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Fit & Well

Core Concepts and Labs in Physical Fitness and Wellness



BRIEF EDITION

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FIT & WELL

BRIEF EDITION

Core Concepts and Labs in Physical Fitness and Wellness



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FIT & WELL: CORE CONCEPTS AND LABS IN PHYSICAL FITNESS AND WELLNESS,
BRIEF EDITION, TWELFTH EDITION

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The digital teaching and learning tools within Connect are built on the solid foundation of *Fit & Well*'s authoritative, science-based content. *Fit & Well* is written by experts who work and teach in the fields of exercise science, physical education, and health education. *Fit & Well* provides accurate, reliable current information on key health and fitness topics while also addressing issues related to mind-body health, diversity, gender, research, and consumer health.



Wellness in the Digital Age sections focus on the many fitness- and wellness-related devices and applications that are appearing every day.



Diversity Matters features address the ways that our biological and cultural differences influence our health strengths, risks, and behaviors.



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Fitness Tips and **Wellness Tips** catch students' attention and get them thinking about—and acting to improve—their fitness and wellness.



Critical Consumer boxes help students navigate the numerous and diverse set of health-related products currently available.



Hands-on lab activities give students the opportunity to assess their current level of fitness and wellness and to create their own individualized programs for improvement.



Take Charge features provide a wealth of practical advice for students on how to apply concepts from the text to their own lives.



Exercise photos and **online videos** demonstrate exactly how to correctly perform exercises described in the text.

CHAPTER-BY-CHAPTER CHANGES

Changes to the twelfth edition reflect new research findings, updated statistics, and current hot topics that impact students' fitness and wellness behaviors. Revisions were also guided by student performance data anonymously collected from the tens of thousands of students who have used LearnSmart with *Fit & Well*. Because virtually every text paragraph is tied to several questions that students answer while using LearnSmart, the specific concepts that students are having the most difficulty with can be pinpointed through empirical data.

Chapter 1: Introduction to Wellness, Fitness, and Lifestyle Management

- Discussions of dimensions of wellness expanded to include cultural and occupational wellness
- All statistics updated to reflect the latest information on causes of death, life expectancy, and measures of quality of life
- New section on the Affordable Care Act

Chapter 2: Principles of Physical Fitness

- New Take Charge feature on reducing sedentary behaviors
- Updated information on medical clearance and risks from exercise

Chapter 3: Cardiorespiratory Endurance

- New Take Charge feature on high-intensity conditioning programs
- Updated coverage of warm-up and cool-down, high-intensity interval training, and cross-training

Chapter 4: Muscular Strength and Endurance

- New table summarizing pros and cons of stability balls
- Updated coverage of core training

Chapter 5: Flexibility and Low-Back Health

- Updated coverage of static and dynamic stretching and exercise safety for back pain
- New illustration of core musculature

Chapter 6: Body Composition

- Updated statistics on overweight and obesity in U.S. adults
- Updated and expanded coverage of diabetes

Chapter 7: Putting Together a Complete Fitness Program

- New Evidence for Exercise feature on the importance of reducing sedentary time
- Updated coverage of apps for tracking and motivation during a fitness program

Chapter 8: Nutrition

- Incorporation of information from the Scientific Report of the 2015 Dietary Guidelines Advisory Committee
- New tables summarizing recommended healthy dietary patterns, including vegetarian and Mediterranean patterns
- New Take Charge feature on making positive dietary changes
- Discussion of new FDA requirements for labels on food packaging, in restaurants, and for vending machines
- Expanded coverage of added sugars and updated discussion of dietary fats, including the FDA ban on trans fats

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INSTRUCTOR RESOURCES

Instructor resources available through Connect for *Fit & Well* include a Course Integrator Guide, Test Bank, and PowerPoint presentations for each chapter.

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TWELFTH EDITION

FIT & WELL

BRIEF EDITION

Core Concepts and Labs in Physical Fitness and Wellness

Introduction to Wellness, Fitness, and Lifestyle Management



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.

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. A person's genetic makeup determines whether he or she will develop certain diseases (such as breast cancer), regardless of that person's health habits. True or false?

See answers on the next page.

A college sophomore sets the following goals for herself:

- Join new social circles and make new friends whenever possible.
- Exercise every day.
- 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: NEW HEALTH GOALS

Generations of people have viewed health simply as the absence of disease, and 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** expands this idea of health to include our ability to achieve optimal 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 terms

Answers (Test Your Knowledge)

1. **b.** Smoking causes about 481,000 deaths per year. Obesity is responsible for about 216,000 premature deaths, and alcohol is a factor in as many as 87,000 deaths.
2. **False.** Although the words are used interchangeably, they 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 all the dimensions of well-being.
3. **False.** In many cases, behavior can tip the balance toward good health even when heredity or environment is a negative factor.

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, a man with a strong family history of prostate cancer will have a higher-than-average risk for developing prostate cancer himself.
- Wellness is largely determined 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 not only caring for himself physically, but also maintaining a positive outlook, keeping up his relationships with others, challenging himself intellectually, and nurturing 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 choosing not to smoke, exercising, and eating a healthy diet are well within your control.

The Dimensions of Wellness

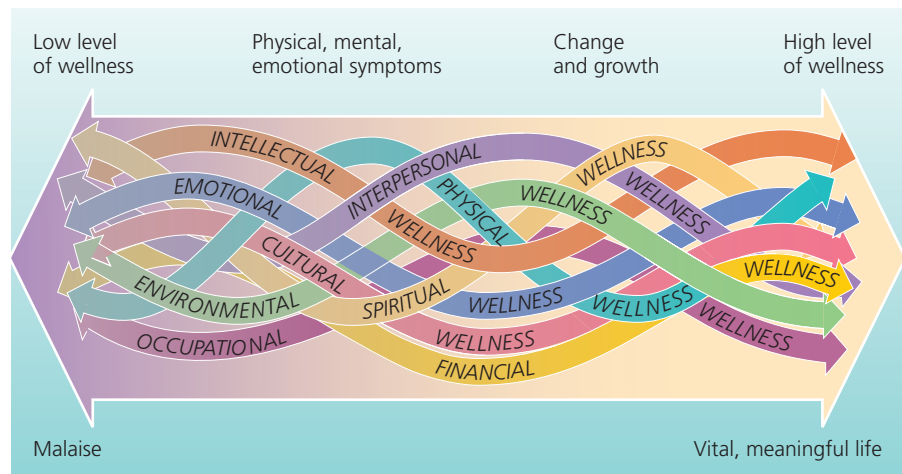
Here are nine dimensions of wellness:

- Physical
- Emotional
- Intellectual
- Interpersonal
- Cultural
- Spiritual
- Environmental
- Financial
- Occupational

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.

FIGURE 1.1 The wellness continuum.

The concept of wellness includes vitality in nine interrelated dimensions, all of which contribute to overall wellness.



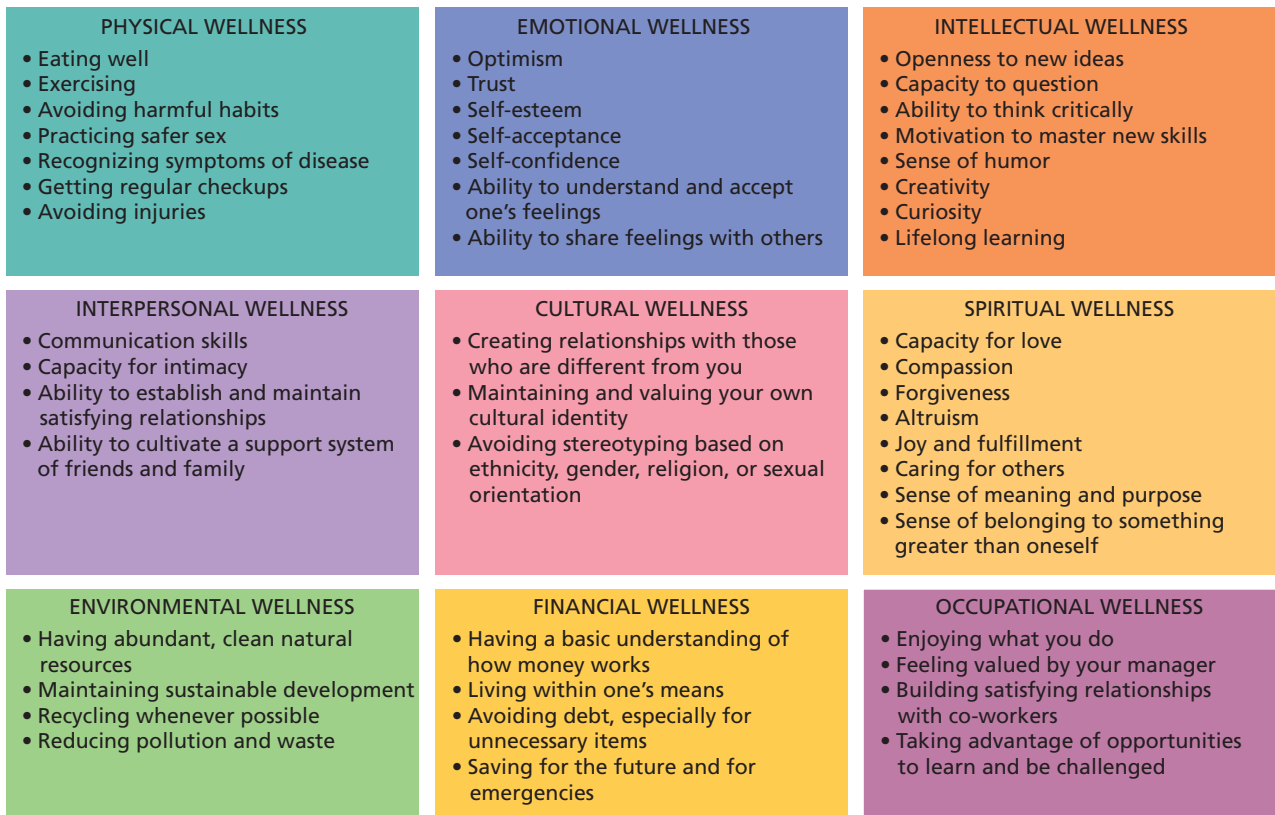


FIGURE 1.2 Qualities and behaviors associated with the dimensions of wellness.

The following sections briefly introduce the dimensions of wellness. Figure 1.2 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 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 wellness will be. Similarly, as you take better care of your own physical needs, you ensure greater physical wellness. To achieve optimum physical wellness, you need to make choices that help you avoid illnesses and injuries. The decisions you make now—and the habits you develop over your lifetime—will largely determine the length and quality of your life.

Emotional Wellness Your emotional wellness reflects your ability to understand and deal with your feelings. Emotional wellness involves attending to your own thoughts and feelings, monitoring your reactions, and identifying obstacles to emotional stability. *Self-acceptance* is your personal satisfaction with yourself, which might exclude society's expectations, whereas *self-esteem* relates to the way you think others perceive you. *Self-confidence* can be a part of both acceptance and esteem. Achieving this type of wellness means finding solutions to emotional problems, with professional help if necessary.

Intellectual Wellness Those who enjoy intellectual wellness constantly challenge their minds. An active mind is essential to wellness because it detects problems, finds solutions, and directs behavior. People who enjoy intellectual wellness never stop learning. They seek out and relish new experiences and challenges.

Interpersonal Wellness Satisfying and supportive relationships are important to physical and emotional wellness. Learning good communication skills, developing the capacity for intimacy, and cultivating a supportive network are all important to interpersonal (or social) wellness. Social wellness requires participating in and contributing to your community and to society.

Cultural Wellness Cultural wellness refers to the way you interact with others who are different from you in terms of ethnicity, religion, gender, sexual orientation, age, and customs (practices). It involves creating relationships with others and suspending judgment on others' behavior until you have lived

health The overall condition of body or mind and the presence or absence of illness or injury.

TERMS

wellness Optimal health and vitality, encompassing all dimensions of well-being.

risk factor A condition that increases one's chances of disease or injury.



Wellness Tip Enhancing one dimension of wellness can have positive effects on others. For example, joining a meditation group can help you enhance your spiritual well-being, but it can also affect the emotional and interpersonal dimensions of wellness by enabling you to meet new people and develop new friendships.

with them or “walked in their shoes.” It also includes accepting, valuing, and even celebrating the different cultural ways people interact in the world. The extent to which you maintain and value cultural identities is one measure of cultural wellness.

Spiritual Wellness 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 well person uses spirituality to focus on positive aspects of life and to fend off 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.

infectious disease A disease that can spread from person to person; caused by microorganisms such as bacteria and viruses.

TERMS

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. 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.

Financial Wellness 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 and expenses, staying out of debt, saving for the future, and understanding your emotions about money. For more on this topic, see the box “Financial Wellness”.

Occupational Wellness Occupational wellness refers to the level of happiness and fulfillment you gain through your work. Although high salaries and prestigious titles are gratifying, 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 takes advantage of opportunities to learn and be challenged. Another important aspect of occupational wellness is recognition from managers and colleagues. An ideal job draws on your interests and passions, as well as your vocational skills, and allows you to feel that you are making a contribution in your everyday work.

New Opportunities for Taking Charge

A century ago, Americans considered themselves lucky just to survive to adulthood (Figure 1.3). 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).

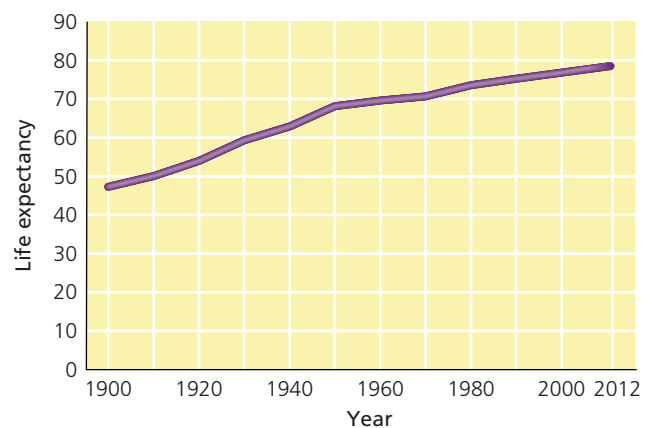


FIGURE 1.3 Life expectancy of Americans from birth, 1900–2011.

SOURCE: http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_09.pdf, Table 10: Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2012.

[National Center for Health Statistics. Deaths: Final Data for 2013. *NVSR* Volume 64, Number 2 will be the final source, but it is forthcoming at time of editing]



With the news full of stories of home foreclosures, credit card debt, and personal bankruptcies, it has become painfully clear that many Americans do not know how to manage their finances. You can avoid such stress—and gain financial peace of mind—by developing skills that contribute to financial wellness.

Financial wellness means having a healthy relationship with money. It involves 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.

Learn to Budget

Although the word *budget* may conjure up thoughts of deprivation, a budget is 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. To start one, list your monthly income and your expenditures. If you aren't sure where you spend your money, track your expenses for a few weeks or a month. Then organize them into categories, such as housing, food, transportation, entertainment, services, personal care, clothes, books and school supplies, health care, credit card and loan payments, and miscellaneous. 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 vice versa? Are you surprised by your spending patterns? Use this information to set guidelines and goals for yourself. If your expenses exceed your income, identify ways to make some cuts. For example, instead of paying for cable TV, you can stream news and entertainment shows from the Internet through your television or Blu-ray player. Or you can view programs online on Hulu.com and Netflix.com. If you spend money going out at night, consider less expensive options like having a weekly game night with friends or organizing an occasional potluck.

Use Credit Cards Wisely

College students are prime targets for credit card companies: Some students tend to be overconfident in their financial decisions and have easy access to credit but little training in finance. The consequences of enhanced lifestyles and peer competition raise the risk of serious financial problems. Thus, the government passed the Credit Card Accountability, Responsibility, and Disclosure Act of 2009 to require people age 21 and younger to have a guarantor cosign their credit card applications to ensure they can make their payments. Students who learn about finance from parents are more likely to pay off their credit card balance in full and regularly.

It is important to understand terms like *APR* (annual percentage rate—the interest you're charged on your balance), *credit limit* (the maximum amount you can borrow 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 or 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).

Get Out of Debt

A 2011 study indicated that graduating college students often had debts of \$25,250 and that this number would likely increase by several thousand dollars over the next several years. If you 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. It can take a very long time to pay off a loan by making only the minimum payments. For example, to pay off a credit card balance of \$2,000 at 10% interest with monthly payments of \$20 would take 203 months—17 years. Check out an online credit card calculator like <http://www.bankrate.com/calculators/credit-cards/balance-debt-payoff-calculator.aspx>. Note that by carrying a balance and incurring finance charges, you are also paying back much more than your initial loan.

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.htm). 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, 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.

Become Financially Literate

How well do you manage your money? Most Americans have not received basic financial training. For this reason, the U.S. government has established the Financial Literacy and Education Commission (MyMoney.gov) to help Americans learn how to save, invest, and manage money better, a skill called *financial literacy*. Developing lifelong financial skills should begin in early adulthood, during the college years, if not earlier.



SOURCES: Smith, C., and G. A. Barboza. 2013. The role of trans-generational financial knowledge and self-reported financial literacy on borrowing practices and debt accumulation of college students. Social Science Electronic Publishing, Inc. (<http://ssrn.com/abstract=2342168>); Plymouth State University. 2013. Student Monetary Awareness and Responsibility Today! (<http://www.plymouth.edu/office/financial-aid/smart/>); U.S. Financial Literacy and Education Commission. 2013. MyMoney.gov (<http://www.mymoney.gov>).



Since 1900, however, life expectancy has nearly doubled, and as of 2012, the average American's life expectancy was 78.8 years. This increase in life span is due largely to the development of vaccines and antibiotics to fight infections, and to public health measures to improve living conditions. But even though life expectancy has increased, poor health limits most Americans' activities during the last 15% of their lives, resulting in some sort of impaired life (Figure 1.4).

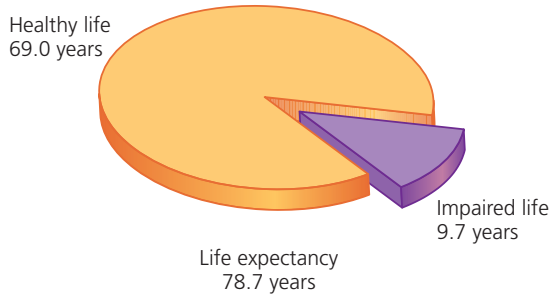


FIGURE 1.4 Quantity of life versus quality of life. Years of healthy life as a proportion of life expectancy in the U.S. population.

SOURCE: National Center for Health Statistics. 2012. *Healthy People 2010 Final Review*. Hyattsville, MD.

Today, a different set of diseases has emerged as our major health threat: heart disease, cancer, and chronic lower respiratory diseases are now the three leading causes of death for Americans (Table 1.1). 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 1.2 makes clear, lifestyle factors contribute to many deaths in the United States, and people can influence their own health risks. The need to make good choices is especially true for teens and young adults. For Americans age 15–24, for example, the top three causes of death are accidents, suicide, and homicide (Table 1.3).

National Health

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.

VITAL STATISTICS

Table 1.1 Leading Causes of Death in the United States, 2012

RANK	CAUSE OF DEATH	NUMBER OF DEATHS	PERCENTAGE OF TOTAL DEATHS	LIFESTYLE FACTORS
1	Heart disease	611,105	23.5	D I S A
2	Cancer	584,881	22.5	D I S A
3	Chronic lower respiratory diseases	149,205	5.7	I S A
4	Unintentional injuries (accidents)	130,557	5.0	I S A
5	Stroke	128,978	5.0	D I S A
6	Alzheimer's disease	84,767	3.3	
7	Diabetes	75,578	2.9	D I S A
8	Influenza and pneumonia	56,979	2.2	D I S A
9	Kidney disease	47,112	1.8	I S A
10	Intentional self-harm (suicide)	41,149	1.6	I S A
11	Septicemia	38,156	1.5	I S A
12	Chronic liver disease and cirrhosis	36,427	1.4	I S A
13	Hypertension (high blood pressure)	30,770	1.2	D I S A
14	Parkinson's disease	25,196	1.0	
15	Lung inflammation due to inhaling solids and liquids	18,579	0.7	I S A
	All other causes	537,554		
	All causes	2,596,993	100.0	

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

NOTE: Although not among the overall top 15 causes of death, HIV/AIDS is a major killer, responsible for 6,955 deaths in 2013. HIV/AIDS was the 13th leading cause of death for Americans aged 15–24 years and the 8th leading cause of death for those aged 25–44 years.

SOURCE: National Center for Health Statistics. 2015. Deaths: Final data for 2013. *National Vital Statistics Report 64(2)*, http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf.

VITAL STATISTICS

Table 1.2 Key Contributors to Death among Americans

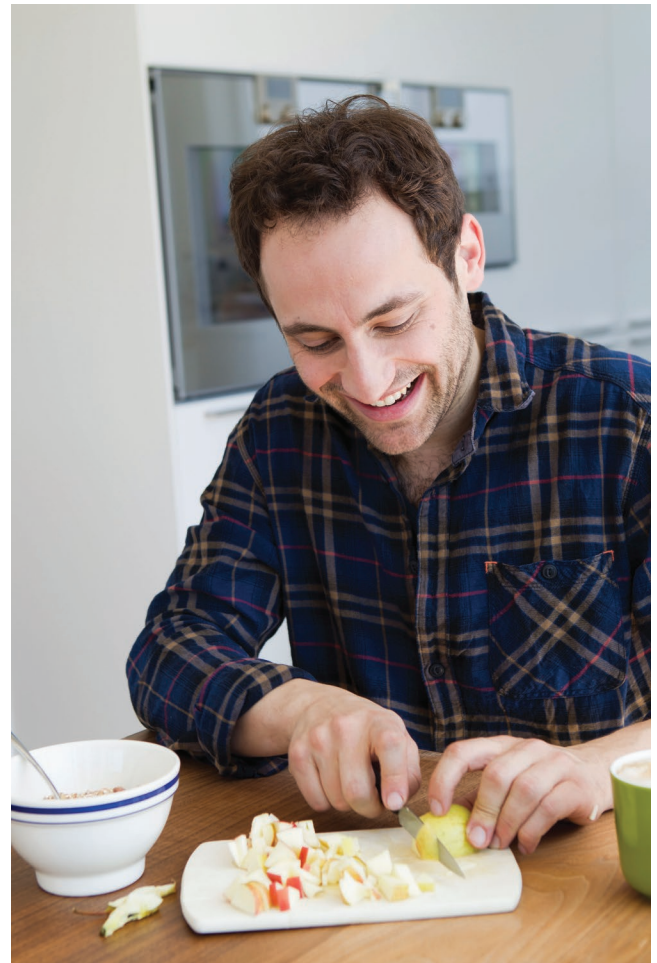
	NUMBER OF DEATHS PER YEAR	PERCENTAGE OF TOTAL DEATHS PER YEAR
Tobacco	481,000	18.5
Obesity-related deaths*	216,000	8.3
Alcohol	87,798	3.4
Microbial agents**	56,979	2.2
Illicit drug use	43,819	1.7
Unintentional poisonings	38,851	1.5
Motor vehicles	34,935	1.4
Firearms	33,636	1.3
Sexual behavior***	32,296	1.3

*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.

**Microbial agents include bacterial and viral infections, such as influenza and pneumonia.

***The number of deaths due to sexual behavior includes deaths from HIV/AIDS, cervical cancer, and hepatitis B and C infections.

SOURCES: National Center for Health Statistics. 2014. Deaths: final data for 2013 (data release). *National Vital Statistics Report* 64(2); Stahre, M., et al. 2014. Contribution of excessive alcohol consumption to deaths and years of potential life lost in the United States. *Preventing Chronic Disease: Research, Practice, and Policy* 11:130293; U.S. Department of Health and Human Services. 2014. The health consequences of smoking—50 years of progress: a report of the surgeon general. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; American Cancer Society. 2015. Cervical cancer. Atlanta, GA: ACS; CDC. 2015. Disease burden from viral hepatitis A, B, and C in the United States. Atlanta, GA: Centers for Disease Control and Prevention



Wellness Tip In Table 1.1, notice how many causes of death are related to lifestyle. This is an excellent motivator for adopting healthy habits and staying in good condition. Maintaining physical fitness and a healthy diet can lead to a longer life. It's a fact!

VITAL STATISTICS

Table 1.3 Leading Causes of Death among Americans Age 15–24, 2012

RANK	CAUSE OF DEATH	NUMBER OF DEATHS	PERCENTAGE OF TOTAL DEATHS
1	Accidents	11,619	40.8
	Motor vehicle	6,692	23.5
	All other accidents	4,927	17.3
2	Suicide	4,874	17.1
3	Homicide	4,329	15.2
4	Cancer	1,496	5.3
5	Heart disease	941	3.3
	All causes	28,486	100.0

SOURCE: National Center for Health Statistics. 2015. Deaths: Final Data for 2013. *National Vital Statistics Report* 64(2), http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf.

The Affordable Care Act The Affordable Care Act (ACA), also called “Obamacare,” was signed into law on March 23, 2010, and upheld by the Supreme Court in 2012 and 2015. The new law requires most people to obtain health insurance or pay a federal penalty. Here is a brief summary of the new law.

COVERAGE

- Health plans can no longer deny or limit benefits due to a pre-existing condition.
- If you are under 26, you may be eligible to be covered under your parent’s health plan.

chronic disease A disease that develops and continues over a long period of time, such as heart disease or cancer.

TERMS

lifestyle choice A conscious behavior that can increase or decrease a person’s risk of disease or injury; such behaviors include smoking, exercising, and eating a healthy diet.

- Insurers can no longer cancel your coverage because of honest mistakes in your application.
- If your plan denies payment, you are guaranteed the right to appeal.

COSTS

- Lifetime dollar limits on most benefits you receive are not permitted.
- Insurance companies must now publicly justify rate hikes.
- Your premium dollars must be spent primarily on health care—not administrative costs.

CARE

- Recommended preventive health services are covered with no copayment.
- From your plan’s network, you can choose the primary care doctor you want.
- You can seek emergency care at a hospital outside your health plan’s network.

FINDING A PLAN Under the ACA, a health insurance marketplace, also called health exchanges, facilitates the purchase of health insurance in every state. The health exchanges provide a selection of government-regulated health care plans that students and others may choose from. Those who are below income requirements are eligible for federal help with the premiums.

BENEFITS TO COLLEGE STUDENTS The ACA permits students to stay on their parents’ health insurance plan until age 26—even if they are married or have coverage through an employer. Students not on their parents’ plan who do not want to purchase insurance through their school can do so through the health insurance marketplace.

If you’re under 30, you have the option of buying a “catastrophic” health plan. Such plans tend to have low premiums but require you to pay all medical costs up to a certain amount, usually several thousand dollars. The insurance company would pay for essential health benefits over that amount.

Students whose income is below a certain level may qualify for Medicaid. Check with your state. Individuals with non-immigrant status, which includes worker visas and student visas, qualify for insurance coverage through the exchanges.

You can browse plans and apply for coverage at HealthCare.gov.

The Healthy People Initiative The national Healthy People initiative aims to prevent disease and improve Americans’ quality of life. Healthy People reports, published each decade

since 1980, set national health goals based on 10-year agendas. The initiative’s most recent iteration, *Healthy People 2020*, was developed in 2008–2009 and released to the public in 2010. *Healthy People 2020* envisions “a society in which all people live long, healthy lives” and proposes the eventual achievement of the following broad national health objectives:

- *Eliminate preventable disease, disability, injury, and premature death.* This objective involves taking more concrete steps to prevent diseases and injuries, promoting healthy lifestyle choices, improving the nation’s preparedness for emergencies, and strengthening the public health infrastructure.
- *Achieve health equity, eliminate disparities, and improve the health of all groups.* This objective involves identifying, measuring, and addressing health differences between individuals or groups that result from social or economic disadvantage. (See the box “Wellness Issues for Diverse Populations.”)
- *Create social and physical environments that promote good health for all.* This objective involves the use of health interventions at many levels (such as anti-smoking campaigns by schools, workplaces, and local agencies), providing a broader array of educational and job opportunities for undereducated and poor Americans, and actively developing healthier living and natural environments for everyone.
- *Promote healthy development and healthy behaviors across every stage of life.* This goal involves taking a cradle-to-grave approach to health promotion by encouraging disease prevention and healthy behaviors in Americans of all ages.

In a shift from the past, *Healthy People 2020* 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 ethnicity, education level, and economic status) and environmental (including natural and human-made environments). Thus, one goal is to improve living conditions in ways that reduce the impact of negative health determinants.

Table 1.4 shows examples of individual health promotion goals from *Healthy People 2020*, as well as estimates of how well Americans are achieving those goals.

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.

Be Physically Active The human body is designed to be active. It readily adapts to nearly any level of activity and exertion. **Physical fitness** is a set of physical attributes that allows the body to respond or adapt to the demands and stress of physical effort. The more we ask of our bodies, the stronger and

physical fitness A set of physical attributes that allows the body to respond or adapt to the demands and stress of physical effort.

TERMS

DIVERSITY MATTERS

Wellness Issues for Diverse Populations



We all need to exercise, eat well, manage stress, and cultivate positive relationships. We all need to know how to protect ourselves from disease and injuries. But some of our differences—both as individuals and as members of groups—have important implications for wellness. These differences 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. You share patterns of influences with others; and information about groups can be useful in identifying areas that may be of concern to you and your family. Wellness-related differences among groups can be described in terms of different characteristics, including the following:

Sex and Gender. Sex represents the biological and physiological characteristics that define men, women, and intersex people. *Gender* refers to the roles, behaviors, activities, and attributes that a given society considers appropriate for men and women. A

person's gender is rooted in biology and physiology, but it is shaped by experience and environment—how society responds to individuals based on their sex. Examples of gender-related characteristics that affect wellness include higher rates of smoking and drinking among men and lower earnings among women compared with men doing similar work. Although men are more biologically likely than women to suffer from certain diseases (a sex issue), men are less likely to visit their physicians for regular exams (a gender issue). Men have higher rates of death from injuries, suicide, and homicide, whereas 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.

Ethnicity. Compared with the U.S. population as a whole, American ethnic minorities have higher rates of death and disability from many causes. These disparities result from a complex mix of genetic variations, environmental factors, and health behaviors. Some diseases are

concentrated in certain gene pools, the result of each ethnic 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. Ethnic groups may vary in their traditional diets; their family and interpersonal relationships; their attitudes toward tobacco, alcohol, and other drugs; and their health beliefs and practices.

Income and Education. Of all the variables contributing to health status, inequalities in income and education are the most important. Income and education are closely related, and groups with the highest poverty rates and least education have the worst health status. These Americans have higher rates of infant mortality, traumatic injury, violent death, and many diseases. They are more likely to eat poorly, be overweight, smoke, drink, and use drugs. They are exposed to more day-to-day stressors and have less access to health care services.

Table 1.4 Selected *Healthy People 2020* Objectives

OBJECTIVE	BASELINE (% MEETING GOAL IN 2008)	MOST RECENT PROGRESS (% MEETING GOAL IN 2012)	TARGET (% BY 2020)	PROGRESS
Increase proportion of people with health insurance	83.2	83.1	100.0	○
Help adults with hypertension get blood pressure under control	43.7	48.9	61.2	+
Reduce proportion of obese adults	33.9	35.3	30.5	-
Reduce proportion of adults who drank excessively in past 30 days	27.1	27.1	24.4	○
Increase proportion of adults who meet federal guidelines for aerobic physical activity and muscle strengthening	18.2	20.6	20.1	✓
Reduce proportion of adults who use cigarettes	20.6	18.2	12.0	+

✓ Target met
 + Improving
 ○ Insignificant or no change
 - Getting worse

SOURCE: *Healthy People 2020 Leading Health Indicators: Progress Update, March 2014* (http://www.healthypeople.gov/sites/default/files/LHI-ProgressReport-ExecSum_0.pdf)