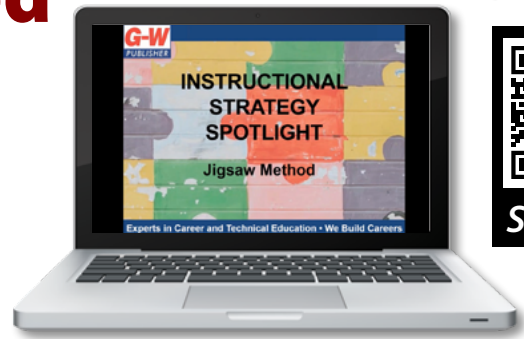


# Instructional Strategies To-Go: Using the Jigsaw Method

Watch this video by G-W National Content Specialist, Mandy Green, to learn how to use the Jigsaw Method with the following excerpt from *Nutrition & Wellness for Life*.

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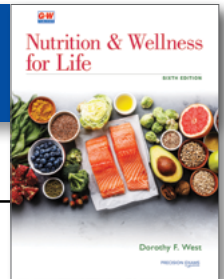
*"WOW! Seriously, THANK YOU! More PDs need to be structured this way."*  
Instructor, California



#### Meet Your National Content Specialist

**Mandy Green** A graduate of Texas Tech University, Mandy has worked as a classroom teacher and school counselor with a focus on Career and Technical Education and instructional technology. She is passionate about partnering with educators to create meaningful, authentic, and student-centered teaching and learning experiences, all developed around research-based instructional practices.

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# CHAPTER 1

## Making Wellness a Lifestyle

Everyone will read the Learning Outcomes and the “What’s Your Nutrition and Wellness IQ?” quiz on the next page. Afterward, continue to the section with your group number. Stop reading once you reach the next group number. Page 23 includes a recipe you can try.

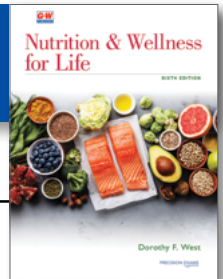
### Learning Outcomes

After studying this chapter, you will be able to

- **assess** your location on the wellness continuum;
- **summarize** how physical, mental, and social aspects of wellness affect quality of life throughout the life span;
- **recall** factors that contribute to disease;
- **distinguish** those factors that affect wellness over which you have control;
- **judge** how your lifestyle choices affect your health now and in the future;
- **implement** a behavior-change contract to improve your health;
- **evaluate** the importance of nutrition, food, and wellness research for changing wellness behaviors; and
- **understand** why use of the scientific process is important when conducting nutrition research.

Photo credit: Oleksandra Naumenko/Shutterstock.com ▼





**Everyone**

**Key Terms**

**Content Terms**

- diagnosis
- eating pattern
- environmental quality
- holistic medicine
- hypothesis
- life expectancy
- mental health
- nutrient
- nutrition
- optimum health
- peer pressure
- physical health
- premature death
- quality of life
- risk factor
- scientific method
- social health
- theory
- wellness

**Academic Terms**

- chronic
- diminished
- endeavor
- impair
- induce

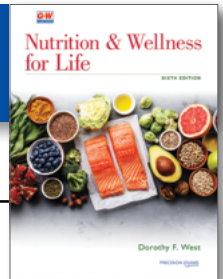
**What's Your Nutrition and Wellness IQ?**

Take this quiz to examine how much you already know about the relationship of lifestyle choices to wellness outcomes. If you cannot answer a question, pay extra attention to that topic as you study this chapter.

- Identify each statement as *True*, *False*, or *It Depends*. *It Depends* means in some cases the statement is true; in some cases it could be false.
- Revise false statements to make them true.
- Explain the circumstances in which each *It Depends* statement is true and when it is false.

**Nutrition and Wellness IQ**

- |   |                       |
|---|-----------------------|
| 1. Social health, mental health, and physical health are equally important for lifelong personal wellness outcomes. | True False It Depends |
| 2. Most people find themselves at one end of the wellness continuum or the other.                                   | True False It Depends |
| 3. Genetics is the biggest factor for determining life expectancy.  | True False It Depends |
| 4. Many chronic diseases can be prevented.  | True False It Depends |
| 5. Eating patterns, activity levels, and tobacco usage are directly related to wellness outcomes.                   | True False It Depends |
| 6. Peer pressure has little to do with wellness.  | True False It Depends |
| 7. The scientific methods used in nutrition research always start with stating a hypothesis.                        | True False It Depends |
| 8. Obesity is directly related to increased medical costs both for the individual and for society.                  | True False It Depends |



**Group 1**

You make choices every day that affect how you feel, think, and act. You decide what you will eat and when you will sleep. You choose how physically active you will be, too. Your actions affect who you are now and the person you will become. You are responsible for making decisions that benefit your health.

How healthy will you be 10 years from now? You could be healthier and in better physical shape than you are now! Choosing behaviors that promote health can have lifelong benefits. You can take steps to feel just as fit at age 50 as you do at age 15.

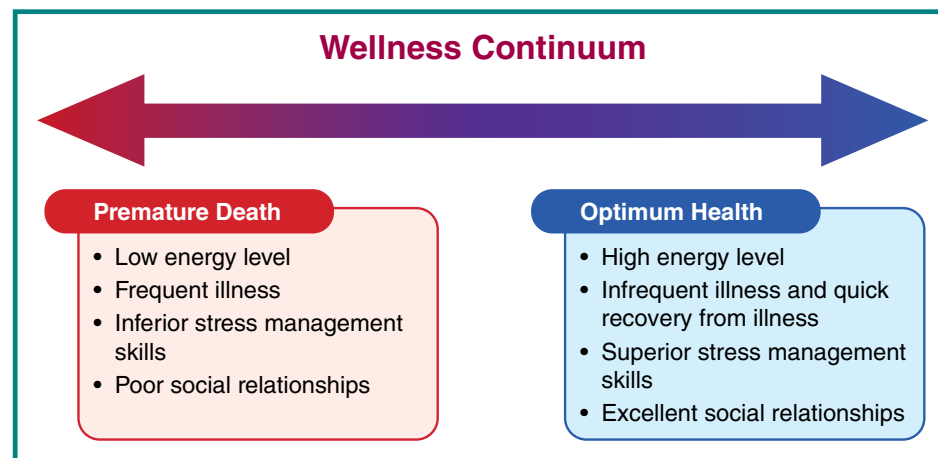
## What Is Wellness?

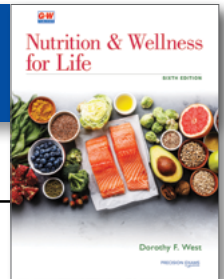
**Wellness** is the state of being in good health. Your level of wellness contributes to your quality of life. **Quality of life** refers to a person's satisfaction with his or her looks, lifestyle, and responses to daily events. When people are in good health, they have a desire to stay fit and live a healthful lifestyle. They are energetic and have an enthusiastic outlook. They are able to successfully meet the challenges of each day. When people are not in good health, life's events can become harder to manage. This causes a decrease in quality of life. Most people want to improve their state of wellness and live a fulfilling life. Making choices that promote wellness is a way to improve your quality of life.

You can use a continuum to determine your personal state of wellness. Premature death is at one end of the continuum and optimum health is at the other. **Premature death** is death that occurs earlier than expected due to lifestyle behaviors that lead to a fatal accident or the development of an avoidable disease. The Centers for Disease Control and Prevention (CDC) reports that nearly 20 to 40 percent of premature deaths could be prevented. **Optimum health** is a state of wellness characterized by peak physical, mental, and social well-being (**Figure 1.1**).

Your health status determines your place along the wellness continuum. Being free from illness and having much energy indicate that you have a high level of physical wellness. If you are able to cope with life's challenges and maintain stable relationships, you exhibit mental and social wellness, too. This means you probably fall near the optimum health end of the continuum. A short-term decline in any of these areas may temporarily move you toward the other end of the continuum; however, the key is your overall state of health most of the time. This is your wellness point.

**Figure 1.1**  
Evaluate your physical, mental, and social health to determine where you fall along the wellness continuum.





Chapter 1 Making Wellness a Lifestyle

If you are already at optimum health, you will want to find out how to maintain this state of wellness. If you are not at optimum health, you can learn how to change your lifestyle to move toward that goal. The key to achieving wellness is accepting responsibility for your health. No one can force you to change. Moving toward optimum health happens when you want change to occur.

Once you begin taking steps to improve your health, you will start to notice the benefits. You might feel stronger and more alert. Maybe you will find it easier to cope with the daily problems of life. Perhaps you will feel more confident about your performance at home, school, work, and play. You may begin to experience better relationships with family members and friends. You may notice additional benefits of wellness in the future. Having optimum health will help you face the challenges of parenthood, career changes, and other aspects of active adult living.

## Aspects of Wellness

Wellness means much more than being free from illness. It is more than eating healthful foods and being physically fit. Three major components—physical, mental, and social health—contribute to your state of wellness. Each component affects the others and your overall sense of wellness. Together, they influence how you look, feel, and act.

### Physical Health

**Physical health** refers to the fitness of your body. It is achieved when numerous body parts work in harmony.

A number of factors can harm your physical health. For instance, getting insufficient rest can reduce your energy for exercising and doing chores. Eating too much or too fast may upset your stomach. Lack of physical activity, poor sanitation, and reckless actions can also keep your body below peak performance level. Too much stress can negatively impact your physical health. *Stress* is the inner agitation you feel in response to change. Tobacco, alcohol, and other drugs can harm physical health, too. Choosing lifestyle behaviors that avoid these factors will help you stay in good physical health (**Figure 1.2**).

Healthcare professionals use medicine, physical therapy, diet, and surgery to care for the physical health of their patients. They stay informed on research about alternative treatments, such as the use of herbs and nutrient supplements. As healthcare costs rise, people are becoming more interested in learning how to prevent disease. Doctors often suggest that patients combine medical care with lifestyle changes. You will read more about making lifestyle changes later in this chapter.

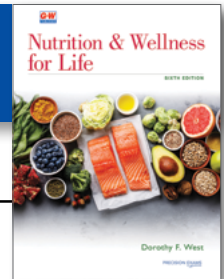
### Mental Health

Have you ever felt stressed, depressed, and emotionally exhausted? These feelings may be related to your current state of mental health. **Mental health** has to do with the way you feel about yourself, your life, and the people around you. People with good mental health generally like themselves for who they are.



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**Figure 1.2** Getting regular exercise is an important requirement for maintaining good physical health. *What are other lifestyle behaviors that promote physical health?*



They express positive attitudes and work to keep all social, physical, spiritual, and emotional aspects of their life in balance. They tend to act according to a set of socially acceptable values. They may also hold beliefs that help them see their relationship to a larger universe. When problems arise, people who are mentally healthy seek ways to resolve them.

Irrational fears, anxiety, and depression may be signs of a mental health problem (**Figure 1.3**). If you are concerned about your mental health, you should talk to a trusted adult. Share concerns and problems with parents, teachers, counselors, or clergypersons. These people may be able to help you better understand who you are and what you want to become. Building effective communication and problem-solving skills can help you improve your mental health.

## Social Health

**Social health** describes the way you get along with other people. Friends and family members enrich your life. Social health can be negatively affected when disagreements occur and problems arise. Learning to resolve conflicts with others is an important skill that can help you achieve and maintain good social health.

Social health is related to an understanding and acceptance of roles. People have different role expectations for sons, daughters, husbands, wives, mothers, fathers, girlfriends, boyfriends, teachers, students, employers, and employees. You may want to analyze your roles for possible conflicts. For instance, you may be expected to be a follower in your role as an employee. You may be expected to be a leader, however, in your role as team captain. Learning appropriate ways to act in each role can contribute to your social wellness.

Social health affects a person's outlook on life and his or her personal state of wellness. For example, a teen on a first date might become so nervous that he gets an upset stomach. A student who worries about being accepted among friends may find it hard to fall asleep at night.

Building social skills allows you to improve your social health. One such skill is learning how to use good communication to resolve conflicts with others.

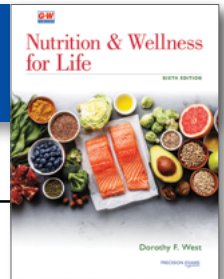


### Signs of Teen Mental Health Problems

- Becomes moody
- Withdraws from social activities and friends
- Experiences changes in appetite or sleep patterns
- Acts and feels tired
- Worries about personal health problems
- Becomes aggressive with friends and family
- Loses concentration in class and does worse academically
- Has difficulty making decisions
- Feels life is too hard

Photo: mdurson/Shutterstock.com

**Figure 1.3** A teen who is exhibiting these warning signs may need to seek help.



## THE MOVEMENT CONNECTION

### Begin with Posture

#### Why

Chances are good that you are sitting as you read this. Most of us sit when we read, study, and attend class. Too much sitting can lead to tight hamstrings, hip flexors, shoulders, chest, and neck. The activity bursts in *The Movement Connection* features found throughout this text will help combat the negative impacts of too much sitting. These activities are designed to help re-energize your brain so you can focus and learn.

As explained in this chapter, wellness is a combination of good mental, physical, and social health. These components of wellness range on a continuum from premature death to optimal health. Oftentimes we put more emphasis on one area of wellness than the others. It is important to remember, it is about balance! Wellness is best achieved when we give equal attention to all three.

Good posture is fundamental to wellness. By standing with good posture, we decrease unnecessary stress on joints, ligaments, and bones that might otherwise occur as we begin to move.

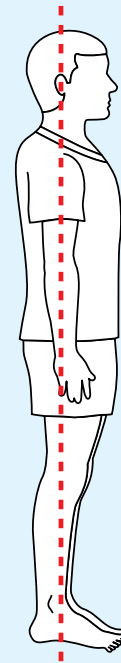
#### Apply

Assume a standing position with weight evenly distributed in both feet. Stand so your hips are stacked over your feet, your shoulders are over your hips, and your neck is straight with your head facing forward (your chin should be parallel to the ground).

Tighten your stomach muscles as if to squeeze your belly button toward your spine. This movement engages your core muscles.

Standing with good posture, slowly breathe in for 5 seconds and out for 6 seconds. Repeat three times. Slow, deliberate breathing can lower heart rate and calm the mind, helping you to relax.

Standing after a long period of sitting allows blood to flow and the brain to feel more alert.

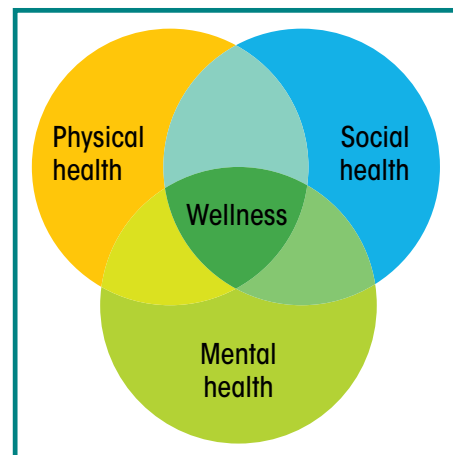


Seeking and lending support to people who need your help is another important social skill. Building a positive self-image will also help you improve your relationships. Developing these skills will help you reach optimum social health. Reaching this optimum level means you can work, play, and interact with others cooperatively. Optimum social health contributes to your states of physical and mental health, too.

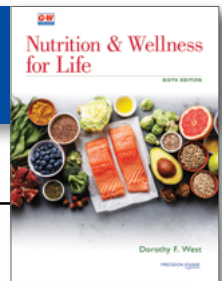
Learning how people develop physically, mentally, and socially can positively affect your sense of wellness. This knowledge may give you some sense of reassurance as you continue to develop and mature over your life span.

### Holistic Approach to Wellness

**Holistic medicine** is an approach to healthcare that focuses on all aspects of patient care—physical, mental, and social. It evolved because many medical doctors saw links among physical, mental, and social health (Figure 1.4).



**Figure 1.4** Physical, mental, and social health all contribute to a total sense of wellness. *Which component do you feel you could improve?*



Treatment programs and medicine may not be enough to cure a physical illness. The effect of physical treatment can depend on mental and social health. Low self-esteem or loneliness can reduce a person's desire to get better. These factors can **impair** (damage) the body's immune system and delay the healing process.

The trend is for healthcare professionals to work in teams to treat illness. This provides greater insight for understanding the various components of how best to help a patient. Specialists, consultants, and mental health professionals work with each other to understand the various aspects of treatment to improve patient health.

As an individual, your holistic approach to wellness must be well rounded. You need to be aware of your physical, mental, and social health needs. You must manage time, money, and other resources to address your needs in all of these areas. If you spend all of your time working out, you may end up neglecting relationships. This would cause your social health to suffer at the expense of your physical health. If you spend all of your money going out with friends, you may feel anxious because you cannot repay the money you borrowed from your parents to buy new sports equipment. Your state of mental health may be reduced in favor of your social health.

Taking a holistic approach to wellness means making choices that fit together to promote all facets of health.

## Group 2

### Factors That Affect Wellness

Why is it important to recognize the impact of health-related decisions made in the teen years? The reason is that your present actions and attitudes are shaping the person you will be in the future (**Figure 1.5**). Habits are hard to change once



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**Figure 1.5** Establishing healthy habits now will improve your quality of life in older adulthood.

established. This is true for good habits as well as bad habits. Once you perform an unhealthy behavior, you are more likely to repeat it. Likewise, once you choose a healthful behavior, you can easily make it a regular part of your life.

Because you are responsible for making many decisions, you have much control over your personal state of wellness. You can engage in activities that lead to the decline of your health. You can also follow practices that help ensure good health.

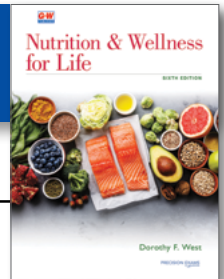
Improving your odds for a long and healthful life requires an understanding of the consequences of poor choices. It also involves recognizing wise choices. Learning about exercise, healthcare, and which foods best nourish your body will aid you in making wise choices.

### Factors That Contribute to Disease

A **risk factor** is a characteristic or behavior that influences a person's chance of being injured or getting a disease. Researchers identify risk factors by studying the traits and actions of large groups of people. Then the researchers determine what effects these traits and behaviors have on the people's health.

Certain lifestyle habits, environmental conditions, and healthcare limitations are known to be risk factors you can control. Hereditary factors affect your risk of disease, too. Genetic research continues to explore ways to help people avoid or delay the onset of inherited diseases. Heredity continues to be a factor that alerts people to their risk factors for specific diseases, however. Knowing your risk factors can encourage early prevention.





## COMMUNITY CONNECTIONS

### The Rewards of Volunteering

Do you believe people have a responsibility to help one another? If so, volunteering in your community is one way to make a difference in the lives of people who need help.

A *volunteer* is someone who chooses to act when a need is recognized and has no expectation of payment. When you volunteer, you have the opportunity to create positive change for others, as well as yourself. For instance, volunteering can provide you with hands-on learning experiences that may prepare you for a job. You may gain insight into how government funds finance agency work. Demonstrating dependability and responsibility is important for successful volunteering that potential employers will also value. These experiences can be used to build your résumé.

When volunteering, you will most likely meet and work with people from backgrounds that are different from your own. Working with diverse populations helps you develop and expand your cultural awareness. The hands-on experience gained and interpersonal skills learned during volunteering will give you an advantage when applying for jobs.

Volunteer experiences often provide opportunities for you to develop your teamwork and leadership skills. As you learn what is unique and special about your skills and talents, your confidence builds. This confidence is an important prerequisite for any career path you choose.

Many nonprofit organizations and agencies are very happy to have teens volunteer their services. Beyond gaining valuable job skills, teens report a growing sense of fulfillment, satisfaction, and “doing good” in the world. Volunteering can be as simple as collecting food to donate to a soup kitchen, or as involved as organizing a food drive for the local food bank.

Volunteering in a community agency or organization can help you organize your thoughts about your career path. For instance, you may discover that you like helping people solve social or emotional problems. Or perhaps you will learn that you enjoy helping construct and reorganize the physical environment. These experiences allow you to explore what interests you the most.



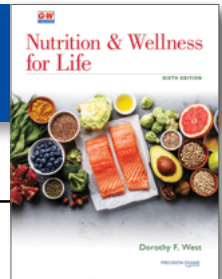
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#### Think Critically

1. In group discussion, identify which rewards and benefits of volunteering are of greatest importance for most teens. Explain why these rewards and benefits are important.
2. Provide examples of specific skills and abilities that a teen might have that could be applied to a volunteer situation. Then, list the skills you personally could bring to a volunteer position. Identify a volunteer experience that would be a good match for your interests and abilities. Research the steps required to participate in this experience.

### Unhealthy Lifestyle Choices

Heart disease, cancer, unintentional injuries, **chronic** (recurring) lower respiratory diseases, and stroke are five major causes of death among adults in the United States. The Centers for Disease Control and Prevention (CDC) stresses the power of prevention through lifestyle choices across the life span. Many chronic diseases are preventable. Measures you can take to prevent these diseases are powerful wellness factors. Lifestyle choices account for more than half of the factors contributing to disease. One example of an important lifestyle choice is your decision about smoking. Smoking is a risk factor for cancer and heart disease. If you choose to smoke, you are at increased risk of getting these diseases.



## EXTEND YOUR KNOWLEDGE

### Locate Community Wellness Resources

Complete an investigative inquiry about a health club, healthcare clinic, wellness center, or other community facility concerned with the health of citizens. Write a brief description stating who is encouraged to use this resource and how much it costs. Also, specify what services the center or agency provides and the expected benefits of participation.

Create a community wellness resource blog describing available activities, as well as locations where wellness activities occur. This may require a visit to the facilities to learn more about their goals, ease of use, requirements for membership, fee structure, and feedback from current users of the facility.

Write a description of each activity or facility, and include links to any online information you may find about wellness options in your community. Build your blog as you continue to gather new information. Consider how you will promote your blog to people in the community.

Other lifestyle choices include decisions about the foods you eat, seat belt use, texting while driving, alcohol consumption, use of drugs, stress management, and exercise. In these areas, you should avoid choices that increase your risk of disease and poor health outcomes.

Eating large amounts of fast foods that are high in saturated fats, added sugars, and salt supplies your body with many calories, but it provides little else that the body needs for proper growth and development. Excess calories contribute to overweight, which increases the risk for many diseases. Inappropriate and illegal driving behaviors all too often result in fatalities. Alcohol and drug misuse create health and social problems for the individual misusing these substances, their family, and their friends. Failing to manage your time can increase your stress level, which can negatively affect your health. Spending little time being active or participating in sports can contribute to weight problems and other health risks. Learning how to avoid unhealthy lifestyle choices is a powerful wellness life skill (**Figure 1.6**).

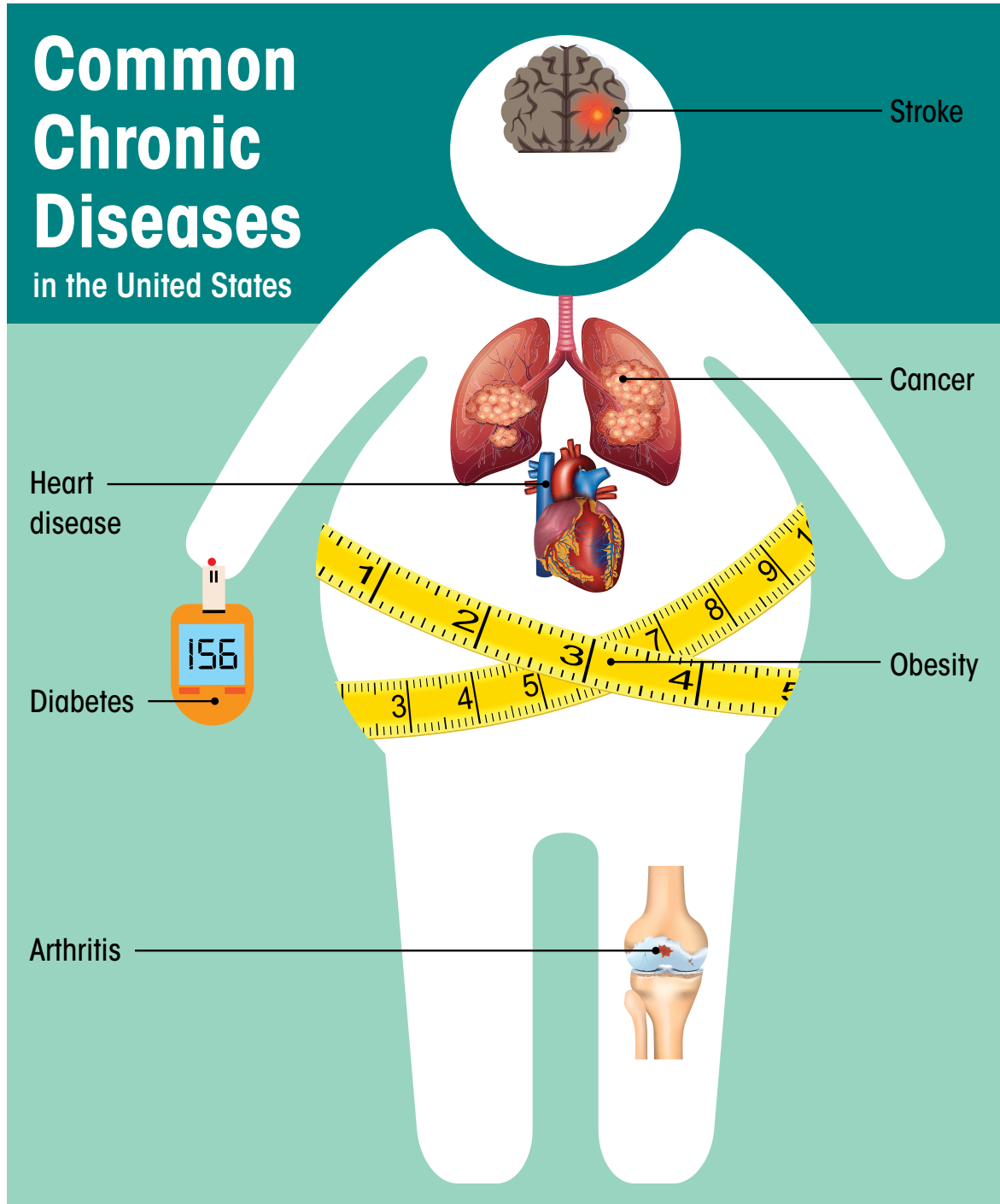
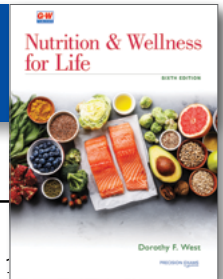
### Poor Environmental Quality

Have you noticed that when your classroom is hot and stuffy, your concentration on learning decreases? While your health may not be in danger in this environment, your learning ability may be **diminished** (reduced). This is one example of how environmental factors affect quality of life.

Other, more serious environmental factors can cause significant illness or death. The National Cancer Institute at the National Institutes of Health reports that exposure to poor environmental quality may be responsible for as little as 4 percent or as much as 19 percent of all cancers. **Environmental quality** refers to the state of the physical world around you. It relates to the safety of the water you drink, the air you breathe, and the food you eat, as well as your exposure to the elements, such as the sun's ultraviolet rays.

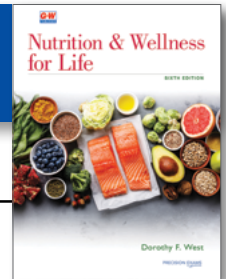
Pollutants in the water and air, and contaminants in food decrease the quality of the environment. Consuming polluted water or contaminated food, or breathing polluted air can cause illness. In countries where food, water, and shelter are scarce or unsafe, the quality of life is greatly reduced because of poor environmental quality.

Some jobs require people to assume greater environmental health risks than others. You may want to think about the safety of various work environments as you evaluate career choices. Compare the job of an urban construction worker with that of a sales representative. What environmental risk factors can you identify in each job? Jobs that require the use of heavy equipment and exposure to dangerous conditions add risk to health and safety.



*Body figure: vadim-design/Shutterstock.com; Top to bottom: ann131313/Shutterstock.com; BlueRingMedia/Shutterstock.com; Tefi/Shutterstock.com; Thana Thanawong/Shutterstock.com; wiki/Shutterstock.com; Designua/Shutterstock.com*

**Figure 1.6** The Centers for Disease Control and Prevention (CDC) estimates that changes in lifestyle, including elimination of poor diet, inactivity, and smoking, could prevent 80 percent of all heart disease, stroke, and type 2 diabetes, as well as more than 40 percent of cancers.



### Inadequate Healthcare

Inadequate healthcare and medical errors are major factors contributing to health risk. Medicine is not an exact science. Doctors cannot always assess symptoms and test results to easily reach a correct diagnosis. A **diagnosis** is the identification of a disease. Failing to diagnose, or recognize, a disease early enough can interfere with effective treatment. Some healthcare facilities lack the specialists or equipment needed to treat certain diseases. Sometimes facilities are not managed well, or treatments are not given properly.

Inadequate healthcare is not always the fault of medical professionals. Patients sometimes interfere with the quality of their healthcare. Some patients fail to get regular checkups, which are needed to help physicians evaluate and maintain patients' health. Other patients do not seek medical care soon enough when they are experiencing symptoms. Some patients may delay seeing a doctor due to a lack of health insurance or inability to pay. Others may hesitate out of fear.

Even when patients go to a physician, they can still lessen the effectiveness of their care. For instance, patients might not share important information with the physician. They might fail to follow the physician's advice. When you are a patient, you have a responsibility to play an active role in your medical care.



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**Figure 1.7** Some factors that affect health are inherited from parents. *Why is it important to be aware of health issues known to recur in your family?*

### Heredity

Inherited factors play a role in most of the leading causes of death. Heredity refers to the passing on of physical or mental characteristics genetically from one generation to another. The genes you receive from your parents determine your sex, body structure, and other physical traits. Family members also share genes that influence risks for disease. The genetic makeup you inherit is beyond your control (**Figure 1.7**).

Tracing your family's health history may provide vital information for you to manage your wellness. With this knowledge, you and your doctor can create a plan to keep you healthy. It may include lifestyle changes and more frequent visits with the doctor. There may be specific tests to detect the early onset of a known familial disease. For example, if your family health history includes type 2 diabetes, you may be

at an increased risk for this disease. Being aware of this risk factor allows you to exert some control over it. You can eat healthy, get plenty of exercise, and maintain a healthy body weight. Taking these steps may help you prevent type 2 diabetes.

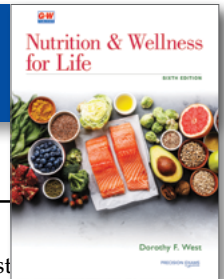


## EXTEND YOUR KNOWLEDGE

### The Effects of Lifestyle Choices on Health

Develop 10 interview questions about personal lifestyle choices. Include questions about topics such as foods typically eaten, number of meals eaten each day, daily activity level, quality of daily environment, availability of medical services, family health history, and other lifestyle choices that affect health and wellness.

Use your questions to interview an adult over age 70. Consider which factors contributed to this individual's long life and which may have reduced his or her quality of life.



You cannot change who your biological parents are. Likewise, you cannot change the genes you inherit from them. You can keep yourself in good physical condition, however. This helps you avert the influence of genetic risk factors. It also improves your body's ability to handle diseases if they do develop.

**Group 3**

**Health-Promoting Choices**

Studies show that you have much control over the factors that influence your health. Healthcare experts have identified certain behaviors that make a difference in a person's quality of life and wellness level. By choosing these behaviors regularly, you can promote good health and perhaps lengthen your life.

**Choose a Healthful Lifestyle**

Because you can control your lifestyle choices, you can also control some of your risks for disease. Your eating pattern is a lifestyle factor that has a strong correlation with many diseases. An *eating pattern* is all of the foods and beverages you routinely consume over time, or your dietary intake. The terms *diet* or *dietary pattern* are often used interchangeably with the term *eating pattern*. In addition to decreasing your risk for disease, healthy eating patterns provide other benefits, such as

- increased energy level;
- improved performance at school or work;
- support for your body during physical and mental stress; and
- healthy skin, hair, weight, and overall appearance.

Choosing to become physically fit is also considered an important lifestyle choice. Researchers find that physically fit people often feel better about themselves and their relationships with others. Exercise is required for becoming physically fit. The benefits of becoming physically fit are clear—improved health and wellness, better weight management, reduced risks of certain diseases, and various mental and social health benefits.

The earlier you begin making healthful lifestyle choices, the more you decrease your risk of early disease.

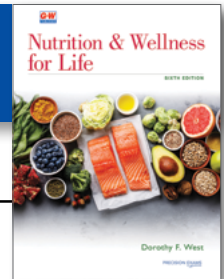
Health experts recommend adopting the following practices into your lifestyle:

- Provide your body with fuel throughout the day by eating three or more regularly spaced meals, including breakfast (**Figure 1.8**).
- Supply your body with needed nutrients to support health, growth, and development.
- Sleep eight to nine hours each night.
- Maintain a healthy weight.
- Stay active. Accumulate at least 60 minutes of physical activity most days of the week.
- Do not use tobacco.
- Avoid drinking alcoholic beverages.
- Do not use street drugs.
- Carefully follow your physician's instructions when using prescription drugs.



Joshua Resnick/Shutterstock.com

**Figure 1.8** Establishing healthy eating patterns when you are young, such as eating breakfast, can reduce the risk of early disease.



Throughout this book, you will read about the impact of each of these practices on health. Although these behaviors may sound simple, many people fail to follow them. Instead, they develop poor health habits. This may occur for a number of reasons. Some people take good health for granted. Perhaps they feel they are strong enough to withstand the strain of poor health habits. Others do not notice the slow toll such habits take on their health. For instance, frequently eating high-calorie desserts and snack foods in place of fruits and vegetables deprives your body of needed nutrients. You may not notice, however, the gradual decrease in energy level and other health effects caused by this eating habit.

Another reason people form poor health habits is they fail to realize how addictive some behaviors can be. Perhaps you have heard someone say, “I can quit drinking alcohol whenever I want.” This person may not realize how physically and emotionally dependent on alcohol he or she has become. Most people need the help of professional services to overcome addictions.

### Resist Negative Peer Pressure

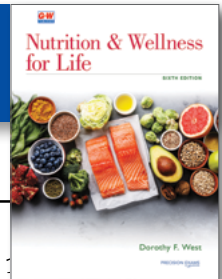
Peer pressure can play a role in the development of health habits. **Peer pressure** is the influence people in your age and social group have on your behavior. The desire to be accepted leads many teens to try activities their peers encourage. This can often be good, such as when friends invite one another to become involved with a sport. Peer pressure is negative, however, when it encourages people to pursue activities that can endanger their health. Teens who urge their friends to smoke cigarettes, drink alcohol, or drive recklessly are using negative peer pressure. Negative peer pressure may play a role in making accidents and suicide the leading causes of death among teens.

You can stand up against negative peer pressure and still come out a winner. Combating negative peer pressure requires self-confidence. You need to believe in your ability to evaluate the effect a choice will have on your health. You also need to be strong enough to say “no” to what you consider to be a poor choice. Be aware that people who have trouble resisting negative peer pressure may admire you for doing so (**Figure 1.9**).

**Figure 1.9**  
Choose friends who share your values for health and wellness to avoid having to deal with negative influences.

### Avoiding Negative Peer Pressure

- Role-play your response to a peer-pressure situation. Practice using firm, confident statements. Consider using humor, flattery, challenges, or topic changes to avoid undesirable situations.
- Talk to a trusted family member or friend about the situations and temptations with which you are struggling.
- Know what is important to you and what you hope to accomplish. This will help you build confidence to make positive choices.
- Demonstrate confidence in your decision and do not be embarrassed.
- Remember your personal goals and show respect for your personal limits to avoid being influenced negatively.
- Spend time with people who share your values for health and wellness. Avoid situations where peer pressure may tempt you to make harmful choices.
- Consider the consequences if you gave in to negative peer pressure.



## CASE STUDY

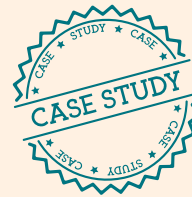
### A Healthier Lifestyle Choice

Raj is 16 years old. His 41-year-old father is currently receiving medical treatment for heart disease. Raj's father has smoked cigarettes since he was 14. Raj's 40-year-old mother is healthy, but she loves to cook the curried rice and chicken she enjoyed as a child. She loves making Indian desserts, too. She is now about 40 pounds (18.1 kg) overweight.

Raj has decided he wants his life to be different. He wants to be more physically active than his parents and is hoping to avoid health problems. His inherited factors place him at increased risk for acquiring heart disease.

#### Case Review

1. How do Raj's ideas about quality of life compare with those of his parents?
2. What lifestyle choices can Raj make now to reduce the risk for future heart and weight problems? Be specific with your suggestions.



### Improve Your Environment

You can do your share to make your environment a healthful one. Carpool or take public transportation to avoid polluting the air with car exhaust. Use cleaning products that do not pollute water supplies with harmful chemical wastes. Handle food carefully to avoid contamination that can cause illness. These are just a few of the many steps you can take to improve the quality of your environment.

Besides these personal efforts, you can also work with others to improve the environmental quality of your area. Contact local industries about the efforts they are making to reduce their impact on the environment. Write to government officials if you have concerns about the quality of the air or water in your community. Talk with your employer about the benefits of creating a work environment that surpasses federal health and safety standards. These steps can help improve the health of many people.

### Choose Quality Healthcare

Choosing quality healthcare will help you reduce health risks. The first step is to select a physician who has a reputation for providing quality care. Choose facilities that can meet your needs and are approved by your healthcare provider. See your doctor for regular checkups. Seek your doctor's advice when you first notice a health problem. Research has shown that early detection of health problems is the best way to prevent serious illness. When you visit your doctor, describe your symptoms completely and accurately. Ask questions to be sure you understand your symptoms and treatment (**Figure 1.10**).

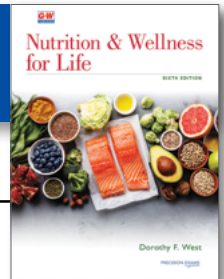


Alexander Rath/Shutterstock.com

**Figure 1.10** Patients should feel free to ask their doctors questions.

### Making a Change

Changing one behavior can affect all aspects of your health. Knowing this can increase your motivation to make positive changes. For instance, you may have heard that eating breakfast can help you concentrate better in school (mental health).



## Assess Your Lifestyle Choices

### Do you

- avoid the use of tobacco?
- avoid the use of alcohol and street drugs?
- regularly eat a nutritious diet, including breakfast?
- manage your weight?
- get daily physical activity to maintain fitness?
- manage stress effectively?
- get enough sleep?
- avoid taking unnecessary risks?
- carefully follow the instructions on medicine labels?
- wear protective clothing when participating in sports and fitness activities?
- avoid unsafe sexual practices?
- take appropriate safety precautions when using equipment and machinery?
- enthusiastically participate in school and community activities?



Photo: cheapbooks/Shutterstock.com

**Figure 1.11** Ask yourself these questions. *Are you making lifestyle choices that promote good health?*

This may not be enough to encourage you to eat breakfast, however. Eating breakfast can also help you maintain a healthy weight (physical health). It can moderate mood swings and help you interact more positively with others, too (social health). Knowing these added benefits may be just the incentive you need to start eating breakfast.

Although you may be motivated to improve your health, you may not know how to start. Answering the questions in **Figure 1.11** can help you pinpoint areas in which you might improve.

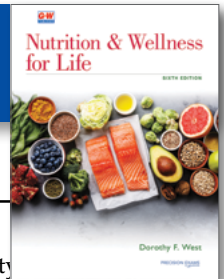
Once you have identified an area you want to improve, set a goal for improvement. Setting and achieving goals is key to success in any **endeavor** (effort). To create effective goals, use the acronym **SMART** as a guide:

- **Specific**—The goal should identify a specific action or event.
- **Measurable**—The goal and its benefits should be easily determined and assessed.
- **Achievable**—The goal should be attainable given the resources that are available.
- **Realistic**—The goal should require you to stretch your limits but still allow the likelihood of success.
- **Timely**—The goal should state the specific time period in which it will be accomplished. Short-term goals may take days, weeks, or months, while long-term goals may take several years to achieve.

An example of a short-term SMART goal might be, “Complete research for my workplace wellness term paper by Friday afternoon. Prepare my bibliography to include a minimum of 10 research sites. Summarize the main points presented in each reference.” Another practical SMART goal for teens may simply be stated as, “I will drink 8 glasses of water every 24 hours to stay hydrated.”

If your SMART goal requires long-term planning to **induce** (cause) a personal behavior change, then you may want to craft a behavior-change contract to help you achieve your goal. Write your goal at the top of your document and create a chart below it. In the first column of the chart, list specific steps you will take to reach the goal. For instance, suppose your goal is to improve your eating pattern. You might list steps such as “Eat breakfast daily” and “Choose beverages with no added sugars, such as water, in place of sugary soft drinks.” List the days of the week across the top of the chart. Each day you complete a listed step, give yourself a check. This allows you to see the progress you are making toward your goal.





## WELLNESS TIP

### Private Pep Talk

Manage your stress with a pep talk. Instead of thinking “I’ll never be able to figure this out,” say to yourself “I have the skills to solve this problem.” In general, if you would not say a negative comment to someone else, do not say it to yourself.

It will take time for you to notice most physical, mental, and social health benefits of a lifestyle change. Follow the listed steps and maintain your chart for at least three weeks. After that time, evaluate the results of your efforts. Ask yourself what factors helped you complete steps you marked with a check. Then ask yourself what kept you from completing those steps left unchecked. For instance, you might notice that eating breakfast is easier on weekends because you have more time in the morning. You might find that limiting your soft drink consumption is harder on weekends, when you are socializing with friends.

Your evaluation will help you set new goals and plan steps for achieving them. Try to consistently reach your goal for a period of six weeks. After this time, you will have formed a new habit that will be an ongoing part of your wellness lifestyle. Achieving optimum health is a lifelong process of consciously evaluating daily lifestyle choices.

Seeing positive results in one lifestyle area can affect your desire to change other areas. For instance, if you improve your eating habits, you are likely to have more energy. This may increase your willingness to begin an exercise program or join a sports team.

Your confidence that good health practices will improve your state of wellness will help you follow such practices. Not all of your daily choices will be in the best interest of your health, however. Everyone skips a meal or overeats snack foods once in a while. Little harm is done unless you start making such choices on a regular basis.

## Group 4

## The Science of Nutrition and Wellness

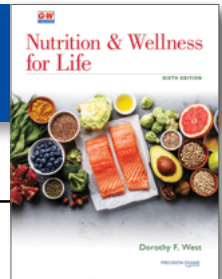
Clearly, nutrition has a big impact on wellness. **Nutrition** is the sum of the processes by which a person takes in and uses food substances. There has been widespread growth in the study of nutrition in recent years. Scientists once thought foods contained just a few nutrients. **Nutrients** are the basic components of food that nourish the body. Today, scientists know of over 45 nutrients needed by the body, which are supplied by foods (Figure 1.12).

Growth in nutrition science is linked to growth in the field of epidemiology. *Epidemiology* is a branch of science that studies the incidence of disease in a population. After World War II, epidemiologists began exploring factors related to heart disease, cancer, and viral infections. One factor that interested them was diet. They conducted studies to learn how the eating patterns of large groups of people related to certain disease patterns.



VGstockstudio/Shutterstock.com

**Figure 1.12** Eating a variety of foods will help ensure your body is getting all of the nutrients needed for good health.



anyaivanova/Shutterstock.com

**Figure 1.13** Scientists are discovering more about the connection between diet and health every day. *What diet-related discoveries have you learned about recently?*

Sometimes nutrition studies involve comparing the effects of various food choices. For instance, researchers might want to compare the health of people who eat meat with the health of those who do not. They might compare the health effects of high-fiber diets with those of low-fiber diets. Researchers can also compare diet and lifestyle patterns among cultures.

What have researchers learned from their nutrition studies? They have learned that eating specific foods cannot cause or prevent certain diseases. They have found, however, that following certain eating patterns tends to increase or decrease a person's chances of developing illness. For instance, studies have shown that eating sugar does not cause diabetes. Nevertheless, eating a diet high in simple sugars can increase a person's risk of becoming overweight. This, in turn, can increase his or her risk of developing type 2 diabetes.

Nutrition scientists continue to research the roles food components play in the human body. They use research methods to discover answers to questions about the links between diet and health (**Figure 1.13**). As a student of nutrition, you will use tools similar to those used by scientists. Correct use of these tools will help you understand and apply information covered in this text.

In the future, you may find yourself eligible to participate in a medical or nutrition-based research project. *Clinical studies* use accepted research methods with human subjects. These studies often focus on new methods of screening, prevention, diagnosis, or treatment for the improvement of health. New therapy methods may be tested.

## FEATURED CAREER



### Health Educator

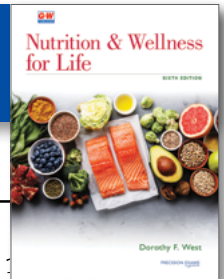
Health educators encourage healthy lifestyles and wellness. They work with people to encourage behaviors that can prevent diseases, injuries, and other health problems. They cover such health-related topics as proper nutrition, exercise and fitness, avoiding sexually transmitted infections (STIs), and the habits and behaviors necessary to avoid illness. Health educators must be able to assess the needs of a group and tailor their educational programs to that group. For example, programs for teens would vary greatly from programs for older adults because of the age and needs of each group.

#### Education

Entry-level positions generally require a bachelor's degree from a health education program. Courses in psychology, human development, and a foreign language are helpful. Experiences with internships or volunteer opportunities can make applicants more appealing to employers. A master's degree is generally required to work in public health, community health, school health, or health promotion.

#### Job Outlook

The demand will remain high. Due to the rising cost and complexity of healthcare, and the need for people to learn how to live healthy lives, career opportunities for health educators will continue to increase.



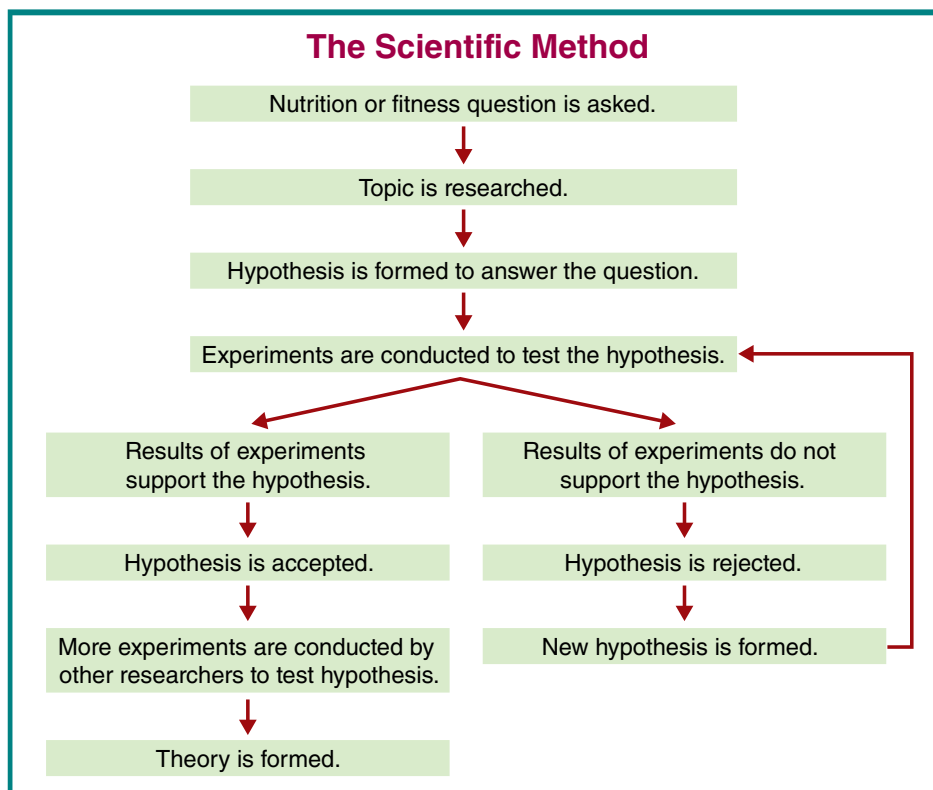
For example, a clinical study may focus on the role of exercise in preventing type 2 diabetes for people who have a family history of the disease. The study may be designed to learn more about how to treat the condition. Other studies focus on measuring safety factors and possible side effects of treatment. Clinical studies use scientific methods to gather and analyze data.

## Using the Scientific Method to Study Nutrition and Wellness

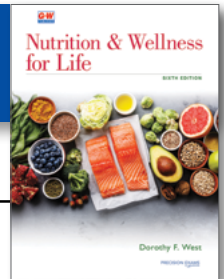
Scientists and research dietitians use the scientific method when performing research. The **scientific method** is the process researchers use to answer a question. Once the question is determined, the researcher states the hypothesis. A **hypothesis** is a proposed answer to a scientific question, which can be tested and verified. An experiment is then devised to test the hypothesis to determine if it is true (**Figure 1.14**).

The following example illustrates the use of the scientific method. A researcher becomes aware of statistics showing that men tend to not live as long as women. This prompts her to raise the question: Why do males have a shorter life expectancy than females? The researcher begins observing males and females. Through these observations, she notes that men seem to exercise less than women. This causes her to form a hypothesis. The researcher's hypothesis states: Men do not live as long as women because men do not exercise as much as women. The researcher then compares the life spans of men and women who do the same amount of exercise.

Suppose the results revealed that men who exercise as much as women have the same life expectancy as women. This would indicate the hypothesis is true. Conversely, suppose the observations revealed that men who exercise as much as women still have a shorter life expectancy. This would indicate the hypothesis is false.



**Figure 1.14**  
Using the scientific method, researchers are able to test and verify possible answers to their questions.



If other researchers conduct many experiments testing this hypothesis and reach the same conclusion, a theory forms. A **theory** is a principle that tries to explain something that happens in nature. Although it is based on evidence, a theory is not a fact. It still requires further testing.

There are still many unanswered questions about diet, disease, and health. Addressing the following questions helps researchers choose which food science, nutrition, and physical fitness topics to study:

- How is current technology affecting these areas?
- What gaps of knowledge currently exist related to the problems identified?
- How many people will be affected by learning about the information?
- Are resources available (money, time, staff, other resources) to do the research?
- How can current technology be used to advance research?
- Where will the study take place, and who will participate?
- Are the rights of people protected, and is the physical environment left unharmed?

### Evaluating Research Reports

You can learn about some of the latest findings and recommendations for improving your wellness level. Television and radio newscasts often include brief reports about the results of health and nutrition studies. These studies are covered in greater detail in newspaper and magazine articles. Professional journals present technical information from the studies. Hundreds of health and nutrition websites provide a wealth of data.

As you evaluate information, identify important details to gain a clearer understanding of the content. For instance, identify the audience to which the report is directed. Is the information intended to update professionals or pique consumer interest? Be aware of who is relaying the information. Is it a media reporter or a health or nutrition professional? Take note of the size and length of the study. Did it involve eight people observed for three weeks or 8,000 people observed for three years?

Group 5



## EXTEND YOUR KNOWLEDGE

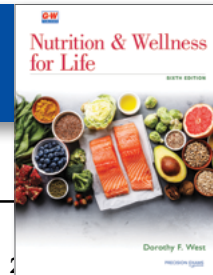
### Consider Becoming a Participant in a Clinical Study

Researchers look for people who qualify to participate in clinical studies. Usually, anyone who meets the specific criteria of the study can enroll. Federal agencies have stricter guidelines regarding the determination of eligibility for research studies, especially as related to children and other special populations.

Most institutions that run clinical studies have an Institutional Review Board (IRB). This group is given the responsibility for reviewing and approving a study. They will examine research procedures to ensure safety for the participants.

Some clinical studies simply ask the participant to fill out a survey regarding specific health problems, food consumption patterns, or exercise patterns. More intensive research may require more of your time and involve physiological testing.

Volunteering to participate in a clinical research study is a way to contribute to the understanding of human diseases and the development of new drugs, devices, and procedures. There is a lot to consider before making the decision to participate. Visit the National Institutes of Health website to learn more about personal and societal benefits and risks of clinical research participation.



Keep in mind that many experiments are conducted to prove or disprove a theory. Not all experiments will yield the same results. A single study is not a sufficient basis for recommending changes in behavior.

### Evaluating Social Media Reports on Health and Wellness

Teens frequently look to social media and the Internet for answers to health-related questions such as the following:

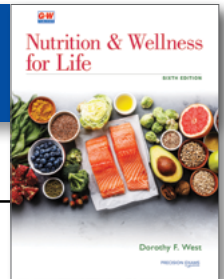
- What are the healthiest food choices?
- How can I build stronger muscles or lose weight?
- Do some foods cause acne?

Not all websites and social media sites are reliable and accurate. Therefore, it is important to learn how to identify sources that can be trusted to provide accurate information.

In general, the most reliable information can be found on websites with the primary goal of educating the public rather than selling a product or a service. Web addresses that include a suffix such as *.gov*, *.edu*, or *.org* are considered more credible than others. These government agencies, educational institutions, or professional organizations share educational literature, post current research findings, and often provide healthcare guidance (**Figure 1.15**). Check with your school librarian if you are in doubt about the reliability of your media source.

Sources of Nutrition and Wellness Information	
Sources of Information	URLs
Academy of Nutrition and Dietetics	<a href="http://www.eatright.org">www.eatright.org</a>
American Academy of Pediatrics	<a href="http://www.aap.org">www.aap.org</a>
American Cancer Society	<a href="http://www.cancer.org">www.cancer.org</a>
American Diabetes Association	<a href="http://www.diabetes.org">www.diabetes.org</a>
American Heart Association	<a href="http://www.heart.org">www.heart.org</a>
American Red Cross	<a href="http://www.redcross.org">www.redcross.org</a>
Centers for Disease Control and Prevention	<a href="http://www.cdc.gov">www.cdc.gov</a>
Institute of Medicine of the National Academies	<a href="http://www.nationalacademies.org/hmd/">www.nationalacademies.org/hmd/</a>
Mayo Clinic	<a href="http://www.mayoclinic.org">www.mayoclinic.org</a>
MedlinePlus® (U.S. National Library of Medicine, National Institutes of Health)	<a href="http://www.medlineplus.gov">www.medlineplus.gov</a>
National Institute of Mental Health	<a href="http://www.nimh.nih.gov">www.nimh.nih.gov</a>
National Institute on Drug Abuse	<a href="http://www.drugabuse.gov">www.drugabuse.gov</a>
Office of Disease Prevention and Health Promotion	<a href="http://www.healthfinder.gov">www.healthfinder.gov</a>
Office of the Surgeon General	<a href="http://www.surgeongeneral.gov">www.surgeongeneral.gov</a>
Tufts University Health & Nutrition Letter	<a href="http://www.nutritionletter.tufts.edu">www.nutritionletter.tufts.edu</a>
United States Consumer Product Safety Commission	<a href="http://www.cpsc.gov">www.cpsc.gov</a>
USDA MyPlate Food Guidance System	<a href="http://www.myplate.gov">www.myplate.gov</a>
U.S. Food and Drug Administration	<a href="http://www.fda.gov">www.fda.gov</a>
World Health Organization	<a href="http://www.who.int">www.who.int</a>

**Figure 1.15**  
Be sure to use reliable Internet sources of nutrition and wellness information when evaluating reports on health and wellness.



Blend Images/Shutterstock.com

**Figure 1.16** Many people fail to balance sedentary work and leisure activities with physical activity. *How many minutes a day are you physically active?*

## Healthful Living in the United States

Studies show that many people in the United States are not following the most healthful eating and physical activity patterns. Studies also show that nutritional problems tend to increase as income levels decrease. A number of health and fitness problems are affecting the nation's state of wellness:

- The percentage of overweight youth has more than doubled in the last 20 years. Now, 21 percent of youth ages 12 to 19 are obese. More than one-third of youth are overweight or obese.
- An estimated 73.6 percent of adults age 20 and older are overweight. Over 36 percent of adults are considered obese.
- Approximately 40 percent of people in the United States have eating patterns that do not meet the recommended dietary guidelines.
- Popular lifestyles include less and less physical activity (**Figure 1.16**).
- Important nutrients are missing from the diets of some groups of people, such as teens and older adults.
- Americans continue to consume more than 50 percent of their calories from added sugars and saturated fats, mostly through heavily processed fast foods and snacks.

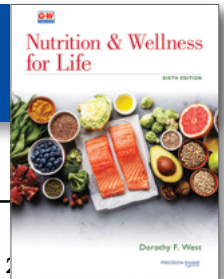
These problems arise for several reasons. Some people do not have enough money to acquire adequate nutrition. Others lack the information, desire, or skills needed to select a nutritious diet. Some people may not know they need to make changes. Still others simply choose to ignore current nutrition recommendations.

One reason some people give for disregarding nutrition recommendations is that nutrition messages can appear unclear or contradictory. Findings from one study seem to dispute the findings from another study. One source says to eat more fiber. Another reference focuses on the importance of protein. Sports books say one thing, diet books say another, and advertisements say something else. Even government nutrition guidelines change periodically. What is a health-conscious person supposed to believe as he or she tries to make wise lifestyle choices?

Education can help you sort out conflicting messages. Learning the scientific method and studying the functions and food sources of nutrients will help you assess media reports. Asking questions will also help you evaluate nutrition information. Finding out who conducted a study and how it was conducted can help you decide whether the results are valid.

Past nutrition studies uncovered convincing information to support the need for improved eating habits. Researchers found that people who ate high-fat diets, especially the harmful fats, were more likely to have heart disease. Identifying this link helped researchers discover that eating a low-fat diet can reduce the risk of heart disease.

As people became more aware of these findings, they began to change their eating habits. Food manufacturers began to produce a wide selection of reduced-fat foods for consumers. For example, low-fat dairy products, nonfat muffins, and fat-free soups began to appear in supermarkets and restaurants. Consumers were buying and eating reduced-fat or nonfat products more than ever before. Despite this, population health issues related to overweight and obesity continued to increase. On average, consumers are now eating more total calories than in past decades, and they are more likely to be overweight. Consuming excess calories has kept the overall risk of weight-related diseases from decreasing.



More recently, there is new evidence suggesting a link between the consumption of added sugars and heart disease. As a result, the American Heart Association has revised its diet recommendations and now recommends individuals minimize their intake of beverages and foods containing added sugars.

One result of improved nutrition research, expanding food technology, and the increased availability of quality food is an increase in life expectancy in the United States over the last 100 years. **Life expectancy** is the average length of life of people living in the same environment. Life expectancy in the United States is about 78.8 years. With improved health, life expectancy tends to increase. Together, healthy people make a healthy nation. Following nutrition and physical activity guidelines will help you and your family maintain good health. In so doing, you contribute to the health of the nation.

## RECIPE FILE

### Vegetable Stir-Fry

6 SERVINGS

#### Ingredients

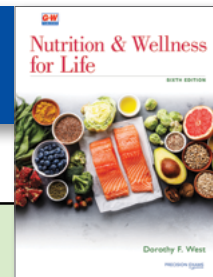
- 2 T. low-sodium soy sauce
- 2 t. toasted sesame oil
- $\frac{3}{4}$  c. broth, vegetable or chicken
- hot pepper sauce to taste (optional)
- $1\frac{1}{2}$  T. cornstarch
- 2 T. avocado or peanut oil
- 2 cloves garlic, minced
- 2 t. ginger, minced
- $\frac{1}{2}$  c. onion, chopped
- $\frac{3}{4}$  c. carrots, julienned
- 1 c. broccoli florets
- $\frac{3}{4}$  c. red bell pepper, sliced into  $\frac{1}{2}$ -inch-wide strips
- $\frac{3}{4}$  c. yellow bell pepper, sliced into  $\frac{1}{2}$ -inch-wide strips
- 1 jalapeño chile, julienned
- 1 c. purple cabbage, shredded
- $\frac{1}{2}$  c. mushrooms, sliced
- $\frac{1}{2}$  c. baby corn, cut into thirds
- 1 c. snow peas
- $\frac{1}{2}$  c. green onion, chopped, green and white parts
- 3 c. cooked brown rice

#### Directions

1. Combine soy sauce, toasted sesame oil, broth, hot pepper sauce, and cornstarch. Set aside.
2. Heat wok over high heat.
3. When wok is hot, add oil to wok and swirl to coat the wok with oil.
4. Turn heat down to medium-high.
5. Add garlic and ginger and stir around for 30 seconds.
6. Add onions, carrots, and broccoli florets. Stir-fry for 2–3 minutes.
7. Add red and yellow bell peppers, and jalapeño. Stir-fry for 2–3 minutes more.
8. Add cabbage and sliced mushrooms. Stir-fry for 1–2 minutes.
9. Add baby corn and snow peas. Stir-fry for 1–2 minutes.
10. Pour soy sauce mixture over vegetables. Stir for one minute, or until thickened.
11. Serve over  $\frac{1}{2}$  cup brown rice and top with chopped green onion.

PER SERVING: 205 CALORIES, 6 G PROTEIN, 43 G CARBOHYDRATE, 8 G FAT, 6 G FIBER, 296 MG SODIUM.





# Chapter 1 Review and Expand

Complete the Chapter Review and Expand after you have heard from all of the expert groups.

## Reading Summary

Wellness involves being in good physical, mental, and social health. People can define their personal states of wellness as points on a continuum between premature death and optimum health.

A number of factors can negatively affect wellness by contributing to disease. Most of these factors are unhealthy lifestyle choices, over which you have control. Poor environmental quality, inadequate healthcare, and heredity can also contribute to disease. You can counteract these factors by making health-promoting choices. Choose a healthful lifestyle and resist peer pressure to engage in unhealthy behaviors. Work to improve the quality of your environment and seek qualified healthcare services when you need them. You can set and work toward goals for improving behaviors that affect your health.

Nutrition and daily physical activity are two factors that have been shown to have a big impact on health. Experts use the scientific method to find answers to their questions about these factors. With education, skills, and motivation, people can eat better and exercise more to maintain better health.

## Chapter Vocabulary

- Content Terms** In small groups, create categories for the following terms and classify as many of the terms as possible. Then, share your ideas with the rest of the class.
 

diagnosis	peer pressure
eating pattern	physical health
environmental quality	premature death
holistic medicine	quality of life
hypothesis	risk factor
life expectancy	scientific method
mental health	social health
nutrient	theory
nutrition	wellness
optimum health	
- Academic Terms** Write each of the following terms on a separate sheet of paper. For each term, quickly write a word you think relates to the term. In small groups, exchange papers. Have each person in the group explain a term on the list. Take turns until all terms have been explained.
 

chronic	impair
diminished	induce
endeavor	

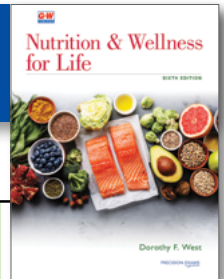
## Review Learning

- Describe the characteristics of people functioning at the extreme points of the wellness continuum.
- Provide an example of how physical, mental, and social health interrelate.
- List common symptoms that may appear when a person has mental health problems.
- What are two social skills that can help teens improve their social health?
- Why is it important to choose health-promoting lifestyle patterns during the teen years? during the adult years?
- In reducing the risk of disease, which risk factors are considered controllable and which are not?
- Name the five major causes of death among adults in the United States.
- List five lifestyle practices that health experts recommend people adopt.
- Describe what is included in a behavior-change contract for achieving a goal for personal improvement.
- Explain the difference between a hypothesis and a theory.
- When evaluating research information, what details should you examine to ensure better and reliable understanding of the content?
- What are two factors that have contributed to health and wellness problems in the United States?

## Critical Thinking

- Evaluate** If obesity is a national health problem in the United States, how does this affect the nation as a whole?
- Conclude** Think about where you currently fit along the wellness continuum. Draw conclusions about ways you can improve your physical, mental, and social health to achieve optimum wellness.
- Predict** If people in the United States continue along their current path of eating and fitness patterns, predict the effect of these behaviors on life expectancy for future generations.
- Evaluate** Draw a line representing the wellness continuum. Label one end "Premature Death" and the other end "Optimum Health."





## Chapter 1 Review and Expand

Place a star on the line to indicate where you place yourself on the wellness continuum. Write a brief explanation to support your assessment.

5. **Analyze** Interview a healthcare professional to learn more about the effects mental and social health can have on physical health. What are the implications of poor mental and/or social health on physical health?
6. **Identify** Working in small groups, identify five activities that are both fun and healthy. Then, brainstorm ways to motivate individuals to incorporate these activities into their daily life. Plan a blog for your class or school website to share your ideas about healthy, fun activities. Employ one or more of the motivational strategies your group generated. When writing your blog, consider the age of your audience and what would make them want to read it. Organize your content and give it an interesting title. Be sure to proofread your blog.
7. **Analyze** Use the Occupational Outlook Handbook website or other reputable resources to research the education requirements, work environment, pay, and job outlook for dietitians in the United States. Write a summary of your findings. Based on information you learned in this chapter and other sources, do you think the job outlook for this career is accurate? Provide evidence to support your opinion.

### Core Skills

1. **Writing** Write and present a play on methods teens could use to avoid negative peer pressure.
2. **Technology Literacy** Create a list of websites that offer information on wellness. Rate each site for accuracy and usability of information and credibility of sources. Prepare a list of reliable sites and post it on your class or school website.
3. **Reading** Identify short stories about teens who made poor choices that had negative consequences in their lives. In each case, describe the choice that was made and the outcomes. Suggest ways to help change the situation so the outcomes are more positive.
4. **Writing** Research current legislation related to nutrition or wellness issues. Select one issue and write a brief summary to share with the class. Include your opinion of the legislation in the summary.
5. **Technology Literacy** Use infographic creation software to create an infographic about wellness.
6. **Science** Contact the state department of public health or a community hospital to obtain a health and wellness lifestyle questionnaire. Complete the questionnaire. Identify the top three lifestyle changes that would probably provide the greatest benefits to your health.
7. **Technology Literacy** Find a life expectancy calculator online to learn about which factors and lifestyle choices add years to life. Calculate your life expectancy and analyze the results. Identify your major health risk areas and suggest methods for changing risky behaviors into health-promoting behaviors.
8. **Math** In 2006, the share of young adults ages 18 to 24 who never smoked was 70.2 percent, according to the Centers for Disease Control and Prevention. In 1965, far fewer could make that claim—only 47.6 percent. Calculate the percentage increase in nonsmokers among members of this age group during that 41-year span.
9. **Speaking** Prepare and present a persuasive speech on the benefits of a healthful diet. Refer to evidence from the text as well as other research to present your case.
10. **Career Readiness Practice** Most employers value employees who can set and achieve reasonable, attainable goals. Think about your personal wellness goals and how they relate to you as a future employee. Create a **SMART** goal for changing one aspect of personal wellness. Determine how you will measure achievement of this goal and identify a deadline for meeting this goal.