Do you want to be healthy and fit? Do you want to look your best and feel good?

*Fitness for Life* is based on the proven HELP philosophy: Health for Everyone for a Lifetime in a very Personal way.

H = Health  
E = Everyone  
L = Lifetime  
P = Personal

The HELP philosophy allows you to take personal control of your future fitness, health, and wellness.

*Fitness for Life* helps you become a physically literate person so that you can

- understand and apply important concepts and principles of fitness, health, and wellness;
- understand and use self-management skills that promote healthy lifestyles for a lifetime;
- be an informed consumer and critical user of fitness, health, and wellness information; and
- adopt healthy lifestyles now and later in life.

*Fitness for Life* is the winner of the Texty Award for textbook excellence.
**Fitness for Life** will help you meet your fitness and physical activity goals. Take this guided tour to learn about all of the features of this textbook. Two lessons are included in each chapter to help you learn key concepts relating to fitness, health, and wellness.

### UNIT III

**Moderate and Vigorous Physical Activity**

**CHAPTER 7**  Moderate Physical Activity and Avoiding Sedentary Living  
**CHAPTER 8**  Cardiorespiratory Endurance  
**CHAPTER 9**  Vigorous Physical Activity  

**Healthy People 2030 Goals and Objectives**

**Overarching Goals**
- Attain healthy, thriving lives and well-being, free of preventable disease, disability, injury, and premature death.
- Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all.

**Objectives**
- Reduce the proportion of people who do no physical activity in their free time.
- Increase the proportion of adolescents and adults who do enough aerobic physical activity for health benefits.
- Increase the proportion of teens who participate in daily school physical education.
- Increase the proportion of teens who play sports.
- Increase the proportion of teens who walk or bike to get places.
- Increase the proportion of teens who limit screen time.
- Improve cardiovascular health and reduce the risk of heart related conditions (e.g., high blood pressure, high blood lipids, heart attack).
- Reduce unintentional injuries including brain injuries.

**Self-Assessment Features in This Unit**
- Walking Test
- Step Test and One-Mile Run Test
- Assessing Jogging Techniques

**Taking Charge and Self-Management Features in This Unit**
- Learning to Manage Time
- Self-Confidence
- Improving Performance Skills

**Taking Action Features in This Unit**
- Performing Your Moderate Physical Activity Plan
- Target Heart Rate Workouts
- Performing Your Vigorous Physical Activity Plan

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**LESSON 7.1**  Moderate Physical Activity Facts  
**SELF-ASSESSMENT**  Walking Test

**LESSON 7.2**  Preparing a Moderate Physical Activity Plan  
**TAKING CHARGE**  Learning to Manage Time  
**SELF-MANAGEMENT**  Skills for Managing Time  
**TAKING ACTION**  Performing Your Moderate Physical Activity Plan
LESSON 1.1
Lifelong Fitness, Health, and Wellness

Lesson Objectives:
Describes what you will learn in each lesson.

Lesson Objectives
After reading this lesson, you should be able to:
1. define health and wellness and describe how they are interrelated.
2. define physical fitness and describe the six parts of health-related fitness and the five parts of skill-related fitness.
3. define functional fitness and explain why it is important; and
4. describe the warm-up, the workout, and the cool-down and explain why each is important.

Lesson Vocabulary:
Lists key terms in each lesson, which are defined in the glossary and on the student website.

Web Icon:
Reminds you that additional information is available on the web resource for each lesson.

Teen Quotes:
Statements from teens about fitness, physical activity, and healthy lifestyles.

If you were granted one wish, what would it be? Some people might wish for material things, such as money, a new car, or a new house. But after some consideration, most people would wish for good health for themselves and their families. With health, fitness, and wellness, you can enjoy life to its fullest. Without them, no amount of money will allow you to do everything you would like to do. More than 90 percent of all people, including teens, agree that good health is important because it helps you feel good, look good, and enjoy life with the people you care about most.

As you read this book, you’ll learn more about good lifestyle choices that can help you be fit, healthy, and well. You’ll learn how to prepare a healthy personal lifestyle plan and how to use self-management skills to stick with your plan. The goal of this book is to help you become an informed consumer who makes effective decisions about your lifelong fitness, health, and wellness. Before you can start developing a plan, you need some basic information. In this lesson, you’ll learn definitions for some key words used throughout this course. You’ll better understand the meaning of the words fitness, health, and wellness, and you’ll learn about each of their components.

Teens often think about fitness in terms of being healthy and feeling good about their physical appearance. For many years a stretching warm-up was recommended before workout. The preferred method of getting ready for a workout, but the current evidence suggests that the type of warm-up you use depends on the type of activity you plan to perform (see tables 1.1 and 1.2).

Experts have studied the warm-up for nearly 100 years, and over that time, ideas about what constitutes a good warm-up have changed. For many years a stretching warm-up was the preferred method of getting ready for a workout, but the current evidence suggests that the type of warm-up you use depends on the type of activity you plan to perform (see tables 1.1 and 1.2). The Warm-Up

Web Icon:
Reminds you that additional information is available on the web resource for each lesson.

STUDENT ACTIVITY
List the three activities that you most commonly do as part of your workout, then use the information in this section to choose the best type of warm-up for each activity.

The cool-down usually consists of slow to moderate activity, such as walking or slow jogging, to allow the muscles to gradually recover and heart rate and blood pressure to return to normal. This also helps prevent disorders and cramps. If you stop too suddenly, your body may not be ready for the change in activity. To avoid this, you should perform a slow warm-down after your workout.

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Now that you have a working knowledge of the warm-up, the cool-down, and the workout, it’s time to learn about flexibility. Flexibility is the quality of being able to do the movements that are expected in your daily life.

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FIT FACT
On average, Americans of all ages take about 5,000 steps per day. This is considerably less than the averages in some other countries—for example, 9,000 or more in Australia and Switzerland and 7,000 or more in Japan—where obesity rates are much lower. Children (ages 5-12) average about 5,000 steps per day. This is much lower than the averages in some other countries—for example, 9,000 or more in Australia and Switzerland and 7,000 or more in Japan—for those involved in sports activities often accumulate 12,000 to 15,000 steps per day. Experts indicate that 12,000 steps per day is a reasonable long-term step goal for teens.

Tracking Energy Expended
Another way to determine whether you perform enough moderate activity is to track the energy you expend during physical activity. Some activity trackers estimate the calories you expend during physical activity. To allow the counters to estimate calories, you enter personal data such as your age and weight. The counter then uses this information as well as the time and intensity of your activity to estimate the calories expended during the day. During 60 minutes of moderate activity, such as brisk walking, you expend about 10,000 steps per day. This is approximately 5,000 steps more per day than the average number of steps taken by adults in the United States. This is approximately 10,000 steps per day, which is about 5,000 steps more per day than the average number of steps taken by adults in the United States.

Using Technology
As described in chapter 6, a pedometer is a small, battery-powered device that counts each step you take and displays the running count on a meter. You simply open the face of the pedometer or push a button to see how many steps you’ve taken. If you choose a pedometer to monitor physical activity, additional information can be useful. Some pedometers allow you to enter the length of your step (your stride length) and your body weight so that the computer can estimate the distance you walk and the number of calories you expend. More expensive pedometers can also track the total time you spend in activity during the day. Less expensive pedometers must be reset at the end of the day, but some more expensive ones can store steps for several days. Pedometers are good for counting steps when walking but are not as good for tracking other forms of activity. Activity trackers such as the Fitbit and the Apple Watch contain an accelerometer, which tracks body movements (forward and backward, up and down, and side to side). The accelerometer uses a formula to determine how much you move each day. Activity trackers are similar to pedometers but measure physical activity in more detail, including the intensity of your movements (METs) and the amount of time you spend at different intensities. With these measurements, most activity trackers can estimate the energy you expend in many types of activity. Accelerometers are now available in watches, phones, and devices worn on your belt or carried in your pocket.

Servings and Serving Sizes
A healthy eating pattern includes appropriate amounts of micro- and macronutrients from the various food groups. The FDA requires that food labels contain a size of servings of the food in a food package. The size of servings is shown in serving measurements (e.g., cup, tablespoon, piece, slice). The size of serving on a food container is not a recommendation of how much to eat or drink. Rather, the size of serving is based on the amount of food people typically consume rather than how much food they should consume. The size of serving is provided so that you know the portion value of food at a serving of the size noted on the package.

Consumer Corner: MyPlate
Provides information to help you become a good consumer and avoid quackery.

Tech Trends: Helps you become aware of new technological information related to fitness, health, and wellness and helps you try out and use new technology.
LESSON 3.1

Fitness for Life

SCIENCE IN ACTION: Optimal Challenge

Scientists in many fields have collaborated to find ways to help people stay active, eat well, and stick with other healthy lifestyle behaviors. They have discovered in order to be successful, you must set goals that provide optimal challenge. If a challenge is too easy, there’s no need to try hard—it’s not really a challenge. On the other hand, if a goal is too hard, we fail, which may lead us to give up because our effort seems hopeless (see figure 3.2).

An optimal challenge requires reasonable effort. Meeting an optimal challenge allows us to experience success and makes us want to try again. In fact, optimal challenge is one reason that video games are so popular. They challenge you by making the task more difficult as you improve, which makes you want to play again and again. You can use optimal challenge when setting your own goals to help you succeed.

STUDENT ACTIVITY

Imagine that you want to help a friend learn a skill—for example, hitting a tennis ball. How could you use optimal challenge to help your friend learn the skill?

LESSON REVIEW

ACADEMIC CONNECTION: Mnemonics and Acronyms

A mnemonic (pronounced ni-monic) is a tool that helps you remember something. There are many types of mnemonics. Examples include rhymes, stories, and patterns or letters. For example, a nursery rhyme is commonly used as a mnemonic to help children learn their ABCs. An acronym is a type of mnemonic that uses the first letters of several words to form a new word. Two examples used in this book are SMART and FIT. SMART helps you remember the characteristics of goal setting and activity is already established.

STUDENT ACTIVITY

Create a mnemonic or an acronym related to your study in Fitness for Life. Briefly describe the mnemonic or acronym and explain how it might be useful.

LESSON 1.2

Fitness for Life

SCIENCE IN ACTION: Optimal Challenge

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Create a mnemonic or an acronym related to your study in Fitness for Life. Briefly describe the mnemonic or acronym and explain how it might be useful.
EXERCISE CHART 3: Elastic Band Exercises

Choose an exercise band that offers enough resistance so that you are fatigued after the last repetition in the last set. Band length should be adjusted to allow the exercise to be performed as described. Check your bands regularly for wear and tear. If a band breaks while you are exercising it can cause injury.

**Arm Press**
This exercise is best performed with a tube-type band with handles. The band length should be adjusted to allow the exercise to be performed as described.

1. Anchor the band at shoulder height or higher using a secure hook (avoid hooks that may damage the band). Stand close to the anchor so that the band is not tight.
2. Face away from the anchor. Hold a handle in each hand, palm facing down. With your hands and hips in front of your shoulders, walk forward until the band is tight. Stand with one foot about two feet in front of the other.
3. Press straight forward with your hands and arms until your arms are extended. Return slowly to the starting position.

**Caution:** Keep the core muscles tight and limit movement to your arms.

**Biceps Curl**
This exercise is best performed with a tube-type band with handles.

1. Stand with both feet on the band with feet shoulder-width apart. Grab the handles with the arms extended and the palms facing up.
2. Flex the elbow until the handles are at shoulder level. Lower to the starting position.
3. You can also perform this exercise with your palms down.

**Caution:** Do not move other joints, especially in your back.

**Triceps Pushdown**

With your hands and grips in front of your shoulders, walk forward until the band is pulled until your arms are extended. Press straight forward with your hands and arms until your arms are extended. Return slowly to the starting position.

**Caution:** Keep the core muscles tight and limit movement to your arms.

**Self-Assessment:** Walking Test

Many of the self-assessments you perform in this course require very intense physical activity. If you’re active and fit, the mile run or PACER may be the best way to estimate your cardiorespiratory endurance, but the walking test is especially good for beginners. Those who haven’t done a lot of recent activity, or those who are regular walkers but do not regularly get more vigorous activity. The walking test is also good for older people and for those who cannot do running tests due to joint or muscle problems. As directed by your teacher, record your scores and fitness ratings for the walking test. You can then use the information in preparing your personal physical activity plan. If you’re working with a partner, remember that self-assessment information is confidential and shouldn’t be shared without the permission of the person being tested.

1. Walk a mile at a fast pace (as fast as you can go while keeping approximately the same pace for the entire walk).
2. Immediately after the walk, count your heartbeats for 15 seconds. (For information about counting heart rate, see chapter 8.) Multiply the result by four to calculate your one-minute heart rate.
3. Use the appropriate chart to determine your walking rating.

**Rating chart for the walking test (for females).**

<table>
<thead>
<tr>
<th>Heart rate (beats/min)</th>
<th>Walking rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 110</td>
<td>Good zone</td>
</tr>
<tr>
<td>110 - 120</td>
<td>Marginal zone</td>
</tr>
<tr>
<td>120 - 160</td>
<td>Low average</td>
</tr>
<tr>
<td>160 - 180</td>
<td>Average</td>
</tr>
<tr>
<td>180+</td>
<td>Marginal zone</td>
</tr>
</tbody>
</table>

Adapted from the James M. Rippe, M.D.

**Rating chart for the walking test (for males).**

<table>
<thead>
<tr>
<th>Heart rate (beats/min)</th>
<th>Walking rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 110</td>
<td>Good zone</td>
</tr>
<tr>
<td>110 - 120</td>
<td>Marginal zone</td>
</tr>
<tr>
<td>120 - 130</td>
<td>Low average</td>
</tr>
<tr>
<td>130 - 150</td>
<td>Average</td>
</tr>
<tr>
<td>150 - 170</td>
<td>Marginal zone</td>
</tr>
<tr>
<td>170+</td>
<td>Marginal zone</td>
</tr>
</tbody>
</table>

Adapted from the James M. Rippe, M.D.

The walking test is a good assessment for beginners or people who don’t do a lot of vigorous activity.
LESSON 3.2  Fitness for Life

TAKING CHARGE: Setting Goals

You probably know people who are sedentary or who eat a lot of unhealthy food. They may have tried to make lifestyle changes but been ineffective because they failed to set good goals. This feature highlights SMART goals for nutrition.

Ms. Booker, a physical education teacher, noticed that Kevin seemed a bit list- less in class. She stopped by his desk and asked, “Are you all right, Kevin? You seem a bit tired.” Kevin said, “I’m okay. I was in a hurry this morning so I missed breakfast.” Later, as she passed through the cafeteria, Ms. Booker couldn’t help noticing that Kevin was eating food from a vending machine for lunch. They were sitting by themselves at an isolated table. Ms. Booker walked over, sat down, and asked, “Are you feeling better now?” Kevin replied, “Yes, but I know I need to eat better.” Ms. Booker said, “Maybe you need to make a plan to eat better. Do you remember the SMART formula we learned in class? Maybe you could use the formula to set some goals.” Kevin agreed that this was a good idea.

FOR DISCUSSION

How could Kevin use the SMART formula to set good nutrition goals? What might be some good long-term goals for them? What might be some good short-term goals? What kinds of advice do you think Ms. Booker gave Kevin about goal setting? What advice would you have for Kevin? Consider the guidelines in the following Self Management feature as you answer these discussion questions.

SELF-MANAGEMENT: Skills for Setting Goals

Now that you know more about different types of goal setting, you can begin developing some goals of your own. Use the following guidelines to help you as you identify and develop your personal goals.

• Know your reasons for setting your goals. People who set goals for reasons other than their own personal improvement often fail. Ask yourself, “Why is this goal important to me?” Make sure you’re setting goals based on your own needs and interests.

• Choose a few goals at a time. As you work your way through this book, you’ll establish goals for fitness, physical activity, food choices, weight management, stress management, and other healthy lifestyle behaviors. But rather than focusing on all of them at once, you’ll choose a few goals at a time. Trying to do too much often leads to failure.

• Use the SMART formula. The SMART formula helps you to set goals that are specific, measurable, attainable, realistic, and timely.

- Set long-term and short-term goals. The SMART formula helps you establish both long-term and short-term goals. When setting short-term goals, focus on process goals—that is, focus on making good lifestyle changes, not on results.
- Put your goals in writing. Writing down a goal represents a personal commitment and increases your chances of success. You’ll get the opportunity to write down your goals as you do the activities in this book.
- Set short-term and long-term goals for themselves. Setting short-term goals is a good idea. For example, an active, fit person who are sedentary or who eat a lot of unhealthy food. They may have tried to make lifestyle changes but been ineffective because they failed to set good goals. This feature highlights SMART goals for nutrition.

For Discussion: Helps you take charge by making good decisions.

Taking Charge and Self-Management: Provide guidelines for learning self-management skills that help you adopt healthy behaviors.

Taking Action: Lets you try out activities that can help you become fit and active for a lifetime.
LESSON 1.2

CHAPTER REVIEW

Reviewing Concepts and Vocabulary

Answer items 1 through 5 by completing each sentence with a word or phrase.

1. Illness is the negative component of health. The positive component of health is called __________.
2. A hypokinetic condition is a health problem caused by __________.
3. The component of fitness that refers to the ability to move joints through a wide range of motion without injury is called __________.
4. The __________ is a series of steps that can help you make good decisions and solve problems.
5. The science that uses principles of physics to understand the motion of the human body is called __________.

For items 6 through 10, match each term in column 1 with the appropriate phrase in column 2.

6. muscular endurance
   a. movement of the body using larger muscles
7. agility
   b. component requiring both strength and speed
8. pedagogy
   c. ability to change body position quickly
9. physical activity
   d. art and science of teaching
10. power
    e. ability to use muscles continuously without tiring

For items 11 through 15, respond to each statement or question.

11. What is physical fitness?
12. How do health-related physical fitness and skill-related physical fitness differ?
13. What are the characteristics of physical literacy?
14. What are some important factors to consider when choosing a warm-up before your workout?
15. What are some guidelines for effective communication?

Thinking Critically

Write a paragraph to answer the following question.

You are asked to make an important decision about your fitness, health, or wellness. How would you use the scientific method to make that decision?

Project

Interview several healthy older adults about their fitness, health, and wellness, then present the information to a group such as your class or family members. Ask questions such as these: How would you rate your health? How would you rate your wellness? How would you rate your health-related physical fitness? (Ask the person to use ratings such as good fitness, marginal fitness, and poor fitness.) How do you think teens rate their fitness, health, and wellness compared to people your age?

In addition to all the textbook features, the *Fitness for Life* program includes several other components:

- **Student Web Resource:** You have access to a variety of resources in the *Fitness for Life, Seventh Edition, Web Resource*. These resources will aid your understanding of the textbook content and include video clips that demonstrate how to do the self-assessment exercises in each chapter and the exercises in chapters 10, 11, and 12, chapter reviews, and vocabulary terms with English and Spanish definitions and audio pronunciations.

- **Teacher Resources:** Your teacher has access to lessons and activities that you can do to better learn and understand the information in this textbook.

Now read on, and enjoy *Fitness for Life*!