively.** Lack of time due to busy school and work schedules may make being physically active and eating healthfully a challenge. This makes learning how to manage your time even more important. Time management is a skill that can be learned to help you manage your lifestyle *and* your stress. In a later Concept, you will learn specific techniques for managing time.
- **Get help and social support from friends, family, and/or experts.** Research shows that support from others can be helpful to eating healthfully, performing regular exercise, and adopting other healthy lifestyles. However, friends and family may not know of your interests or values regarding health and wellness. Thus, it is important to manage your personal interactions. Also, sometimes the help of an expert may be necessary. Specific information about finding help is provided in many of the Concepts in this edition.
- **Build knowledge by learning the facts.** There is considerable misinformation on the Internet and in the media, so it is important to be an informed consumer. Too often people fall prey to health fraud because they lack good information. Learning facts can help you “do it right” and avoid failure resulting from trying things that are not based on solid research.

Physical Activity Generally considered to be a broad term used to describe all forms of large muscle movements, including sports, dance, games, work, lifestyle activities, and exercise for fitness. Although they have slightly different definitions, *exercise* and *physical activity* are sometimes used interchangeably to make reading less repetitive and more interesting.

Exercise Physical activity done for the purpose of getting physically fit.



Strategies for Action: Lab Information

Self-assessments of lifestyles will help you determine areas in which you may need changes to promote optimal health, wellness, and fitness. The Healthy Lifestyle Questionnaire in Lab 2A will help

you assess your current lifestyle behaviors to determine if they are contributing positively to your health, wellness, and fitness. As you continue your study, refer back to this questionnaire to see if your lifestyles have changed.

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Suggested Resources and Readings

The websites for the following sources can be accessed by searching online for the organization, program, or title listed. Specific scientific references are available at the end of this edition of *Concepts of Fitness and Wellness*.

- Centers for Disease Control and Prevention. *Impact of the Built Environment on Health* (pdf).
- Centers for Disease Control and Prevention. *Health-Related Quality of Life*. Atlanta. Website
- Healthy People 2020*. Social Determinants of Health. Website.
- Johns Hopkins Medicine. PodMed Health and Medicine Podcasts. Online Resource.
- National Library of Medicine. Genetic Ancestry Testing. Online Resource.
- National Center for Health Statistics. (2017). *Health, United States, 2016: With Chartbook on Long-term Trends in Health*. Hyattsville, MD: USDHHS. pdf.
- National Research Council and Institute of Medicine. *U.S. Health in International Perspective: Shorter Lives, Poorer Health*. Institute of Medicine. Washington, DC: National Academies Press. pdf.
- National Research Council and Institute of Medicine. (2015). *Measuring the Risks and Causes of Premature Death*. Washington, DC: National Academies Press. Online Summary.

Lab 2A Healthy Lifestyle Questionnaire

Name

Section

Date

Purpose: To assess the current status of various lifestyle behaviors and to help you make decisions concerning good health and wellness for the future.

Procedures

1. Complete the Healthy Lifestyle Questionnaire on the next page by answering “Almost Never,” “Sometimes,” or “Almost Always” to each of the questions. If your behavior is not consistent, or you feel you are between the extremes, then choose the middle option (“Sometimes”).
2. For each of the 10 lifestyle habits, sum the scores in the adjacent Total box.
3. Sum the 10 composite scores to create a Total Lifestyle Rating.
4. Record your scores in the Results section below.
5. Use the Healthy Lifestyle Rating Chart to determine your ratings. Add the ratings to the Results section.
6. Answer the question in the Conclusions and Implications section.

Results

Lifestyle Behavior	Score	Rating
Physical Activity Habits		
Nutrition Habits		
Stress-Management Habits		
Destructive Habits		
Safety Habits		
First Aid Habits		
Health Habits		
Medical Habits		
Consumer Habits		
Environmental Habits		
Total Score		

Healthy Lifestyle Rating Chart

Habit Rating	Score
Good Lifestyle	5–6
Neutral Lifestyle	3–4
Needs improvement	1–2
Total Score Rating	
Good Lifestyle	46–60
Neutral Lifestyle	30–45
Needs improvement	<30

Note: Your scores on the Healthy Lifestyle Questionnaire should be interpreted carefully. The statements are intended to provide a simple self-evaluation and are not designed as a screening or diagnostic tool. The various lifestyle behaviors pose different types of risks. For example, using tobacco or abusing drugs has immediate and significant negative effects on health and wellness, whereas other health lifestyles and skills, such as knowing first aid, may have subtler and less direct effects. Therefore, it is important not to compare scores on the different scales. The goal is to evaluate your overall profile and identify areas where you are doing well and areas that may need improvement.

Conclusions and Implications: In the space below, summarize the overall status of your lifestyle behaviors and indicate your strengths (areas where you are adopting healthy lifestyles) and concerns (areas where you may need to improve).

Healthy Lifestyle Questionnaire

Directions: Use the following ratings to determine your habits: 1 = Almost Never, 2 = Sometimes, 3 = Almost Always. Place that number in the box to the right of each question. Sum the two numbers to get a score for each lifestyle habit. Sum the lifestyle habit scores to get a total lifestyle rating.

Physical Activity Habits

1. I perform physical activity most days of the week (or vigorous 3 days).
2. I perform some exercises for muscle fitness (at least 2 days a week).

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Nutrition Habits

3. I consume 4–5 servings of fruits and vegetables per day.
4. I monitor the amount of fat in my diet.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Stress-Management Habits

5. I am able to identify situations in daily life that cause stress.
6. I take time out during the day to relax and recover from daily stress.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Destructive Habits

7. I do *not* smoke or use other tobacco products.
8. I do *not* binge drink or abuse alcohol.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Safety Habits

9. I use seat belts and adhere to the speed limit when I drive.
10. I avoid risky environments and situations.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

First Aid Habits

11. I can perform CPR if called on in an emergency.
12. I can perform basic first aid if needed in an emergency.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Health Habits

13. I brush my teeth at least twice a day and floss at least once a day.
14. I get an adequate amount of sleep each night.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Medical Habits

15. I do regular self-exams and have regular medical checkups.
16. I seek and follow medical advice when needed and prescribed.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Consumer Habits

17. I read product labels and make careful decisions before I buy.
18. I avoid using questionable products or programs.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Environmental Habits

19. I recycle paper, glass, and aluminum.
20. I look for ways to conserve energy and protect the environment.

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Total Lifestyle Rating

Note: These 10 habits capture only a sample of important lifestyle behaviors. A number of other potentially harmful behaviors are intentionally excluded due to their personal nature (such as the use and abuse of drugs, sexual practices, drinking and driving). Use the framework from this lab to think critically about your lifestyle behaviors and how you can work to improve them.

Self-Management Skills for Health Behavior Change

LEARNING OBJECTIVES

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

- ▶ Identify and define the five stages of change and explain how the stages relate to making lifestyle changes.
- ▶ Describe the four key factors that influence health behaviors, describe components in each category, and explain how the factors relate to stages of change.
- ▶ Identify and describe the self-management skills that predispose and enable you to change and to reinforce changes once you have made them.
- ▶ Identify and describe the six steps in self-planning and explain how they can be used to make personal plans for behavior change.
- ▶ Conduct self-assessments of your current stages for health behaviors and your self-management skills for making health behavior change.

Learning and regularly using self-management skills can help you adopt and maintain healthy lifestyles throughout life.



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Why it Matters!

Nearly everyone values good health, wellness, and fitness, but many people struggle to adopt the lifestyle patterns needed to achieve these outcomes. The focus in this Concept is on introducing different self-management skills that are needed to adopt and maintain healthy lifestyles. You may be good at some but not at others; this information will help you identify personal strengths and weaknesses. However, it is important to understand that self-management skills (like any skill) must be practiced and refined if they are to be useful. The labs and activities in this Concept (and others) provide opportunities to build these skills. However, it is up to you to learn from your experiences, apply the information, and adopt a long-term perspective for health behavior change that ultimately leads to healthy living throughout life.

Practicing one healthy lifestyle does not mean you will practice another, though adopting one healthy behavior often leads to the adoption of another.

College students are more likely to participate in regular physical activity than are older adults. However, they are also much more likely to eat poorly and abuse alcohol. Many young women adopt low-fat diets to avoid weight gain and smoke because they mistakenly believe that smoking will contribute to long-term weight maintenance. These examples illustrate the fact that practicing one healthy lifestyle does not ensure **adherence** to another. However, there is evidence that making one lifestyle change often makes it easier to make other changes. For example, smokers who have started regular physical activity programs often see improvements in fitness and general well-being and decide to stop smoking.

People progress—forward and backward—through several stages of change when making lifestyle changes. The widely used Transtheoretical Model suggests that lifestyle changes occur in at least five different stages, called **stages of change**. The stages of change model (see Figure 1) has been applied to many different lifestyles. For

Understanding Stages of Change

Many adults want to make lifestyle changes but find changes hard to make. Results of several national public opinion polls show that adults often have difficulty making desired lifestyle changes. Examples include those who believe that physical activity is important but do not get enough exercise to promote good health, those who have tried numerous times to lose weight but have failed, those who know good nutrition is good for health but do not eat well, and those who feel stress on a regular basis but have not found a way to become less stressed. Changes in other lifestyles are frequently desired but often not accomplished. While most people value health, many still seek shortcuts instead of learning how to adopt healthier lifestyles (see “In the News”).

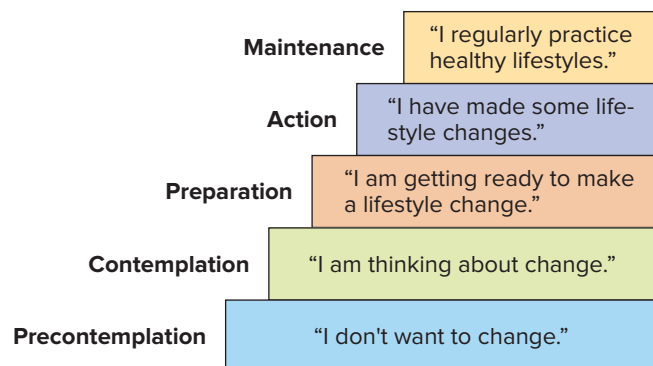


Figure 1 ► Stages of lifestyle change.



In the News

Myths and Medical Conspiracy Theories

There is considerable misinformation about health and medicine in society, fueled in part by web posts and media reports that popularize health myths or that reinforce unsubstantiated medical conspiracies. A prominent medical research study revealed that many Americans believe these conspiracy theories and have little trust in health information. For example, many people believe that agencies like the Food and Drug Administration intentionally keep

information and medical treatments away from the public rather than serve and protect citizens. This misinformation adds to the confusion about what and whom to believe. (See Suggested Resources and Readings.)

Why do some people choose to believe in miracle cures and question the science related to health and medicine? How can you ensure that you get accurate health information?

example, smokers who are not considering quitting smoking are in the *precontemplation* stage, whereas those who are considering the need to change are in the *contemplation* stage. These stages are very distinct, as is the next stage, *preparation*, which is characterized by specific efforts at changing. Individuals who have bought a nicotine patch or a book about smoking cessation are in the preparation stage; they have moved beyond contemplation and are preparing to take action. The *action* stage occurs when the smoker makes a change in behavior, even a small one, such as cutting back on the number of cigarettes smoked. The fifth stage, *maintenance*, is reached when a person finally stops smoking for a relatively long time (e.g., six months).

Although the stages model can be applied to any behavior, let's consider an example related to physical activity habits. Individuals who are totally sedentary may be in the precontemplation stage or in the contemplation stage if they are thinking about becoming active. A person at the preparation stage may have bought a pair of walking shoes and appropriate clothing for activity. Those who have started activity, even if infrequent, are at the stage of action. Those who have been exercising regularly for at least six months are at the stage of maintenance.

Whether the lifestyle is positive or negative, people move from one stage to another in an upward or a downward direction. Individuals in the action stage may move on to maintenance or revert to contemplation. Smokers who succeed in quitting permanently report having stopped and started dozens of times before reaching lifetime maintenance. Similarly, those attempting to adopt positive lifestyles, such as eating well, often move back and forth from one stage to another, depending on their life circumstances.

Once maintenance is attained, relapse is less likely to occur. Although complete relapse is possible, it is generally less likely after the maintenance stage is reached. At the maintenance stage, the behavior has been integrated into a personal lifestyle, and it becomes easier to sustain. For example, a person who has been active for years does not have to undergo the same thought processes as a beginning exerciser—the behavior becomes automatic and habitual. Similarly, a nonsmoker is not tempted to smoke in the same way as a person who is trying to quit.

Importance of Self-Management Skills

Learning self-management skills can help you alter factors that lead to healthy lifestyle change. Experts have determined that people who practice healthy lifestyles possess certain characteristics. Fortunately, these characteristics are attainable and the skills can be learned. The various skills needed to adopt and maintain healthy lifestyles are referred



to as “self-management skills” since they influence the way that you manage your behaviors. In this edition, 14 different skills are emphasized. Each is described in Table 1.

It takes time to change unhealthy lifestyles. People in Western cultures are used to seeing things happen quickly. We flip a switch, and the lights come on. We want food quickly, and thousands of fast food restaurants provide it. The expectation that we should have what we want when we want it has led us to expect instantaneous changes in health, wellness, and fitness. Unfortunately, there is no quick way to health. There is no pill that can reverse the effects of a lifetime of sedentary living, poor eating, or tobacco use. Changing your lifestyle is the key. But lifestyles that have been practiced for years are not easy to change. Environmental factors also influence options for healthy living (see “A Closer Look”). Learning self-management skills helps you overcome barriers and make positive lifestyle changes, but only if you implement them and practice them.



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 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?



Adherence Adopting and sticking with healthy behaviors, such as regular physical activity or sound nutrition, as part of your lifestyle.

Stage of Change The level of motivational readiness to adopt a specific health behavior.



Table 1 ► Key Self-Management Skills

Overcoming Barriers	Ability to overcome problems and challenges in adopting or maintaining healthy lifestyles. By conquering challenges, you learn skills that help you overcome other barriers.
Building Self-Confidence and Motivation	Ability to act on your intentions and the discipline needed to stick to them.
Balancing Attitudes	Ability to balance positive and negative attitudes. Developing more favorable and optimistic outlooks can help you adhere to healthy lifestyles.
Building Knowledge and Changing Beliefs	Ability to interpret and apply information about health, wellness, and fitness. Knowledge doesn't always change beliefs, but awareness of the facts can play a role in achieving good health.
Goal-Setting Skills	Ability to establish (and focus on) what you want to achieve in the future.
Self-Assessment Skills	Ability to assess your own health, wellness, and fitness and to learn to interpret your own self-assessment results.
Self-Monitoring Skills	Ability to monitor behavior and to keep records. Many people think they adhere to healthy lifestyles but, in reality, do not. Self-monitoring gives you a true picture of your behavior and helps you track progress over time.
Self-Planning Skills	Ability to prepare and follow a plan for adopting or maintaining healthy lifestyle habits.
Performance Skills	Ability to learn lifestyle and physical skills needed to be physically active and healthy. These skills can help you feel confident and more successful in your efforts.
Coping Skills	Ability to handle change. This set of skills helps you see situations in different perspectives and have more control over your lifestyle.
Consumer Skills	Ability to understand and interpret health information and make sound decisions related to health, wellness, and fitness.
Time-Management Skills	Ability to devote time to the behaviors and activities that are most important to your personal health, wellness, and fitness.
Using Social Support	Ability to seek out and obtain support from others. By learning to find support, you are more likely to sustain motivation and drive when faced with challenges.
Preventing Relapse	Ability to return to healthy lifestyles despite challenges and setbacks. It is normal to have up and down phases, but this skill helps you avoid long-term relapses and return to healthy lifestyles when faced with barriers.

Making Lifestyle Changes

Various factors have been found to influence the adoption and maintenance of healthy lifestyles. A

variety of theories have been proposed to understand health behavior (e.g., Social Cognitive Theory, Self-Determination Theory, Theory of Planned Behavior, Theory of Reasoned Action). Each theory offers some unique attributes or concepts, but they share many of the same components. The previously mentioned Transtheoretical Model integrates elements from multiple theories and can be viewed as a “meta-theory.” The distinction between a “theory” and a “model” is important in this case. The Transtheoretical Model does not provide a new explanation of behavior (a theory) but rather a guide or map that makes using and applying the theories easier (a model). The unique advantage of the Transtheoretical Model is that it demonstrates that behavior is influenced in different ways depending on the stage of change a person has reached.

Another meta-theory used to explain the challenges of changing health behaviors is the Social-Ecological Model.



This model also integrates multiple theories, but a key point in this model is that a person's behavior is strongly influenced by the nature of the environment in which she or he lives. If you are in a supportive social environment and have access to healthy foods and activity resources, adopting healthier lifestyles is easier.

You do not need a thorough understanding of the theories and models, but you should be aware of the basic principles. Concepts from both the Transtheoretical and Social-Ecological models have been combined to provide a simpler way to understand the various factors that influence behavior. The various factors can be classified as **personal, predisposing, enabling, and reinforcing factors**. Personal factors refer to personal characteristics or conditions that may make it easier or more difficult to make change. Predisposing factors help initiate behavior change—moving toward contemplation or even preparation. Enabling factors help those in contemplation or preparation take a step toward action. Reinforcing factors move people from action to maintenance and help those in maintenance stay there. As depicted in Figure 2, there is a general progression in the relevance of factors across the various stages of change.

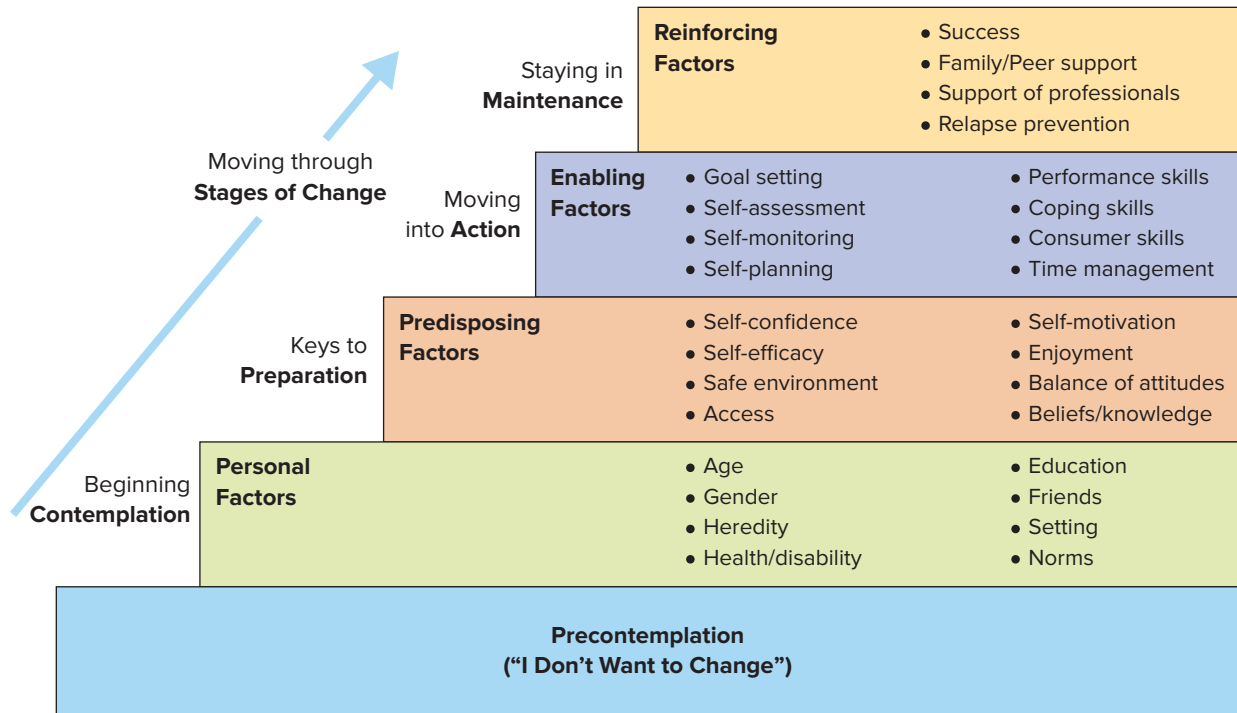


Figure 2 ► Relevant factors and self-management skills to progress across the various stages of change.

Personal factors affect health behaviors but are often out of your personal control. Age, gender, heredity, social status, and current health and fitness levels are all personal factors that affect your health behaviors. Age effects are exemplified by differences in health behaviors across the life-span. For example, young adults are more likely to smoke and drink excessively but to be more physically active than older adults. Gender differences are illustrated by the fact that women use health services more often than men. Women are more likely than men to have identified a primary care doctor and are more likely to participate in regular health screenings. Heredity can directly and indirectly influence lifestyle behaviors. For example, some people are more prone to addictions and hereditary predisposition may alter beliefs or attitudes about health and wellness.

Personal factors also capture other conditions that influence ability to make change. People with little education are more likely to have health problems and make less money. People with limited income often have less access to health care and healthy foods. Social interactions also affect your ability to change. People who have friends who practice healthy habits have an easier time adopting healthy behaviors than people who have friends or who have social interactions with people who practice destructive health behaviors. No matter what your circumstances are, you can take responsibility to change your health behaviors. Learning about predisposing, enabling, and reinforcing factors (see Figure 2) can help you overcome personal or social circumstances and help you to make the most of your efforts to change your lifestyles to promote health, wellness, and fitness.



Access to healthy foods is an important predisposing factor for good nutrition.

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Personal Factors Factors, such as age or gender, related to healthy lifestyle adherence but not typically under personal control.

Predisposing Factors Factors that make you more likely to adopt a healthy lifestyle, such as participation in regular physical activity, as part of your normal routine.

Enabling Factors Factors that help you carry out your healthy lifestyle plan.

Reinforcing Factors Factors that provide encouragement to maintain healthy lifestyles, such as physical activity, for a lifetime.

Predisposing factors are important in getting you started with the process of change. Predisposing factors refer to characteristics, attributes, and beliefs that help a person prepare to adopt healthy behaviors. One particularly important predisposing factor is self-motivation (also called intrinsic motivation). People with intrinsic motivation tend to have greater levels of **self-confidence** and **self-efficacy**—terms that both have to do with having positive perceptions about your own abilities. People with positive self-perceptions are more predisposed to take action because they are confident in their ability to make behavior changes. Other factors that help you feel you are able to engage in a healthy behavior include easy access and a safe environment. For example, people who have easy access to exercise equipment at home or the workplace or who have a place to exercise within 10 minutes of home are more likely to be active than those who do not. Similarly, access to healthy food options is critical for adopting a healthy diet. A supportive physical and social environment can also make it easier to adopt healthy habits.

There are specific self-management skills that can help a person change predisposing factors (see Figure 2). Learning to overcome barriers in one lifestyle can build your confidence in being able to make other changes. Gaining knowledge and developing more favorable attitudes can also help in adopting healthy lifestyles. Table 2 provides specific lifestyle examples of the various predisposing factors to help you understand how to apply them to your own lifestyle.



Enabling factors move you from the beginning stages of change to action and maintenance. Enabling factors refer to a range of self-management skills that help you follow through with decisions to make changes in behaviors. As shown in Figure 2, the ability to assess needs, set goals, make plans, and monitor progress are important in helping moving into the action stage on a particular behavior. Specific performance and consumer skills may be needed for some behaviors while coping and time-management skills can help you stick to your intended goals and plans. Table 3 provides illustrative examples for each of these enabling factors, and the labs in each

Concept provide opportunities for you to directly apply various self-management skills to your lifestyle.

Reinforcing factors help you adhere to lifestyle changes. Once you have reached the action or maintenance stage, it is important to stay at this high level. Reinforcing factors help you stick with a behavior change (see Figure 2).

Social support from family, peers, and health professionals can be an especially important reinforcing factor. There are, however, different kinds of support and some are more helpful than others. A supportive person might ask, “How can I help you meet your goals?” This type of support helps you take control of your own behavior and is not viewed as overly

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

Do Your Friends Support or Hinder Your Efforts to Adopt Healthy Lifestyles?

Learning to find positive social support is an important self-management skill. Studies of social connections over time have shown that people are more likely to become obese if they have obese friends. Similar relationships have been shown among spouses. Researchers suggest that health behaviors tend to be shared within social groups, resulting in shared outcomes. (See link in Suggested Resources and Readings.)

Do your friends help you maintain a healthy lifestyle or do they make it more difficult to do so?



Self-Confidence The belief that you can be successful at something (for example, the belief that you can be successful in sports and physical activities and can improve your physical fitness).

Self-Efficacy Confidence that you can perform a specific task (a type of specific self-confidence).

Table 2 ► Lifestyle Examples of Self-Management Skills related to Predisposing Factors

Overcoming Barriers	You might find it hard to be physically active in the winter or bad weather. However, you can dress more appropriately or find alternate ways to be active indoors.
Building Confidence and Motivation	You may be tempted by snack foods and candy provided by coworkers. Resisting these foods takes discipline, but it builds confidence and motivation that helps keep focus on long-term goals.
Balancing Attitudes	You might have negative attitudes about physical activity from sports or experiences in school. Rather than focusing on negative memories or attitudes, focus on positive outcomes (e.g., enjoyment, social interactions, or how it helps you feel). Shifting the balance to positive attitudes can help in making change.
Building Knowledge and Changing Beliefs	You may doubt that eating habits influence health and wellness, but learning about nutrition and healthy lifestyles can increase knowledge and awareness and provide the basis for changes in beliefs and behavior.