Looking Ahead

After reading this chapter, you should be able to:

- Describe the dimensions of wellness
- Identify the major health problems in the United States today, and discuss their causes
- Describe the behaviors that are part of a wellness lifestyle
- Explain the steps in creating a behavior management plan to change a wellness-related behavior
- List some of the available sources of wellness information and explain how to think critically about them

Introduction to Wellness, Fitness, and Lifestyle Management

Test Your Knowledge

1. Which of the following lifestyle factors is the leading preventable cause of death for Americans?
   a. excess alcohol consumption
   b. cigarette smoking
   c. obesity

2. The terms health and wellness mean the same thing.
   True or false?

3. Which of the following health-related issues affects the greatest number of college students each year?
   a. stress
   b. colds/flu/sore throat
   c. sleep problems
   d. concern for a friend or family member

Answers

1. b. Smoking causes about 440,000 deaths per year; obesity is responsible for more than 100,000; and alcohol, as many as 85,000.

2. FALSE. Although the words are used interchangeably, they actually have different meanings. The term health refers to the overall condition of the body or mind and to the presence or absence of illness or injury. The term wellness refers to optimal health and vitality, encompassing six dimensions of well-being.

3. a. About 27% of college students suffer so much stress that it affects their academic performance. High stress levels affect overall health and wellness, making it important to learn effective stress management techniques.
A college sophomore sets the following goals for herself:

- To join in new social circles and make new friends whenever possible
- To exercise every day
- To clean up trash and plant trees in blighted neighborhoods in her community

These goals may differ, but they have one thing in common. Each contributes, in its own way, to this student’s health and well-being. Not satisfied merely to be free of illness, she wants more. She has decided to live actively and fully—not just to be healthy but to pursue a state of overall wellness.

**WELLNESS: THE NEW HEALTH GOAL**

Generations of people have viewed health simply as the absence of disease. That view largely prevails today; the word health typically refers to the overall condition of a person’s body or mind and to the presence or absence of illness or injury. Wellness is a relatively new concept that expands our idea of health. Beyond the simple presence or absence of disease, wellness refers to optimal health and vitality—to living life to its fullest. Although we use the words health and wellness interchangeably, there are two important differences between them:

- Health—or some aspects of it—can be determined or influenced by factors beyond your control, such as your genes, age, and family history. For example, consider a man with a strong family history of prostate cancer. These factors place this man at a higher-than-average risk for developing prostate cancer himself.
- Wellness is determined largely by the decisions you make about how you live. That same man can reduce his risk of cancer by eating sensibly, exercising, and having regular screening tests. Even if he develops the disease, he may still rise above its effects to live a rich, meaningful life. This means choosing not only to care for himself physically but also to maintain a positive outlook, keep up his relationships with others, challenge himself intellectually, and nurture other aspects of his life.

Enhanced wellness, therefore, involves making conscious decisions to control risk factors that contribute to disease or injury. Age and family history are risk factors you cannot control. Behaviors such as not smoking, exercising, and eating a healthy diet are well within your control.

The Dimensions of Wellness

Experts have defined six dimensions of wellness:

- Physical
- Emotional
- Intellectual
- Interpersonal
- Spiritual
- Environmental

Each dimension of wellness affects the others. Further, the process of achieving wellness is constant and dynamic (Figure 1.1), involving change and growth. Ignoring any dimension of wellness can have harmful effects on your life. The following sections briefly introduce the dimensions of wellness. Table 1.1 lists some of the specific qualities and behaviors associated with each dimension. Lab 1.1 will help you learn what wellness means to you and where you fall on the wellness continuum.

**Physical Wellness** Your physical wellness includes not just your body’s overall condition and the absence of disease but also your fitness level and your ability to care for yourself. The higher your fitness level (which is discussed throughout this book), the higher your level of physical health.
To enjoy spiritual wellness is to possess a set of guiding beliefs, principles, or values that give meaning and purpose to your life, especially in difficult times. The spiritually well person focuses on the positive aspects of life and finds spirituality to be an antidote for negative feelings such as cynicism, anger, and pessimism. Organized religions help many people develop spiritual health. Religion, however, is not the only source or form of spiritual wellness. Many people find meaning and purpose in their lives on their own—through nature, art, meditation, or good works—or with their loved ones.

**Environmental Wellness** Your environmental wellness is defined by the livability of your surroundings. Personal health depends on the health of the planet—from the safety of the food supply to the degree of violence in society. Your physical environment either supports your wellness or diminishes it. To improve your environmental wellness, you can learn about and protect yourself against hazards in your surroundings and work to make your world a cleaner and safer place.

**Other Aspects of Wellness** Many experts consider occupational wellness and financial wellness to be additional important dimensions of wellness. Occupational wellness refers to the level of happiness and fulfillment you gain through your work. Although high salaries and prestigious titles are nice, they alone generally do not bring about occupational wellness. An occupationally well person truly likes his or her work, feels a connection with others in the workplace, and has opportunities to learn and be challenged. Other aspects of occupational wellness include enjoyable work, job satisfaction, and recognition from managers and colleagues. An ideal job draws on your interests and passions, as well as your vocational or professional skills, and allows you to feel that you are contributing to society in your everyday work.

To achieve occupational wellness, set career goals that reflect your personal values. For example, a career in sales might be a good choice for someone who values financial security, whereas a career in teaching or nursing might be a good choice for someone who values service to others.

Financial wellness refers to your ability to live within your means and manage your money in a way that gives you peace of mind. It includes balancing your income...
Financial Wellness

With the news full of stories of home mortgage foreclosures, credit card debt, and personal bankruptcies, it has become painfully clear that many Americans do not know how to manage their finances. Are such stressful experiences inevitable in today’s world? Not at all. You can avoid them—and gain financial peace of mind—by developing the skills that contribute to financial wellness.

What exactly is financial wellness? Basically, it means having a healthy relationship with money. It involves such skills as knowing how to manage your money, using self-discipline to live within your means, using credit cards wisely, staying out of debt, meeting your financial obligations, having a long-range financial plan, and saving. It also includes managing your emotional relationship with money and being in charge of your financial decisions. If you haven’t developed these skills yet, now is the time to start.

Learn to Budget

Although the word budget may conjure up thoughts of deprivation, a budget is really just a way of tracking where your money goes and making sure you’re spending it on the things that are most important to you. Basic budgeting worksheets are available online, but you can also just use a notebook with lined paper. On one page, list your monthly income by source (for example, job, stipend, parental aid), and on another, list your expenditures. If you’re not sure where you spend your money, track your expenditures for a few weeks or a month. Then organize them into categories, such as housing (rent, utilities), food (groceries, eating out), transportation (car, insurance, parking, public transportation), entertainment (movies, music, cable TV, parties), services (cell phone, Internet service provider), personal care (haircuts, cosmetics), clothes, books and school supplies, health care, credit card and loan payments, and miscellaneous. These are suggestions; use categories that reflect the way you actually spend your money. Knowing where your money goes is the first step in gaining control of it.

Now total your income and expenditures. Are you taking in more than you spend, or are you spending more than you’re taking in? Are you spending your money where you want to spend it, or are you surprised by your spending patterns? Use what you find out to set guidelines and goals for yourself. If your expenditures exceed your income, identify ways to make some cuts. If morning lattes are adding up, consider making coffee at home. If you have both a cell phone and a landline, consider whether you can give one up. If you’re spending money on movies and restaurants, consider less expensive options like having a game night with friends or organizing a potluck.

Be realistic about what you can cut, but also realize that you may have to adjust your mind-set about what you can afford. Once you have a balance between income and expenses, don’t stop there. Try to have a little left over each month for an emergency fund or savings. You may be surprised by how much peace of mind you can gain by living within your means!

Be Wary of Credit Cards

College students are prime targets for credit card companies, and most undergraduates have at least one card. A 2009 report found that college students use credit cards to live beyond their means, not just for convenience. According to the report,

- Half of all students have four or more cards.
- The average outstanding balance on undergraduate credit cards was $3,173.
- Seniors graduated with an average credit card debt of $4,100; nearly 20% of seniors carried balances of more than $7,000.
- 82% carried balances on their credit cards and thus incurred finance charges each month.

The best way to avoid credit card debt is to have just one card, to use it only when necessary, and to pay off the entire balance every month. Make sure you understand terms like APR (annual percentage rate—the interest you’re charged on your balance), credit limit (the maximum amount you can borrow and expenditures, staying out of debt, saving for the future, and understanding your emotions about money. For more on this topic, see the box “Financial Wellness.”

New Opportunities, New Responsibilities

Wellness is a fairly new concept. A century ago, Americans considered themselves lucky just to survive to adulthood (Figure 1.2). A child born in 1900, for example, could expect to live only about 47 years. Many people died from common infectious diseases (such as pneumonia, tuberculosis, or diarrhea) and poor environmental conditions (such as water pollution and poor sanitation).

Since 1900, however, life expectancy has nearly doubled, due largely to the development of vaccines and antibiotics to fight infections and to public health measures to improve living conditions. Today, a different set of diseases has emerged as our major health threat, and heart disease, cancer, and stroke are now the three leading causes of death for Americans (Table 1.2). Treating such chronic diseases is costly and difficult.

The good news is that people have some control over whether they develop chronic diseases. People make choices every day that increase or decrease their risks for such diseases. These lifestyle choices include behaviors such as smoking, diet, exercise, and alcohol use. As Table 1.3 makes clear, lifestyle factors contribute to many
at any one time), **minimum monthly payment** (the smallest payment your creditor will accept each month), **grace period** (the number of days you have to pay your bill before interest, late fees, or other penalties are charged), and **over-the-limit and late fees** (the amount you’ll be charged if your payment is late or you go over your credit limit). Banks make most of their money from fees. Read the fine print!

**Get Out of Debt**

If you do have credit card debt, stop using your cards and start paying them off. If you can’t pay the whole balance, at least try to pay more than the minimum payment each month. Most people are surprised by how long it will take to pay off a loan by making only the minimum payments. For example, to pay off a credit card balance of $2000 at 10% interest with monthly payments of $20 would take 203 months—17 years. To see for yourself, check out an online credit card calculator like [http://www.bankrate.com/calculators/credit-cards/credit-card-payoff-calculator.aspx](http://www.bankrate.com/calculators/credit-cards/credit-card-payoff-calculator.aspx). By carrying a balance and incurring finance charges, you are also paying back much more than your initial loan—money you could be putting to other uses.

Some experts recommend choosing one card—the one with the largest balance or the highest interest—and paying off as much as you can every month. Others recommend paying off one or two cards with smaller balances to give yourself a sense of accomplishment and motivation to continue. Whatever your choice, if you have credit card debt, make it a priority to pay it off as soon as you can.

**Start Saving**

The same miracle of compound interest that locks you into years of credit card debt can work to your benefit if you start saving early (for an online compound interest calculator, visit [http://www.moneychimp.com/calculator/compound_interest_calculator.html](http://www.moneychimp.com/calculator/compound_interest_calculator.html)).

Experts recommend “paying yourself first” every month—that is, putting some money into savings before you start paying your bills, depending on what your budget allows. You may want to save for a large purchase, like a car or a vacation, or you may even be looking ahead to retirement. If you work for a company with a 401(k) retirement plan, contribute as much as you can every pay period. Some companies match contributions up to a certain amount; so be sure you contribute at least that amount.

**Become Financially Literate**

Although modern life requires financial literacy—which includes everything from basics like balancing a checkbook to more sophisticated endeavors like developing a long-term financial plan—most Americans have not received any kind of education in financial skills. Even before the economic meltdown that began in 2008, the U.S. government had established the [Financial Literacy and Education Commission](http://www.MyMoney.gov) to help Americans develop financial literacy and learn how to save, invest, and manage their money better. The consensus is that developing lifelong financial skills should begin in early adulthood, during the college years, if not earlier.

If you want to improve your financial literacy, a good way to start is to take a course in personal finance or financial management skills. There are also many magazines that focus on money management, and of course a wealth of information can be found online. Make it a priority to achieve financial wellness, and start now. Money may not buy you love, but having control over your money can buy you a lot of peace of mind.

**The National Healthy People Initiative**

Wellness is a personal concern, but the U.S. government has financial and humanitarian interests in it, too. A healthy population is the nation’s source of vitality, creativity, and wealth. Poor health drains the nation’s resources and raises health care costs for all.

**The national Healthy People Initiative aims to prevent disease and improve Americans’ quality of life.** Healthy People reports, published each decade since 1980, set health goals, as well as specific targets for reducing disease and promoting health and wellness. Two examples are the 2000 and 2010 Healthy People objectives for reducing deaths from infectious disease and chronic disease.

VITAL STATISTICS

Table 1.2 Leading Causes of Death in the United States, 2007

<table>
<thead>
<tr>
<th>RANK</th>
<th>CAUSE OF DEATH</th>
<th>NUMBER OF DEATHS</th>
<th>PERCENTAGE OF TOTAL DEATHS</th>
<th>DEATH RATE</th>
<th>LIFESTYLE FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heart disease</td>
<td>615,651</td>
<td>25.4</td>
<td>190.7</td>
<td>D I S A</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>560,187</td>
<td>23.1</td>
<td>177.5</td>
<td>D I S A</td>
</tr>
<tr>
<td>3</td>
<td>Stroke</td>
<td>133,990</td>
<td>5.5</td>
<td>41.6</td>
<td>D I S A</td>
</tr>
<tr>
<td>4</td>
<td>Chronic lower respiratory diseases</td>
<td>129,311</td>
<td>5.3</td>
<td>41.2</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>Unintentional injuries (accidents)</td>
<td>117,075</td>
<td>4.8</td>
<td>37.8</td>
<td>I S A</td>
</tr>
<tr>
<td>6</td>
<td>Alzheimer’s disease</td>
<td>74,944</td>
<td>3.1</td>
<td>22.8</td>
<td>D I S A</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes mellitus</td>
<td>70,905</td>
<td>3.0</td>
<td>22.4</td>
<td>D I S A</td>
</tr>
<tr>
<td>8</td>
<td>Influenza and pneumonia</td>
<td>52,847</td>
<td>2.2</td>
<td>16.3</td>
<td>S</td>
</tr>
<tr>
<td>9</td>
<td>Kidney disease</td>
<td>46,093</td>
<td>2.0</td>
<td>14.4</td>
<td>I S A</td>
</tr>
<tr>
<td>10</td>
<td>Septicemia (systemic blood infection)</td>
<td>34,851</td>
<td>1.4</td>
<td>11.0</td>
<td>A</td>
</tr>
<tr>
<td>11</td>
<td>Intentional self-harm (suicide)</td>
<td>33,835</td>
<td>1.4</td>
<td>10.8</td>
<td>A</td>
</tr>
<tr>
<td>12</td>
<td>Chronic liver disease and cirrhosis</td>
<td>28,504</td>
<td>1.2</td>
<td>8.9</td>
<td>A</td>
</tr>
<tr>
<td>13</td>
<td>Hypertension (high blood pressure)</td>
<td>23,769</td>
<td>1.0</td>
<td>7.3</td>
<td>D I S A</td>
</tr>
<tr>
<td>14</td>
<td>Parkinson’s disease</td>
<td>20,136</td>
<td>0.8</td>
<td>6.6</td>
<td>A</td>
</tr>
<tr>
<td>15</td>
<td>Assault (homicide)</td>
<td>17,520</td>
<td>0.7</td>
<td>5.8</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>All other causes</td>
<td>465,089</td>
<td>19.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key:  
D  Diet plays a part  
I  Inactive lifestyle plays a part  
S  Smoking plays a part  
A  Excessive alcohol use plays a part

*Percentages may not total 100% due to rounding.  
1Age-adjusted death rate per 100,000 persons.

NOTE: Although not among the overall top 15 causes of death, HIV/AIDS (11,061 deaths in 2007) is a major killer. In 2007, HIV/AIDS was the thirteenth leading cause of death for Americans age 15–24 years and the sixth leading cause of death for those age 25–44 years.

the strengthening of public health policies. In a shift from the development of more healthful surroundings, and promotes healthy lifestyle choices among individuals, Healthy People 2020 like past versions of the program, focuses primarily on keeping Americans healthy rather than treating them after they become ill. Toward this end, the initiative now emphasizes the importance of health determinants—factors that affect the health of individuals, demographic groups, or entire populations. Health determinants are social (including factors such as education level and economic status) and environmental (including natural and human-made environments). Because many health determinants can be monitored and measured, their impacts can often be foreseen. Armed with this understanding, Healthy People 2020 hopes to predict and prevent illness and injuries among Americans and to improve living conditions in a way that reduces the negative impact of certain health determinants on individuals and populations.

Examples of individual health promotion goals from the most recent version of Healthy People (Healthy People 2010), along with estimates of how well Americans are tracking toward achieving those goals, appear in Table 1.5.

### Behaviors That Contribute to Wellness

A lifestyle based on good choices and healthy behaviors maximizes quality of life. It helps people avoid disease, remain strong and fit, and maintain their physical and mental health as long as they live. The most important behaviors and habits are introduced briefly here and described in detail in later chapters.

**Be Physically Active** The human body is designed to work best when it is active. It readily adapts to nearly any level of activity and exertion. **Physical fitness** is a set of physical attributes that allow the body to respond or adapt to the demands and stress of physical effort. The more we

---

**Table 1.3**

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of Deaths Per Year</th>
<th>Percentage of Total Deaths Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>440,000</td>
<td>18.1</td>
</tr>
<tr>
<td>Obesity*</td>
<td>112,000</td>
<td>4.6</td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>83,000</td>
<td>3.5</td>
</tr>
<tr>
<td>Microbial agents</td>
<td>75,000</td>
<td>3.1</td>
</tr>
<tr>
<td>Toxic agents</td>
<td>55,000</td>
<td>2.3</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>43,000</td>
<td>1.8</td>
</tr>
<tr>
<td>Firearms</td>
<td>29,000</td>
<td>1.2</td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>20,000</td>
<td>0.8</td>
</tr>
<tr>
<td>Illicit drug use</td>
<td>17,000</td>
<td>0.7</td>
</tr>
</tbody>
</table>

**Note:** The factors listed here are defined as lifestyle and environmental factors that contribute to the leading killers of Americans (health experts often refer to these as the actual causes of death). Microbial agents include bacterial and viral infections like influenza and pneumonia; toxic agents include environmental pollutants and chemical agents such as asbestos.

*The number of deaths due to obesity is an area of ongoing controversy and research. Recent estimates have ranged from 112,000 to 365,000.


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**Figure 1.3** Quantity of life versus quality of life. Years of healthy life as a proportion of life expectancy in the U.S. population.


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**Table 1.4** Leading Causes of Death among Americans Age 15–24

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause of Death</th>
<th>Number of Deaths</th>
<th>Percentage of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accidents:</td>
<td>15,336</td>
<td>45.4</td>
</tr>
<tr>
<td></td>
<td>Motor vehicle</td>
<td>10,507</td>
<td>31.1</td>
</tr>
<tr>
<td></td>
<td>All other accidents</td>
<td>4,849</td>
<td>14.3</td>
</tr>
<tr>
<td>2</td>
<td>Homicide</td>
<td>5,284</td>
<td>15.6</td>
</tr>
<tr>
<td>3</td>
<td>Suicide</td>
<td>4,030</td>
<td>11.9</td>
</tr>
<tr>
<td>4</td>
<td>Cancer</td>
<td>1,609</td>
<td>4.8</td>
</tr>
<tr>
<td>5</td>
<td>Heart disease</td>
<td>991</td>
<td>2.9</td>
</tr>
<tr>
<td>6</td>
<td>All causes</td>
<td>33,788</td>
<td></td>
</tr>
</tbody>
</table>

When it comes to striving for wellness, most differences among people are insignificant. We all need to exercise, eat well, and manage stress. We all need to know how to protect ourselves from heart disease, cancer, sexually transmitted diseases, and injuries.

But some of our differences—both as individuals and as members of groups—do have implications for wellness. Some of us, for example, have grown up with eating habits that increase our risk of obesity or heart disease. Some of us have inherited predispositions for certain health problems, such as osteoporosis or high cholesterol levels. These health-related differences among individuals and groups can be biological—determined genetically—or cultural—acquired as patterns of behavior through daily interactions with family, community, and society. Many health conditions are a function of biology and culture combined.

Every person is an individual with her or his own unique genetic endowment as well as unique experiences in life. However, many of these influences are shared with others of similar genetic and cultural backgrounds. Information about group similarities relating to wellness issues can be useful. For example, it can alert people to areas that may be of special concern for them and their families.

Wellness-related differences among groups can be described along several dimensions, including the following:

- **Gender.** Men and women have different life expectancies and different incidences of many diseases, including heart disease, cancer, and osteoporosis. Men have higher rates of death from injuries, suicide, and homicide; women are at greater risk for Alzheimer’s disease and depression. Men and women also differ in body composition and certain aspects of physical performance.

- **Race and ethnicity.** A genetic predisposition for a particular health problem can be linked to race or ethnicity as a result of each group’s relatively distinct history. Diabetes is more prevalent among individuals of Native American or Latino heritage, for example, and African Americans have higher rates of hypertension. Racial or ethnic groups may also vary in other ways that relate to wellness: traditional diets; patterns of family and interpersonal relationships; and attitudes toward using tobacco, alcohol, and other drugs, to name just a few.

- **Income and education.** Inequalities in income and education underlie many of the health disparities among Americans. People with low incomes (low socioeconomic status, or SES) and less education have higher rates of injury and many diseases, are more likely to smoke, and have less access to health care. Poverty and low educational attainment are far more important predictors of poor health than any racial or ethnic factor.

These are just some of the “dimensions of diversity”—differences among people and groups that are associated with different wellness concerns. Other factors, such as age, geographic location, sexual orientation, and disability can present challenges as an individual strives for wellness. In this text, topics related to wellness and diversity are given special consideration in boxes labeled Dimensions of Diversity.

### Table 1.5 Selected Healthy People 2010 Objectives

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>ESTIMATE OF CURRENT STATUS (%)</th>
<th>GOAL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the proportion of people age 18 and older who engage regularly in moderate physical activity.</td>
<td>31</td>
<td>50</td>
</tr>
<tr>
<td>Increase the proportion of people age 2 and older who consume at least 3 daily servings of vegetables, with at least one-third being dark-green or orange vegetables.</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>Increase the prevalence of healthy weight among people age 20 and older.</td>
<td>32</td>
<td>60</td>
</tr>
<tr>
<td>Reduce the proportion of adults 18 and older who use cigarettes.</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Reduce the proportion of college students reporting binge drinking during the past 2 weeks.</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>Increase the proportion of adults who take protective measures to reduce the risk of skin cancer (sunscreens, sun-protective clothing, and so on).</td>
<td>71</td>
<td>85</td>
</tr>
<tr>
<td>Increase the use of safety belts by motor vehicle occupants.</td>
<td>82</td>
<td>92</td>
</tr>
<tr>
<td>Increase the number of residences with a functioning smoke alarm on every floor.</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Increase the proportion of persons (under age 65) with health insurance.</td>
<td>83</td>
<td>100</td>
</tr>
</tbody>
</table>

WELLNESS: THE NEW HEALTH GOAL

The benefits of regular physical activity are both physical and mental, immediate and long-term (Figure 1.4). In the short term, being physically fit makes it easier to do everyday tasks, such as lifting; it provides reserve strength for emergencies; and it helps people look and feel good. In the long term, being physically fit confers protection against chronic diseases and lowers the risk of dying prematurely (see the box “Does Being Physically Active Make a Difference in How Long You Live?”). Physically active people are less likely to develop or die from heart disease, respiratory disease, high blood pressure, cancer, osteoporosis, and type 2 diabetes (the most common form of diabetes). As they get older, they may be able to avoid weight gain, muscle and bone loss, fatigue, and other problems associated with aging.

Choose a Healthy Diet

In addition to being sedentary, many Americans have a diet that is too high in calories, unhealthy fats, and added sugars and too low in fiber, complex carbohydrates, fruits, and vegetables. Like physical inactivity, this diet is linked to a number of chronic diseases. A healthy diet provides necessary nutrients and sufficient energy without also providing too much of the dietary substances linked to diseases.

Maintain a Healthy Body Weight

Overweight and obesity are associated with a number of disabling and potentially fatal conditions and diseases, including heart disease, cancer, and type 2 diabetes. The Centers for Disease Control and Prevention (CDC) estimates that obesity kills 112,000 Americans each year. Healthy body weight is an important part of wellness—but short-term dieting is not part of fitness or wellness. Maintaining a healthy body weight requires a lifelong commitment to regular exercise, a healthy diet, and effective stress management.

Manage Stress Effectively

Many people cope with stress by eating, drinking, or smoking too much. Others don’t deal with it at all. In the short term, inappropriate stress management can lead to fatigue, sleep disturbances, and other symptoms. Over longer periods of time, poor stress management can lead to less efficient functioning of the immune system and increased susceptibility to disease. Learning to incorporate effective stress management techniques into daily life is an important part of a fit and well lifestyle.

Avoid Tobacco and Drug Use and Limit Alcohol Consumption

Tobacco use is associated with 8 of the top 10 causes of death in the United States; personal tobacco use and second-hand smoke kill about 440,000 Americans each year, more than any other behavioral or environmental factor. With 20% of adult Americans describing themselves as current smokers as of 2007, lung cancer is the most common cause of cancer death among both men and women and one of the leading causes of death overall. On average, the direct health care costs associated with smoking exceed $100 billion per year. If the cost of lost productivity from sickness, disability, and premature death is included, the total is closer to $196 billion.

Excessive alcohol consumption is linked to 6 of the top 10 causes of death and results in about 85,000 deaths a year in the United States. The social, economic, and medical costs of alcohol abuse are estimated at over $185 billion per year. Alcohol or drug intoxication is an especially notable factor in the death and disability of young people, particularly through unintentional injuries (such as drownings and car crashes caused by drunken driving) and violence.

Protect Yourself from Disease and Injury

The most effective way of dealing with disease and injury is to prevent them. Many of the lifestyle strategies discussed here help protect you against chronic illnesses. In addition, you can take specific steps to avoid infectious diseases, particularly those that are sexually transmitted.

Take Other Steps Toward Wellness

Other important behaviors contribute to wellness, including these:

- Developing meaningful relationships
- Planning for successful aging

**TERMS**

sedentary  Physically inactive; literally, “sitting.”

unintentional injury  An injury that occurs without harm being intended.
Does Being Physically Active Make a Difference in How Long You Live?

Most of us know that being physically active makes us feel better and look better, but how do we know that physical activity and exercise are good for our health? To answer this question, the U.S. Department of Health and Human Services charged a committee with the task of reviewing the scientific literature to discover whether there is sufficient evidence to support physical activity recommendations to the public. The committee’s report, the Physical Activity Guidelines Advisory Committee Report, 2008, summarizes the scientific evidence for the health benefits of habitual physical activity and the risks of sedentary behavior. The report provides the rationale for government physical activity guidelines.

The first question the committee addressed was whether being physically active would help people live longer. The committee investigated the link between physical activity and all-cause mortality—deaths from all causes—by looking at 73 studies dating from 1995 to 2008. The subjects of the studies were both men and women, from all age groups (16 to 65+), and from different racial and ethnic groups. The review included studies conducted in countries in North America, Europe, the Middle East, Asia, and Australia. Follow-up time (the time from the study to the examination of mortality data) ranged from 10 months to 28 years, with a median time of 11.7 years. (The only exception to this was a Finnish study of former Olympic athletes, in which follow-up time was 71 years!)

The data from these studies strongly support an inverse relation between physical activity and all-cause mortality—that is, physically active individuals were less likely to die during the follow-up period. The review found that active people have about a 30% lower risk of dying compared with inactive people. These inverse associations were found not just for healthy adults but also for older adults (age 65 and older) for people with coronary artery disease and diabetes, for people with impaired mobility, and for people who were overweight or obese. Poor fitness and low physical activity levels were found to be better predictors of premature death than smoking, diabetes, or obesity. The committee found that about 150 minutes (2 to 2.5 hours) of physical activity per week is sufficient to decrease all-cause mortality (see Chapter 2 for more details). It appears that it is the overall volume of energy expended, regardless of what kinds of activities produce the energy expenditure, that makes a difference in risk of premature death.

The committee also looked at whether there is a dose-response relation between physical activity and all-cause mortality—that is, whether more activity results in a greater reduction in death rates. Again, the studies showed an inverse relation between these two variables. This means not only that more activity above and beyond 150 minutes per week produces greater benefits but also that, for inactive people, benefits are seen at levels below 150 minutes per week. In fact, any increase in physical activity resulted in reduced risk of death. The committee refers to this as the “some is good; more is better” message. A target of 150 minutes per week is recommended, but any level of activity below the target is encouraged for inactive individuals.

Looking more closely at this relationship, the committee found that the greatest risk reduction is seen at the lower end of the physical activity spectrum (30 to 90 minutes per week). In fact, sedentary people who become more active have the greatest potential for improving health and reducing the risk of premature death. Additional risk reduction occurs as physical activity increases, but at a slower rate. For example, individuals who engaged in physical activity 90 minutes per week had a 20% reduction in mortality risk compared with inactive people, and individuals who were active 150 minutes per week, as noted earlier, had a 30% reduction in risk. But to achieve a 40% reduction in mortality, individuals had to be physically active 420 minutes per week (7 hours).

The message from the research is clear: It doesn’t matter what activity you choose or even how much time you can devote to it per week as long as you get moving! The life you save will be your own!


- Learning about the health care system
- Acting responsibly toward the environment

Labs 1.1 and 1.2 will help you evaluate your behaviors as they relate to wellness.

The Role of Other Factors in Wellness

Heredity, the environment, and adequate health care are other important influences on health. These factors can interact in ways that raise or lower the quality of a person’s life and the risk of developing particular diseases. For example, a sedentary lifestyle combined with a genetic predisposition for diabetes can greatly increase a person’s risk for developing the disease. If this person also lacks adequate health care, he or she is much more likely to suffer dangerous complications from diabetes.

But in many cases, behavior can tip the balance toward health even if heredity or environment is a negative factor. Breast cancer, for example, can run in families, but it is also associated with overweight and a sedentary lifestyle. A woman with a family history of breast cancer is less likely to die from the disease...
if she controls her weight, exercises, performs regular breast self-exams, and consults with her physician about mammograms.

**REACHING WELLNESS THROUGH LIFESTYLE MANAGEMENT**

As you consider this description of behaviors that contribute to wellness—being physically active, choosing a healthy diet, and so on—you may be doing a mental comparison with your own behaviors. If you are like most young adults, you probably have some healthy habits and some habits that place your health at risk. For example, you may be physically active and have a healthy diet but indulge in binge drinking on weekends. You may be careful to wear your seat belt in your car but smoke cigarettes or use chewing tobacco. Moving in the direction of wellness means cultivating healthy behaviors and working to overcome unhealthy ones. This approach to lifestyle management is sometimes called behavior change.

As you may already know from experience, changing an unhealthy habit can be harder than it looks. When you embark on a behavior change plan, it may seem like too much work at first. But as you make progress, you will gain confidence in your ability to take charge of your life. You will also experience the benefits of wellness—more energy, greater vitality, deeper feelings of appreciation and curiosity, and a higher quality of life.

The rest of this chapter outlines a general process for changing unhealthy behaviors that is backed by research and that has worked for many people. You will also find many specific strategies and tips for change. For additional support, work through the activities in the Behavior Change Workbook at the end of the text.

**Getting Serious About Your Health**

Before you can start changing a wellness-related behavior, you have to know that the behavior is problematic and that you can change it. To make good decisions, you need information about relevant topics and issues, including what resources are available to help you change.

**Examine Your Current Health Habits** Have you considered how your current lifestyle is affecting your health today and how it will affect your health in the future? Do you know which of your current habits enhance your health and which detract from it? Begin your journey toward wellness with self-assessment: Think about your own behavior, complete the self-assessment in Lab 1.2, and talk with friends and family members about what they’ve noticed about your lifestyle and your health.

**Choose a Target Behavior** Changing any behavior can be demanding. This is why it’s a good idea to start small, by choosing one behavior you want to change—called a target behavior—and working on it until you succeed. Your chances of success will be greater if your first goal is simple, such as resisting the urge to snack between classes. As you change one behavior, make your next goal a little more significant, and build on your success.

**Motivate Yourself** STRATEGIES FOR BEHAVIOR CHANGE

**Chart your family health history.** Learning about the diseases and health conditions that run in your family can help you start improving your lifestyle. Such knowledge helps you understand the health risks you may face in the future. It can also help motivate you to keep a behavior change program on track. Put together a simple family health tree by entering key health information on your close relatives—siblings, parents, aunts and uncles, grandparents—into a family tree format. Don’t focus only on causes of death. Look at all chronic conditions and health-related behaviors that affect both quality and quantity of life—alcoholism, diabetes, high blood pressure, high cholesterol, obesity, osteoporosis, depression, and so on. What patterns do you see? Visit the U.S. Surgeon General’s Family History Initiative Web site (www.hhs.gov/familyhistory) for more information and a sample family health tree form.

**Ask Yourself** QUESTIONS FOR CRITICAL THINKING AND REFLECTION

How often do you feel exuberant? Vital? Joyful? What makes you feel that way? Conversely, how often do you feel downhearted, de-energized, or depressed? What makes you feel that way? Have you ever thought about how you might increase experiences of vitality and decrease experiences of discouragement?

**Learn About Your Target Behavior** Once you’ve chosen a target behavior, you need to learn its risks and benefits for you—both now and in the future. Ask these questions:

- How is your target behavior affecting your level of wellness today?
- What diseases or conditions does this behavior place you at risk for?
- What effect would changing your behavior have on your health?

As a starting point, use this text and the resources listed in the For Further Exploration section at the end of each

**TERMS**

- **behavior change** A lifestyle management process that involves cultivating healthy behaviors and working to overcome unhealthy ones.
- **target behavior** An isolated behavior selected as the object of a behavior change program.
Find Help

Have you identified a particularly challenging target behavior or mood—something like alcohol addiction, binge eating, or depression—that interferes with your ability to function or places you at a serious health risk? Help may be needed to change behaviors or conditions that are too deeply rooted or too serious for self-management. Don’t be discouraged by the seriousness or extent of the problem; many resources are available to help you solve it. On campus, the student health center or campus counseling center can provide assistance. To locate community resources, consult the yellow pages, your physician, or the Internet.

Building Motivation to Change

Knowledge is necessary for behavior change, but it isn’t usually enough to make people act. Millions of people have sedentary lifestyles, for example, even though they know it’s bad for their health. This is particularly true of young adults, who may not be motivated to change because they feel healthy in spite of their unhealthy behaviors (see the box “Wellness Matters for College Students”). To succeed at behavior change, you need strong motivation.

Examine the Pros and Cons of Change

Health behaviors have short-term and long-term benefits and costs. Consider the benefits and costs of an inactive lifestyle:

- Short-term, such a lifestyle allows you more time to watch TV and hang out with friends, but it leaves you less physically fit and less able to participate in recreational activities.
- Long-term, it increases the risk of heart disease, cancer, stroke, and premature death.

To successfully change your behavior, you must believe that the benefits of change outweigh the costs. Carefully examine the pros and cons of continuing your current behavior and of changing to a healthier one. Focus on the effects that are most meaningful to you, including those that are tied to your personal identity and values. For example, if you see yourself as an active person who is a good role model for others, then adopting behaviors such as engaging in regular physical activity and getting adequate sleep will support your personal identity. If you value independence and control over your life, then quitting smoking will be consistent with your values and goals. To complete your analysis, ask friends and family members about the effects of your behavior on them. For example, a younger sister may tell you that your smoking habit influenced her decision to take up smoking.

The short-term benefits of behavior change can be an important motivating force. Although some people are motivated by long-term goals, such as avoiding a disease that may hit them in 30 years, most are more likely to be moved to action by shorter-term, more personal goals. Feeling better, doing better in school, improving at a sport, reducing stress, and increasing self-esteem are common short-term benefits of health behavior change. Many wellness behaviors are associated with immediate improvements in quality of life. For example, surveys of Americans have found that nonsmokers feel healthy and full of energy more days each month than do smokers, and they report fewer days of sadness and troubled sleep; the same is true when physically active people are compared with sedentary people. Over time, these types of differences add up to a substantially higher quality of life for people who engage in healthy behaviors.

Boost Self-Efficacy

When you start thinking about changing a health behavior, a big factor in your eventual success is whether you have confidence in yourself and in your ability to change. Self-efficacy refers to your belief in your ability to successfully take action and perform a specific task. Strategies for boosting self-efficacy include developing an internal locus of control, using visualization and self-talk, and getting encouragement from supportive people.

LOCUS OF CONTROL

Who do you believe is controlling your life? Is it your parents, friends, or school? Is it “fate”? Or is it you? Locus of control refers to the figurative “place” a person designates as the source of responsibility for the...
Evaluating Sources of Health Information

Believability of Health Information Sources
A 2007 survey conducted by the American College Health Association indicated that college students are smart about evaluating health information. They trust the health information they receive from health professionals and educators and are skeptical about popular information sources.

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<thead>
<tr>
<th>RANK</th>
<th>SOURCE</th>
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<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Health educators</td>
<td>8</td>
<td>Resident assistants/advisors</td>
</tr>
<tr>
<td>2</td>
<td>Health center medical staff</td>
<td>9</td>
<td>Religious centers</td>
</tr>
<tr>
<td>3</td>
<td>Parents</td>
<td>10</td>
<td>Internet/World</td>
</tr>
<tr>
<td>4</td>
<td>Faculty/coursework</td>
<td>11</td>
<td>Wide Web</td>
</tr>
<tr>
<td>5</td>
<td>Leaflets, pamphlets, flyers</td>
<td>12</td>
<td>Friends</td>
</tr>
<tr>
<td>6</td>
<td>Campus newspaper, articles</td>
<td>13</td>
<td>Television</td>
</tr>
<tr>
<td>7</td>
<td>Campus peer educators</td>
<td>14</td>
<td>Other sources</td>
</tr>
</tbody>
</table>

How smart are you about evaluating health information? Here are some tips.

General Strategies
Whenever you encounter health-related information, take the following steps to make sure it is credible:

- **Go to the original source.** Media reports often simplify the results of medical research. Find out for yourself what a study really reported, and determine whether it was based on good science. What type of study was it? Was it published in a recognized medical journal? Was it an animal study or did it involve people? Did the study include a large number of people? What did the authors of the study actually report?

- **Watch for misleading language.** Reports that tout “breakthroughs” or “dramatic proof” are probably hype. A study may state that a behavior “contributes to” or is “associated with” an outcome; this does not prove a cause-and-effect relationship.

- **Distinguish between research reports and public health advice.** Do not change your behavior based on the results of a single report or study. If an agency such as the National Cancer Institute urges a behavior change, however, you should follow its advice. Large, publicly funded organizations issue such advice based on many studies, not a single report.

- **Remember that anecdotes are not facts.** A friend may tell you he lost weight on some new diet, but individual success stories do not mean the plan is truly safe or effective. Check with your doctor before making any serious lifestyle changes.

- **Be skeptical.** If a report seems too good to be true, it probably is. Be wary of information contained in advertisements. An ad’s goal is to sell a product, even if there is no need for it.

- **Make choices that are right for you.** Friends and family members can be a great source of ideas and inspiration, but you need to make health-related choices that work best for you.

Internet Resources
Online sources pose special challenges. When reviewing a health-related Web site, ask these questions:

- **What is the source of the information?** Web sites maintained by government agencies, professional associations, or established academic or medical institutions are likely to present trustworthy information. Many other groups and individuals post accurate information, but it is important to look at the qualifications of the people who are behind the site. (Check the home page or click the “About Us” link.)

- **How often is the site updated?** Look for sites that are updated frequently. Check the “last modified” date of any Web page.

- **Is the site promotional?** Be wary of information from sites that sell specific products, use testimonials as evidence, appear to have a social or political agenda, or ask for money.

- **What do other sources say about a topic?** Be wary of claims and information that appear at only one site or come from a chat room, bulletin board, or blog.

- **Does the site conform to any set of guidelines or criteria for quality and accuracy?** Look for sites that identify themselves as conforming to some code or set of principles, such as those set forth by the Health on the Net Foundation or the American Medical Association. These codes include criteria such as use of information from respected sources and disclosure of the site’s sponsors.

Events in his or her life. People who believe they are in control of their own lives are said to have an **internal locus of control**. Those who believe that factors beyond their control determine the course of their lives are said to have an **external locus of control**.

For lifestyle management, an internal locus of control is an advantage because it reinforces motivation and commitment. An external locus of control can sabotage efforts to change behavior. For example, if you believe that you are destined to die of breast cancer because your mother died from the disease, you may view monthly breast self-exams and regular checkups as a waste of time. In contrast, if you believe that you can take action to reduce your risk of breast cancer in spite of hereditary factors, you will be motivated to follow guidelines for early detection of the disease.

If you find yourself attributing too much influence to outside forces, gather more information about your wellness-related behaviors. List all the ways that making

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**self-efficacy** The belief in one’s ability to take action and perform a specific task.

**locus of control** The figurative “place” a person designates as the source of responsibility for the events in his or her life.
In focus

If you are like most college students, you probably feel pretty good about your health right now. Most college students are in their late teens or early twenties, lead active lives, have plenty of friends, and look forward to a future filled with opportunity. With all these things going for you, why shouldn’t you feel good?

A Closer Look

Although most college-age people look healthy, appearances can be deceiving. Each year, thousands of students lose productive academic time to physical and emotional health problems—some of which can continue to plague them for life.

The following table shows the top 10 health issues affecting students’ academic performance, according to the 2008 National College Health Assessment II.

<table>
<thead>
<tr>
<th>HEALTH ISSUE</th>
<th>STUDENTS AFFECTED (%)</th>
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</thead>
<tbody>
<tr>
<td>Stress</td>
<td>27.2</td>
</tr>
<tr>
<td>Sleep difficulties</td>
<td>19.3</td>
</tr>
<tr>
<td>Anxiety</td>
<td>18.2</td>
</tr>
<tr>
<td>Cold/flu/sore throat</td>
<td>15.4</td>
</tr>
<tr>
<td>Work</td>
<td>13.1</td>
</tr>
<tr>
<td>Concern for a troubled friend/family member</td>
<td>11.3</td>
</tr>
<tr>
<td>Depression</td>
<td>11.2</td>
</tr>
<tr>
<td>Internet use/computer games</td>
<td>10.8</td>
</tr>
<tr>
<td>Relationship difficulties</td>
<td>10.7</td>
</tr>
<tr>
<td>Extracurricular activities</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Clearly, eating behaviors are often a matter of choice. Although students may not see (or feel) the effects of their dietary habits today, the long-term health risks are significant. Overweight and obese persons run a higher-than-normal risk of developing diabetes, heart disease, and cancer later in life. We now know with certainty that improving one’s eating habits, even a little, can lead to weight loss and improved overall health.

Other Choices, Other Problems

Students commonly make other unhealthy choices. Here are some examples from the 2008 National College Health Assessment II:

- Nearly 47% of students reported that they did not use a condom the last time they had vaginal intercourse.
- About 16% of students had 7 or more drinks the last time they partied.
- Almost 17% of students had smoked cigarettes at least once during the past month.

What choices do you make in these situations? Remember: It’s never too late to change. The sooner you trade an unhealthy behavior for a healthy one, the longer you’ll be around to enjoy the benefits.


Wellness Matters for College Students

Each of these issues is related to one or more of the six dimensions of wellness, and most can be influenced by choices students make daily. Although some troubles—such as the death of a friend—cannot be controlled, other physical and emotional concerns can be minimized by choosing healthy behaviors. For example, there are many ways to manage stress, the top health issue affecting students. By reducing unhealthy choices (such as using alcohol to relax) and by increasing healthy choices (such as using time management techniques), even busy students can reduce the impact of stress on their life.

The survey also estimated that, based on students’ reporting of their height and weight, more than 31% of college students are either overweight or obese. Although heredity plays a role in determining one’s weight, lifestyle is also a factor in weight and weight management. In many studies over the past few decades, a large percentage of students have reported behaviors such as these:

- Overeating
- Snacking on junk food
- Frequently eating high-fat foods
- Using alcohol and binge drinking

Clearly, eating behaviors are often a matter of choice. Although students may not see (or feel) the effects of their dietary habits today, the long-term health risks are significant. Overweight and obese persons run a higher-than-normal risk of developing diabetes, heart disease, and cancer later in life. We now know with certainty that improving one’s eating habits, even a little, can lead to weight loss and improved overall health.

Lifestyle changes will improve your health. If you believe you’ll succeed, and if you recognize that you are in charge of your life, you’re on your way to wellness.

Visualization and Self-talk

One of the best ways to boost your confidence and self-efficacy is to visualize yourself successfully engaging in a new, healthier behavior. Imagine yourself going for an afternoon run 3 days a week or no longer smoking cigarettes. Also visualize yourself enjoying all the short-term and long-term benefits that your lifestyle change will bring. Create a new self-image: What will you and your life be like when you become a regular exerciser or a nonsmoker?

You can also use self-talk, the internal dialogue you carry on with yourself, to increase your confidence in your ability to change. Counter any self-defeating patterns of thought with more positive or realistic thoughts: “I am a strong, capable person, and I can maintain my commitment to change.” See Chapter 10 for more on self-talk.

Role Models and Other Supportive Individuals

Social support can make a big difference in your level of motivation and your chances of success. Perhaps you know people who have reached the goal you are striving for; they could be role models or mentors for you, providing information and support for your efforts. Gain strength from their experiences, and tell yourself, “If they can do it, so can I.” In addition, find a buddy who wants to make the
same changes you do and who can take an active role in your behavior change program. For example, an exercise buddy can provide companionship and encouragement when you might be tempted to skip your workout.

**Identify and Overcome Barriers to Change** Don’t let past failures at behavior change discourage you; they can be a great source of information you can use to boost your chances of future success. Make a list of the problems and challenges you faced in any previous behavior change attempts. To this list, add the short-term costs of behavior change that you identified in your analysis of the pros and cons of change. Once you’ve listed these key barriers to change, develop a practical plan for overcoming each one. For example, if you always smoke when you’re with certain friends, decide in advance how you will turn down the next cigarette you are offered.

**Enhancing Your Readiness to Change**

The transtheoretical, or “stages of change,” model has been shown to be an effective approach to lifestyle self-management. According to this model, you move through distinct stages as you work to change your target behavior. It is important to determine what stage you are in now so that you can choose appropriate strategies for progressing through the cycle of change. This approach can help you enhance your readiness and intention to change. Read the following sections to determine what stage you are in for your target behavior. For ideas on changing stages, see the box “Tips for Moving Forward in the Cycle of Behavior Change.”

**Precontemplation** People at this stage do not think they have a problem and do not intend to change their behavior. They may be unaware of the risks associated with their behavior or may deny them. They may have tried unsuccessfully to change in the past and may now think the situation is hopeless. They may also blame other people or external factors for their problems. People in the precontemplation stage believe that there are more reasons or more important reasons not to change than there are reasons to change.

**Contemplation** People at this stage know they have a problem and intend to take action within 6 months. They acknowledge the benefits of change but are also aware of the costs of changing. To be successful, people must believe that the benefits of change outweigh the costs. People in the contemplation stage wonder about possible courses of action but don’t know how to proceed. There may also be specific barriers to change that appear too difficult to overcome.

**Preparation** People at this stage plan to take action within a month or may already have begun to make small changes in their behavior. They may be engaging in their new, healthier behavior but not yet regularly or consistently. They may have created a plan for change but may be worried about failing.

**Action** During the action stage, people outwardly modify their behavior and their environment. The action stage requires the greatest commitment of time and energy, and people in this stage are at risk for reverting to old, unhealthy patterns of behavior.

**Maintenance** People at this stage have maintained their new, healthier lifestyle for at least 6 months. Lapses may have occurred, but people in maintenance have been successful in quickly reestablishing the desired behavior. The maintenance stage can last for months or years.

**Termination** For some behaviors, a person may reach the sixth and final stage of termination. People at this stage have exited the cycle of change and are no longer tempted to lapse back into their old behavior. They have a new self-image and total self-efficacy with regard to their target behavior.

**Dealing with Relapse**

People seldom progress through the stages of change in a straightforward, linear way. Rather, they tend to move to a certain stage and then slip back to a previous stage before resuming their forward progress. Research suggests that most people make several attempts before they successfully change a behavior, four out of five people experience some degree of backsliding. For this reason, the stages of change are best conceptualized as a spiral, in which people cycle back through previous stages but are farther along in the process each time they renew their commitment (Figure 1.5).

If you experience a lapse—a single slip—or a relapse—a return to old habits—don’t give up. Relapse can be demoralizing, but it is not the same as failure. Failure means stopping before you reach your goal and never changing your target behavior. During the early stages of the change process, it’s a good idea to plan for relapse so you can avoid guilt and self-blame and get back on track quickly. Follow these steps:

1. **Forgive yourself.** A single setback isn’t the end of the world, but abandoning your efforts to change could have negative effects on your life.
**PRECONTEMPLATION**
- **Raise your awareness.** Research your target behavior and its effects.
- **Be self-aware.** Look at the mechanisms you use to resist change, such as denial or rationalization. Find ways to counteract these mechanisms.
- **Seek social support.** Friends and family members can help you identify target behaviors and understand their impact on the people around you.
- **Identify helpful resources.** These might include exercise classes or stress-management workshops offered by your school.

**CONTEMPLATION**
- **Keep a journal.** A record of your target behavior and the circumstances that elicit the behavior can help you plan a change program.
- **Do a cost-benefit analysis.** Identify the costs and benefits (both current and future) of maintaining your behavior and of changing it. Costs can be monetary, social, emotional, and so on.
- **Identify barriers to change.** Knowing these obstacles can help you overcome them.
- **Engage your emotions.** Watch movies or read books about people with your target behavior. Imagine what your life will be like if you don’t change.
- **Create a new self-image.** Imagine what you’ll be like after changing your target behavior. Try to think of yourself in new terms right now.
- **Think before you act.** Learn why you engage in the target behavior. Determine what “sets you off,” and train yourself not to act reflexively.

**PREPARATION**
- **Create a plan.** Include a start date, goals, rewards, and specific steps you will take to change your behavior.
- **Make change a priority.** Create and sign a contract with yourself.
- **Practice visualization and self-talk.** These techniques can help prepare you mentally for challenging situations.
- **Take short steps.** Successfully practicing your new behavior for a short time—even a single day—can boost your confidence and motivation.

**ACTION**
- **Monitor your progress.** Keep up with your journal entries.
- **Change your environment.** Make changes that will discourage the target behavior—for example, getting rid of snack foods or not stocking the refrigerator with beer.
- **Find alternatives to your target behavior.** Make a list of things you can do to replace the behavior.
- **Reward yourself.** Rewards should be identified in your change plan. Give yourself lots of praise, and focus on your success.
- **Involve your friends.** Tell them you want to change, and ask for their help.
- **Don’t get discouraged.** Real change is difficult.

**MAINTENANCE**
- **Keep going.** Continue using the positive strategies that worked in earlier stages.
- **Be prepared for lapses.** Don’t let slip-ups set you back.
- **Be a role model.** Once you have successfully changed your behavior, you may be able to help someone else do the same thing.

2. **Give yourself credit for the progress you have already made.** You can use that success as motivation to continue.

3. **Move on.** You can learn from a relapse and use that knowledge to deal with potential setbacks in the future.

   If relapses keep occurring or if you can’t seem to control them, you may need to return to a previous stage of the behavior change process. If this is necessary, reevaluate your goals and your strategy. A different or less stressful approach may help you avoid setbacks when you try again.

**Motivate Yourself**

**STRATEGIES FOR BEHAVIOR CHANGE**

**Bombard yourself with propaganda.** Put photos on your refrigerator and motivational statements on your computer screen. Talk to people who have already made the change you want to make. Train yourself to counter negative thoughts with positive ones. Frequently visualize yourself achieving your goal and enjoying its benefits. At the end of the day, review your good decisions and congratulate yourself on your successes. Even if you lapse, remind yourself that you’re farther along the path to change than you were before, and renew your commitment.

**Developing Skills for Change: Creating a Personalized Plan**

Once you are committed to making a change, it’s time to put together a plan of action. Your key to success is a well-thought-out plan that sets goals, anticipates problems, and includes rewards.

1. **Monitor Your Behavior and Gather Data** Keep a record of your target behavior and the circumstances...
surrounding it. Record this information for at least a week or two. Keep your notes in a health journal or notebook or on your computer (see the sample journal entries in Figure 1.6). Record each occurrence of your behavior, noting the following:

- What the activity was
- When and where it happened

2. Analyze the Data and Identify Patterns

After you have collected data on the behavior, analyze the data to identify patterns. When are you most likely to overeat? What events trigger your appetite? Perhaps you are especially hungry at midmorning or when you put off eating dinner until 9:00. Perhaps you overindulge in food and drink when you go to a particular restaurant or when you’re with certain friends. Note the connections between your feelings and such external cues as time of day, location, situation, and the actions of others around you.

3. Be “SMART” About Setting Goals

If your goals are too challenging, you will have trouble making steady progress and will be more likely to give up altogether. If, for example, you are in poor physical condition, it will not make sense to set a goal of being ready to run a marathon within 2 months. If you set goals you can live with, it will be easier to stick with your behavior change plan and be successful.

Experts suggest that your goals meet the “SMART” criteria. That is, your behavior change goals should be:

- **Specific.** Avoid vague goals like “eat more fruits and vegetables.” Instead, state your objectives in specific terms, such as “eat 2 cups of fruit and 3 cups of vegetables every day.”
- **Measurable.** Recognize that your progress will be easier to track if your goals are quantifiable, so give your
goal a number. You might measure your goal in terms of time (such as “walk briskly for 20 minutes a day”), distance (“run 2 miles, 3 days per week”), or some other amount (“drink 8 glasses of water every day”).

- **Attainable.** Set goals that are within your physical limits. For example, if you are a poor swimmer, it might not be possible for you to meet a short-term fitness goal by swimming laps. Walking or biking might be better options.
- **Realistic.** Manage your expectations when you set goals. For example, it may not be possible for a long-time smoker to quit cold turkey. A more realistic approach might be to use nicotine replacement patches or gum for several weeks while getting help from a support group.
- **Time frame–specific.** Give yourself a reasonable amount of time to reach your goal, state the time frame in your behavior change plan, and set your agenda to meet the goal within the given time frame.

Using these criteria, a sedentary person who wants to improve his health and build fitness might set a goal of being able to run 3 miles in 30 minutes, to be achieved within a time frame of 6 months. To work toward that goal, he might set a number of smaller, intermediate goals that are easier to achieve. For example, his list of goals might look like this:

### WEEK | FREQUENCY (DAYS/WEEK) | ACTIVITY | DURATION (MINUTES)
--- | --- | --- | ---
1 | 3 | Walk < 1 mile | 10–15
2 | 3 | Walk 1 mile | 15–20
3 | 4 | Walk 1–2 miles | 20–25
4 | 4 | Walk 2–3 miles | 25–30
5–7 | 3–4 | Walk/run 1 mile | 15–20
8 | | | |
19–24 | 4–5 | Run 2–3 miles | 25–30

Of course, it may not be possible to meet these goals, but you never know until you try. As you work toward meeting your long-term goal, you may find it necessary to adjust your short-term goals. For example, you may find that you can start running sooner than you thought, or you may be able to run farther than you originally estimated. In such cases, it may be reasonable to make your goals more challenging. Otherwise, you may want to make them easier in order to stay motivated.

For some goals and situations, it may make more sense to focus on something other than your outcome goal. If you are in an early stage of change, for example, your goal may be to learn more about the risks associated with your target behavior or to complete a cost-benefit analysis. If your goal involves a long-term lifestyle change, such as reaching a healthy weight, it is better to focus on developing healthy habits than to target a specific weight loss. Your goal in this case might be exercising for 30 minutes every day, reducing portion sizes, or eliminating late-night snacks.

4. **Devise a Plan of Action** Develop a strategy that will support your efforts to change. Your plan of action should include the following steps:

- **Get what you need.** Identify resources that can help you. For example, you can join a community walking club or sign up for smoking cessation program. You may also need to buy some new running shoes or nicotine replacement patches. Get the items you need right away; waiting can delay your progress.
- **Modify your environment.** If there are cues in your environment that trigger your target behavior, try to control them. For example, if you normally have alcohol at home, getting rid of it can help prevent you from indulging. If you usually study with a group of friends in an environment that allows smoking, try moving to a non-smoking area. If you always buy a snack at a certain vending machine, change your route to avoid it.
- **Control related habits.** You may have habits that contribute to your target behavior; modifying these habits can help change the behavior. For example, if you usually plop down on the sofa while watching TV, try putting an exercise bike in front of the set so you can burn calories while watching your favorite programs.
- **Reward yourself.** Giving yourself instant, real rewards for good behavior will reinforce your efforts. Plan your rewards; decide in advance what each one will be and how you will earn it. Tie rewards to achieving specific goals or subgoals. For example, you might treat yourself to a movie after a week of avoiding snacks. Make a list of items...
or events to use as rewards. They should be special to you and preferably unrelated to food or alcohol.

- **Involve the people around you.** Tell family and friends about your plan, and ask them to help. To help them respond appropriately to your needs, create a specific list of dos and don'ts. For example, ask them to support you when you set aside time to exercise or avoid second helpings at dinner.

- **Plan for challenges.** Think about situations and people that might derail your program, and develop ways to cope with them. For example, if you think it will be hard to stick to your usual exercise program during exams, schedule short bouts of physical activity (such as a brisk walk) as stress-reducing study breaks.

### 5. Make a Personal Contract

A serious personal contract—one that commits you to your word—can result in a higher chance of follow-through than a casual, offhand promise. Your contract can help prevent procrastination by specifying important dates and can also serve as a reminder of your personal commitment to change.

Your contract should include a statement of your goal and your commitment to reaching it. The contract should also include details, such as the following:

- The date you will start
- The steps you will take to measure your progress
- The strategies you plan to use to promote change
- The date you expect to reach your final goal

Help from a committed friend can ensure the success of any behavior change program, whether you want to eat better, lose weight, stop smoking, or exercise more.

Have someone—preferably someone who will be actively helping you with your program—sign your contract as a witness.

Figure 1.7 shows a sample behavior change contract for someone who is committing to eating more fruit every day. A blank contract is included as Activity 8 in the Behavior Change Workbook at the end of this text.

### Putting Your Plan into Action

The starting date has arrived, and you are ready to put your plan into action. This stage requires commitment, the resolve to stick with the plan no matter what temptations you encounter. Remember all the reasons you have to make the change—and remember that you are the boss. Use all your strategies to make your plan work. Make sure your environment is change-friendly, and get as much support and encouragement from others as possible. Keep track of your progress in your health journal, and give yourself regular rewards. And don’t forget to give yourself a pat on the back—congratulate yourself, notice how much better you look or feel, and feel good about how far you’ve come and how you’ve gained control of your behavior.

### Staying with It

As you continue with your program, don’t be surprised when you run up against obstacles; they’re inevitable. In fact, it’s a
levels of motivation and commitment may become a role model for others. but that's all. focus on yourself. when you succeed, you influence someone by tactfully providing facts or support, only after intensive self-examination. you may be able to influence someone by tactfully providing facts or support, but that's all. focus on yourself. when you succeed, you may become a role model for others.

levels of motivation and commitment you won't make real progress until an inner drive leads you to the stage of change at which you are ready to make a personal commitment to the goal. if commitment is your problem, you may need to wait until the behavior you're dealing with makes you unhappier or unhealthier; then your desire to change it will be stronger. or you may find that changing your goal will inspire you to keep going. for more ideas, refer to activity 9 in the behavior change workbook.

social influences take a hard look at the reactions of the people you're counting on, and see if they're really supporting you. if they come up short, connect with others who will be more supportive.

a related trap is trying to get your friends or family members to change their behaviors. the decision to make a major behavior change is something people come to only after intensive self-examination. you may be able to influence someone by tactfully providing facts or support, but that's all. focus on yourself. when you succeed, you may become a role model for others.

choice of techniques and level of effort if your plan is not working as well as you thought it would, make changes where you're having the most trouble. if you've lagged on your running schedule, for example, maybe it's because you don't like running. an aerobics class might suit you better. there are many ways to move toward your goal. or you may not be trying hard enough. you do have to push toward your goal. if it were easy, you wouldn't need a plan.

stress barrier if you hit a wall in your program, look at the sources of stress in your life. if the stress is temporary, such as catching a cold or having a term paper due, you may want to wait until it passes before strengthening your efforts. if the stress is ongoing, find healthy ways to manage it (see chapter 10). you may even want to make stress management your highest priority for behavior change.

procrastinating, rationalizing, and blaming be alert to games you might be playing with yourself, so you can stop them. such games include the following:

• procrastinating if you tell yourself, “it's friday already; i might as well wait until monday to start,” you're procrastinating. break your plan into smaller steps that you can accomplish one day at a time.

• rationalizing if you tell yourself, “i wanted to go swimming today but wouldn't have had time to wash my hair afterward,” you're making excuses.

• blaming if you tell yourself, “i couldn't exercise because dave was hogging the elliptical trainer,” you're blaming others for your own failure to follow through. blaming is a way of taking your focus off the real problem and denying responsibility for your own actions.

being fit and well for life your first attempts at making behavior changes may never go beyond the contemplation or preparation stage. those that do may not all succeed. but as you experience some success, you'll start to have more positive feelings about yourself. you may discover new physical activities and sports you enjoy, and you may encounter new situations and meet new people. perhaps you'll surprise yourself by accomplishing things you didn't think were possible—breaking a long-standing nicotine habit, competing in a race, climbing a mountain, or developing a leaner body. most of all, you'll discover the feeling of empowerment that comes from taking charge of your health. being healthy takes effort, but the paybacks in energy and vitality are priceless.

once you've started, don't stop. assume that health improvement is forever. take on the easier problems first, and then use what you learn to tackle more difficult problems later. when you feel challenged, remind yourself that you are creating a lifestyle that minimizes your health risks and maximizes your enjoyment of life. you can take charge of your health in a dramatic and meaningful way. fit and well will show you how.
FOR FURTHER EXPLORATION

TIPS FOR TODAY AND THE FUTURE

You are in charge of your health. Many of the decisions you make every day have an impact on the quality of your life, both now and in the future.

RIGHT NOW YOU CAN
- Go for a 15-minute walk.
- Have a piece of fruit for a snack.
- Call a friend and arrange for a time to catch up with each other.
- Start thinking about whether you have a health behavior you’d like to change. If you do, consider the elements of a behavior change strategy. For example, begin a mental list of the pros and cons of the behavior, or talk to someone who can support you in your attempts to change.

IN THE FUTURE YOU CAN
- Stay current on health- and wellness-related news and issues.
- Participate in health awareness and promotion campaigns in your community—for example, support smoking restrictions in local venues.
- Be a role model for someone else who is working on a health behavior you have successfully changed.

SUMMARY

- Wellness is the ability to live life fully, with vitality and meaning. Wellness is dynamic and multidimensional; it incorporates physical, emotional, intellectual, spiritual, interpersonal, and environmental dimensions.
- People today have greater control over and greater responsibility for their health than ever before.
- Behaviors that promote wellness include being physically active, choosing a healthy diet, maintaining a healthy body weight, managing stress effectively, avoiding tobacco and limiting alcohol use, and protecting yourself from disease and injury.
- Although heredity, environment, and health care all play roles in wellness and disease, behavior can mitigate their effects.
- To make lifestyle changes, you need information about yourself, your health habits, and resources available to help you change.
- You can increase your motivation for behavior change by examining the benefits and costs of change, boosting self-efficacy, and identifying and overcoming key barriers to change.
- The stages-of-change model describes six stages that people may move through as they try to change their behavior: precontemplation, contemplation, preparation, action, maintenance, and termination.
- A specific plan for change can be developed by (1) collecting data on your behavior and recording it in a journal; (2) analyzing the recorded data; (3) setting specific goals; (4) devising strategies for modifying the environment, rewarding yourself, and involving others; and (5) making a personal contract.
- To start and maintain a behavior change program, you need commitment, a well-developed and manageable plan, social support, and strong stress-management techniques. It is also important to monitor the progress of your program, revising it as necessary.

FOR FURTHER EXPLORATION

BOOKS

Claiborn, J., and C. Pedrick. 2009. The Habit Change Workbook: How to Break Bad Habits and Form Good Ones. Oakland, Ca.: New Harbinger Publications. Provides step-by-step instructions for identifying and overcoming a variety of unhealthy behaviors, such as poor eating habits, reluctance to exercise, and addictive behavior.


Krueger, H., et al. 2007. The Health Impact of Smoking and Obesity and What to Do About It. Toronto: University of Toronto Press. Examines the effects of smoking and sedentary lifestyle, the costs to individuals and society, and strategies for overcoming these behaviors.


NEWSLETTERS
Center for Science in the Public Interest Nutrition Action Health Letter (http://www.cspinet.org/nah/index.htm)
Consumer Reports on Health (800-274-7596; http://www.consumerreports.org/oh/index.htm)
Harvard Men’s Health Watch (877-649-9457)
Harvard Women’s Health Watch (877-649-9457)
Mayo Clinic Housecall (http://www.mayoclinic.com/health/housecall/HouseCall)
ORGANIZATIONS, HOTLINES, AND WEB SITES

The Internet addresses listed here were accurate at the time of publication.

Centers for Disease Control and Prevention. Provides a wide variety of health information.
http://www.cdc.gov

Many other government sites provide health-related materials:
Federal Trade Commission. Consumer Protection—Diet, Health, and Fitness:
http://www.ftc.gov/bcp/consumerạndhealth.shtm

MedlinePlus: Evaluating Health Information. Provides background information and links to sites with guidelines for finding and evaluating health information on the Web.

National Health Information Center (NHIC). Puts consumers in touch with the organizations that are best able to provide answers to health-related questions.
http://www.healthpeople.gov

National Women's Health Information Center. Provides information and answers to frequently asked questions.
http://www womenshealth.gov

Student Counseling Virtual Pamphlet Collection. Provides links to more than 400 pamphlets produced by different student counseling centers on a variety of wellness topics.
http://counseling.uchicago.edu/vpc

World Health Organization (WHO). Provides information about health topics and issues affecting people around the world.
http://www.who.int

The following are just a few of the many sites that provide consumer-oriented information on a variety of health issues:

CNN Health: http://www.cnn.com/health
Family Doctor Org: http://www.familydoctor.org
InteliHealth: http://www.intelihth.com
Mayo Clinic: http://www.mayoclinic.com
WebMD: http://webmd.com
Yahoo Health: http://news.yahoo.com/health

SELECTED BIBLIOGRAPHY


LAB 1.1 Your Wellness Profile

Consider how your lifestyle, attitudes, and characteristics relate to each of the six dimensions of wellness. Fill in your strengths for each dimension (examples of strengths are listed with each dimension). Once you’ve completed your lists, choose what you believe are your five most important strengths, and circle them.

**Physical wellness:** To maintain overall physical health and engage in appropriate physical activity (e.g., stamina, strength, flexibility, healthy body composition).

**Emotional wellness:** To have a positive self-concept, deal constructively with your feelings, and develop positive qualities (e.g., optimism, trust, self-confidence, determination).

**Intellectual wellness:** To pursue and retain knowledge, think critically about issues, make sound decisions, identify problems, and find solutions (e.g., common sense, creativity, curiosity).

**Interpersonal/social wellness:** To develop and maintain meaningful relationships with a network of friends and family members, and to contribute to your community (e.g., friendly, good-natured, compassionate, supportive, good listener).

**Spiritual wellness:** To develop a set of beliefs, principles, or values that gives meaning or purpose to your life; to develop faith in something beyond yourself (e.g., religious faith, service to others).

**Environmental wellness:** To protect yourself from environmental hazards and to minimize the negative impact of your behavior on the environment (e.g., carpooling, recycling).

Next, think about where you fall on the wellness continuum for each of the dimensions of wellness. Indicate your placement for each—physical, emotional, intellectual, interpersonal/social, spiritual, and environmental—by placing Xs on the continuum below.
Based on both your current lifestyle and your goals for the future, what do you think your placement on the wellness continuum will be in 10 years? What new health behaviors will you have to adopt to achieve your goals? Which of your current behaviors will you need to change to maintain or improve your level of wellness in the future?

Does the description of wellness given in this chapter encompass everything you believe is part of wellness for you? Write your own definition of wellness, including any additional dimensions that are important to you. Then rate your level of wellness based on your own definition.

Using Your Results

How did you score? Are you satisfied with your current level of wellness—overall and in each dimension? In which dimension(s) would you most like to increase your level of wellness?

What should you do next? As you consider possible target behaviors for a behavior change program, choose things that will maintain or increase your level of wellness in one of the dimensions you listed as an area of concern. Remember to consider health behaviors such as smoking or eating a high-fat diet that may threaten your level of wellness in the future. Below, list several possible target behaviors and the wellness dimensions that they influence.

For additional guidance in choosing a target behavior, complete the lifestyle self-assessment in Lab 1.2.
LAB 1.2  Lifestyle Evaluation

How does your current lifestyle compare with the lifestyle recommended for wellness? For each question, choose the answer that best describes your behavior; then add up your score for each section.

### Exercise/Fitness

1. I engage in moderate exercise, such as brisk walking or swimming, for 20–60 minutes, three to five times a week.  
   - Almost Always: 4
   - Sometimes: 1
   - Never: 0

2. I do exercises to develop muscular strength and endurance at least twice a week.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

3. I spend some of my leisure time participating in individual, family, or team activities, such as gardening, bowling, or softball.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

4. I maintain a healthy body weight, avoiding overweight and underweight.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

**Exercise/Fitness Score:**

### Nutrition

1. I eat a variety of foods each day, including seven or more servings of fruits and/or vegetables.  
   - Almost Always: 3
   - Sometimes: 1
   - Never: 0

2. I limit the amount of total fat and saturated and trans fat in my diet.  
   - Almost Always: 3
   - Sometimes: 1
   - Never: 0

3. I avoid skipping meals.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

4. I limit the amount of salt and sugar I eat.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

**Nutrition Score:**

### Tobacco Use

If you never or no longer use tobacco, enter a score of 10 for this section and go to the next section.

1. I avoid using tobacco.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

2. I smoke only a pipe or cigars, or I use smokeless tobacco.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

**Tobacco Use Score:**

### Alcohol and Drugs

1. I avoid alcohol, or I drink no more than one (women) or two (men) drinks a day.  
   - Almost Always: 4
   - Sometimes: 1
   - Never: 0

2. I avoid using alcohol or other drugs as a way of handling stressful situations or the problems in my life.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

3. I am careful not to drink alcohol when taking medications (such as cold or allergy medications) or when pregnant.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

4. I read and follow the label directions when using prescribed and over-the-counter drugs.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

**Alcohol and Drugs Score:**

### Emotional Health

1. I enjoy being a student, and I have a job or do other work that I enjoy.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

2. I find it easy to relax and express my feelings freely.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

3. I manage stress well.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

4. I have close friends, relatives, or others whom I can talk to about personal matters and call on for help when needed.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

5. I participate in group activities (such as community or church organizations) or hobbies that I enjoy.  
   - Almost Always: 2
   - Sometimes: 1
   - Never: 0

**Emotional Health Score:**
**Safety**

1. I wear a safety belt while riding in a car.  
2. I avoid driving while under the influence of alcohol or other drugs.  
3. I obey traffic rules and the speed limit when driving.  
4. I read and follow instructions on the labels of potentially harmful products or substances, such as household cleaners, poisons, and electrical appliances.  
5. I avoid smoking in bed.  

| Safety Score: ________________ |

**Disease Prevention**

1. I know the warning signs of cancer, heart attack, and stroke.  
2. I avoid overexposure to the sun and use sunscreen.  
3. I get recommended medical screening tests (such as blood pressure and cholesterol checks and Pap tests), immunizations, and booster shots.  
5. I am not sexually active, or I have sex with only one mutually faithful, uninfected partner, or I always engage in safer sex (using condoms), and I do not share needles to inject drugs.  

| Disease Prevention Score: ________________ |

**Scores of 9 and 10** Excellent! Your answers show that you are aware of the importance of this area to your health. More important, you are putting your knowledge to work for you by practicing good health habits. As long as you continue to do so, this area should not pose a serious health risk.

**Scores of 6 to 8** Your health practices in this area are good, but there is room for improvement.

**Scores of 3 to 5** Your health risks are showing.

**Scores of 0 to 2** You may be taking serious and unnecessary risks with your health.

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**Using Your Results**

How did you score? In which areas did you score the lowest? Are you satisfied with your scores in each area? In which areas would you most like to improve your scores?

What should you do next? To improve your scores, look closely at any item to which you answered “sometimes” or “never.” Identify and list at least three possible targets for a health behavior change program. (If you are aware of other risky health behaviors you currently engage in, but that were not covered by this assessment, you may include those in your list.) For each item on your list, identify your current “stage of change” and one strategy you could adopt to move forward (see pp. 15–19). Possible strategies might be obtaining information about the behavior, completing an analysis of the pros and cons of change, or beginning a written record of your target behavior.

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<thead>
<tr>
<th>Behavior</th>
<th>Stage</th>
<th>Strategy</th>
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<td>1.</td>
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**Source:** Adapted from *Healthstyle: A Self-Test*, developed by the U.S. Public Health Service. The behaviors covered in this test are recommended for most Americans, but some may not apply to people with certain chronic diseases or disabilities or to pregnant women, who may require special advice from their physician.