

Understanding the Basics





Introduction to Consumer Health: Orthodox and Complementary and Alternative Medicine (CAM)

LEARNING OBJECTIVES

As a result of reading this chapter, students will:

- 1. Explain why it is important to become a responsible health consumer.
- 2. Describe what it means to be healthy.
- 3. Assess how a person in today's world could integrate traditional health practices with alternative therapies.
- Compare and contrast similarities and differences between traditional medicine and CAM.

Note: Throughout this text, our use of the word health-care will refer to a system that offers, provides, or delivers health care to individuals. Our use of the phrase, health care, will refer to care given to a patient by medical or health professionals.

■ WHAT IS THE PURPOSE OF LEARNING ABOUT HEALTH CONSUMERISM AND CAM?

This chapter is intended to get you motivated to become a better health consumer and to learn initial information regarding complementary and alternative medicine (CAM). All of us "consume" health by buying products or services to treat illnesses or to prevent disease or disorders. Those products and services encompass traditional therapies, such as prescription drugs, vitamins, minerals, pain medications, and other over the counter (OTC) drugs, and may include complementary and alternative therapies such as herbal supplements, massage therapy, and acupuncture.

As a health consumer, we join fitness centers or clubs where we "work out" or play golf or tennis. We use walking, running, or bicycle trails. So that youth can have a safe place to skateboard, many cities are building skateboard tracks within their city parks or other sites. To do many of these activities, we need to buy proper clothing: tennis or running shoes and outfits, swimsuits, and so forth. As a result of our fitness-seeking lifestyle we spend a lot of money, and we need to learn to spend wisely. We can only

do that if we are knowledgeable about the services we are purchasing.

Why do we buy health products or engage in fitness activities? Why do we believe it's important to make better food choices when we go to the grocery store? Why do many people look for, and select, organic foods? It seems that we are chasing after good health.

HOW COSTLY IS CHASING AFTER GOOD HEALTH?

People want to be healthy because they perceive that healthy people feel and look better, and they appear more youthful. Because of this, individuals of every race and culture seek ways to become healthier and, in so doing, they collectively spend billions of dollars. It is wonderful that people want to become healthier, but the health care that is needed requires financing. Part of the funding for health care comes from private and governmentally funded insurance programs. For very poor countries, publicly financed development assistance is available in the form of financial resources and improved effectiveness of resources. As an example, spending on health care by health-related worldwide agencies, governmental (e.g., World Health Organization [WHO], United Nations Children's Fund [UNICEF]) and nongovernmental (e.g., Bill and Melinda Gates Foundation), has increased from \$5 billion in 1990 to \$21.8 billion in 2007. In 2007, \$10 billion of that amount was spent by the United States. 1 Per

capita, the United States spends approximately \$6,714, an amount reported to be much more than two dozen other developed countries.²

As can be seen, we value our health and we spend great amounts of money to achieve healthier lifestyles and to seek medical treatment when needed. It is important, therefore, to gain an understanding of the meaning of health and disease/illness conditions.

WHAT IS THE MEANING OF HEALTH AND DISEASE/ILLNESS?

Disease and Illness

A disease can be either a mental or physical condition. An example of a mental disease is depression, which is treatable with certain medications and/or counseling. A physical disease generally is caused by a germ (pathogen) that could be bacterial, viral, fungal, and so forth. Depending on the type of pathogen, usually a medical doctor will order medicinal treatment. Not all physical diseases, however, are caused by pathogens. They may have a genetic (inherited) cause or may be caused by an autoimmune response, such as occurs with arthritis or gout. Even if people have a disease condition (whether mental or physical), they may not always feel unwell or uncomfortable. When people have the flu or a cold, they usually consider themselves ill. The perception of feeling the symptoms of a disease is considered an illness.

To illustrate further, examine the following case study.

Health

What is the meaning of "health"? It appears to be an elusive quality that we seem to cherish, but have difficulty maintaining. In our current world, most health professionals view health in a holistic manner, an approach to health care that aims at treating the whole person, both body and mind, rather than focusing solely on a specific set of symptoms. It encompasses the physical, mental, emotional, social, sexual, and spiritual domains. The 2000 Joint Committee on Health Education Terminology³ has presented several definitions of health.

- A state of complete physical, mental, and social wellbeing, and not merely the absence of disease and infirmity (WHO definition of health).
- A quality of life involving dynamic interaction and independence among the individual's physical wellbeing, his (sic) mental and emotional reactions, and the social complex in which he (sic) exists.
- An integrated method of functioning that is oriented toward maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction with the environment where he (sic) is functioning.

Because it allows for individual differences regarding levels of health, the latter health definition has great potential for more accurately assessing health status. It speaks to the potential that people have for achieving their personal, maximal level of good health. The following case study explains this health definition more clearly.



Case Study

Judy is a 19-year-old college student who has been having unprotected sexual intercourse with her boyfriend, Tom. Unknown to her, Tom has been having unprotected sexual intercourse with another college female who has chlamydia, a bacterial sexually transmitted disease (STD). Tom is having some penile discharge but it is not causing him much discomfort, so he ignores it and continues to have sex with both Judy and the other woman. Judy is one of the 80 to 90% of women who do not show immediate symptoms of chlamydia (e.g., vaginal irritation and redness, swollen labia, vaginal discharge). A couple of months after contracting the STD, Judy began to get an elevated temperature, low pelvic pain, and a discharge. When that occurred, Judy experienced symptoms of the disease and felt ill. At this point, we could say that Judy has the subjective state of illness. An illness is a description of the physical or mental condition of a person who shows symptoms of disease or sickness; an unhealthy state. This event caused Judy to go to a doctor for testing and diagnosis, at which point Judy learned she had the disease called chlamydia.

All of us will experience being ill and having a disease at some point in our lives. We will turn to our traditional doctors for diagnosis and treatment; we may seek an alternative practitioner for care; or we may attempt self-care. The reason that we do this is to feel healthy.

Questions:

- 1. What is good health?
- 2. Why don't all people experience the same level of health?
- 3. Do we all seek health for the same reasons? If not, what are those reasons?



Case Study

Let's contrast the health behaviors of two males, each age 22 years. John has a chronic disease diagnosed as muscular dystrophy, which causes progressive weakness and degeneration of the skeletal muscles that control movement. His disease has progressed to the point that he is now confined to a wheelchair. Please refer to a photo of John in **FIGURE 1.1**.

Matthew is a 22-year-old college baseball player. He is handsome, lean, muscular, and has no known disease condition. Please see the photo of Matthew in **FIGURE 1.2**.





FIGURE 1.1 John.

FIGURE 1.2 Matthew.

Based on the descriptions provided thus far, which of the two would you say is healthier?

Now let's learn more about each young man. John, who has muscular dystrophy, maximizes his health potential because he follows physicians' medical orders, attends physical therapy sessions, eats a diet appropriate for his health condition, and follows a prescribed exercise regimen. John spends time tutoring at-risk youth at the local high school, has a great sense of humor, and his peers love to be around him.

Matthew, the college athlete, has a less healthy lifestyle and engages in risky health behaviors. He takes steroids, does not eat a healthy diet, drinks heavily on the weekends, drives while drunk, does not use a seatbelt, and practices unsafe sexual practices. He has very few friends because he has an explosive personality and is very egocentric. Based on this description, who do you believe is healthier?

If all individuals could strive to maximize their potential for being healthy, we would see a definite decrease in morbidity (diseases) and mortality (deaths). This case study scenario has demonstrated that a person could have the physical appearance of high quality health but, in actuality, be very unhealthy.

Illness-Avoiding Behaviors and Health-Enhancing Behaviors

Health practices can be considered as illness-avoiding or health-enhancing behaviors. Individuals may practice healthy behaviors because they want to avoid getting sick or they may practice healthy behaviors because they want to enhance their health. People who practice health-enhancing behaviors do not live in fear that if they don't practice good health, they will acquire some illness or die. Rather, they practice healthy behaviors because they like the way it makes them feel, function, and look. Health-enhancing behaviors are those that should be practiced over a lifetime. As depicted in **BOX 1.1**, several major differences exist between illness avoiding and health-enhancing behaviors.

As presented in Box 1.1, one of the illness-avoiding behaviors is setting short-term health-related goals, which is discussed next in the application of concepts section.

Informed Consumer: Application of Concepts

You are in your junior year of college and the month is January. You and several of your friends are planning a spring break trip to Cancun, Mexico. It has been a stressful year because you have had to take many upper-level science courses (organic chemistry, biology, and physics) and you have been working 20 hours per week. You have been overeating and not exercising like you used to do. Because

Box 1.1 Illness-Avoidance Behaviors vs. Health-Enhancing Behaviors **ILLNESS-AVOIDING HEALTH-ENHANCING BEHAVIORS BEHAVIORS** Avoiding illness is highest High health is highest priority Enjoy healthy behaviors Motivated by return to health Motivated by feeling good, or alleviation of symptoms better, best Minimal goal Maximal goal Desire immediate or short-Desire long-term results term results Need measurable results More nebulous results are okay Time-limited activity Ongoing activity Medical-centered motivation Ego-centric motivation Authority dominated Internal control Fear as motivator Accomplishment as motivator External checks mandatory Few external checks External rewards Internal rewards Specific behaviors Diffuse behaviors Reactive (to symptoms or Proactive (don't need that threat of symptoms) negative force)

of this, you have gained 15 pounds and perceive yourself as being fat. You want to begin a diet and exercise plan so that you will lose weight in order to look "buff" or sexy.

- 1. What short-term goals should you set?
- 2. What long-term goals should you set?

You begin your training in January in preparation for the April trip. Lo and behold, the goal is met: you lose weight, acquire some level of muscle mass, and look "leaner" and "sexier."

Questions for Discussion:

- 1. Do you feel better about yourself?
- 2. What will be your health habits from now on?
- 3. If your behavior was only practiced to look good for spring break, once it is over, what is the chance that you will continue to eat nutritiously and keep exercising?

We can conclude that people may practice healthy behaviors because they love how it makes them feel or they may practice healthy behaviors because they have a greater fear of becoming ill. The result is that many individuals seek help in achieving a higher level of wellness. For this, they may turn to either orthodox (traditional) medicine or alternative means.

WHAT ARE ORTHODOX AND COMPLEMENTARY AND ALTERNATIVE MEDICINE PRACTICES?

Orthodox Medicine

Orthodox medicine is also known as traditional medicine. Orthodox physicians may be either allopathic or osteopathic doctors. An allopathic physician is a medical doctor (MD). An osteopathic physician is a DO. Both have similar academic training and clinical experiences. These are the physicians that have been the mainstream of our traditional medical care. Other examples of orthodox practitioners are nurses, dentists, social workers, registered dietitians, and health educators. Later chapters of this text include information on how one can find a medical physician and the costs associated with diagnostics and treatment.

Complementary and Alternative Medicine (CAM)

CAM includes a myriad of approaches to health care provided by a variety of practitioners. As defined by the National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health, CAM is "a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine."^{4, p1} The NCCAM was established for the purpose of scientifically testing and assessing CAM therapies for safety and efficacy. Those therapies used to complement traditional medical therapies (e.g., use of aromatherapy after surgery) are identified as complementary;

Box 1.2

Orthodox Medicine and CAM: Similarities and Differences

- Both orthodox medicine and alternative health care embrace holistic health concepts.
- Alternative practices are generally viewed as unorthodox from the standpoint of scientific medicine as currently taught in medical schools.
- Alternative health care is more emphatic about the role of the individual in maintaining his or her own health.
- Practitioners of orthodox medicine all must fulfill certain kinds and amounts of training, education, and licensing.
- Orthodox practitioners tend to treat symptoms of a disease or some other sick or unhealthy state.
- Alternative health care providers embrace a wide variety of possible practices and emphasize the body's natural selfrestoration properties.

those used as a replacement for traditional medical practices (e.g., use of a special diet to treat cancer rather than surgery or chemotherapy) are known as alternative.

A major difference between traditional and alternative modalities is that CAM practices accentuate the role of the individual in maintaining his or her health.^{5,6} Alternative health care practitioners also embrace a wide variety of possible practices that emphasize the body's natural self-restoration properties. Please see **BOX 1.2**, which depicts similarities and differences between traditional and alternative practices.

The NCCAM has divided CAM therapies into five categories⁴: (1) alternative medical systems (homeopathic medicine, naturopathic medicine, traditional Chinese medicine, and Ayurvedic medicine), (2) mind-body interventions (meditation, prayer, mental healing, art, music, or dance), (3) biologically-based therapies (dietary supplements,

herbal medicine), (4) manipulative and body-based therapies (chiropractic, osteopathic, massage), and (5) energy therapies (qi gong, Reiki, therapeutic touch, pulsed fields, and magnetic fields). Acupuncture, acupressure, and Tai chi ch'uan are practices used in traditional Chinese medicine. Other examples of CAM therapies include prayer utilized for healing, faith healing, Alexander technique, reflexology, yoga, hypnosis, biofeedback, and deep breathing exercises. Chapters devoted to more in-depth discussion of alternative therapies are included in this text.

■ WHY DO PEOPLE SEEK ALTERNATIVE HEALTH CARE?

Three major reasons^{7,8} have been identified to explain the increased use of alternative health care:

- 1. Dissatisfaction with conventional treatment as expensive, impersonal, and ineffective
- Feeling empowered to make one's own health care decisions
- 3. Compatibility with users' own values and spiritual beliefs regarding the nature of their illness

One persuasive appeal of CAM is the association of CAM with nature. Many of the CAM practices comprise natural rather than artificial therapies and supplements. Terms such as "pure" versus "synthetic" comprise the language. Organic rather than processed foods are bought and consumed. As a result, stores that sell herbal supplements and organic food supplies have proliferated into the thousands and can be found in most cities (e.g., Whole Foods stores). The result is that a nationwide government study, co-funded by NCCAM, found that in 2007, \$34 billion was spent to seek "natural" means to good health. About two-thirds of that money was spent on self-care.

Thus far in this chapter, we have discussed the meaning of health and illness and provided an introduction to orthodox and CAM helping practices. We, the consumers, have to make decisions about the type of health care we want to



In the News

A June 9, 2010, news article from MSNBC news described the increased use of pesticides as a contributing factor to the increase in ADHD in children. In fact, children who showed high markers of pesticide residue in their systems had a 93% greater likelihood of ADHD symptoms. The compound commonly found in pesticides is organophosphates, which are known to disrupt the neurological systems of insects. This is a purposeful objective in order to aid in insect control. Even children who live in cities have high markers for this pesticide because the exposure comes from the air we breath and the foods we consume. Some of those foods that may contain pesticides are blueberries, strawberries, and celery. All should be washed with cold water before eating. This is a reason that people are drawn to buying foods that are 100% organically grown.

use and the types of products we want to buy. Let's now explore what being a consumer of health means.

WHAT DOES IT MEAN TO BE A HEALTH CONSUMER?

Americans like "stuff." We like to have as much as possible, right? Stereos, iPods, video gaming systems, computers, clothing, cars, houses, boats . . . we like our stuff, and every time we buy something, we are acting as a consumer. We seek out a product, we purchase that product, we use that product, and, when it is gone or stops working, we throw the product away and replace that product. In other words, we consume the product. Our nation's economy is built on this function, called a material economy, and the economy relies on individuals to keep buying things to keep it healthy.

Because we are consumers of goods and services, including health services, we need to make wise and intelligent decisions when spending our money to buy "good health." A major goal in *Healthy People 2020*¹⁰, reads, "Improve the health literacy of the population." Three objectives related to that goal are:

- 1. Increase the proportion of persons who report their health care provider always gave them easy-to-understand instructions about what to do to take care of their illness or health condition.
- 2. Increase the proportion of persons who report their health care provider always asked them to describe how they will follow the instructions.
- 3. Increase the proportion of persons who report their health care providers' office always offered help in filling out a form.

Cornacchia et al. 11 describe consumer health as follows:

It deals with the decisions individuals make in regard to the purchase and use of the available health products and services that will have a direct effect on their health. It involves the economic, or monetary, aspects of health over which individuals have control. Consumer health includes self-motivated or self-initiated actions, which may include the purchase of a bottle of aspirin tablets or a dentifrice or the selection of a physician, dentist or nursing home. It is not what health departments or others do to control disease through clinics or information. However, a consumer's decision to use such services or information is consumer health.

The health consumer is the one who buys or otherwise acquires, consumes, or makes and then uses services or products intended to promote health. Prior to 1960, there was no history related to protecting the consumer from fraudulent or dangerous products. In 1962, President John F. Kennedy was so concerned about consumer rights that

Box 1.3

Consumer Bill of Rights

President John F. Kennedy first conceptualized the Consumer Bill of Rights in 1962. This was professional regulation to serve the public interest. The following are the six basic consumer rights:

- The right to safety: To be protected against the marketing of goods that are hazardous to health or to life
- The right to be informed: To be protected against fraudulent, deceitful, or grossly misleading information, advertising, labeling, or other practices, and to be given the facts needed to make informed choices
- The right to choose: To be assured, wherever possible, access
 to a variety of products and services at competitive prices;
 in those industries in which competition is not workable
 and government regulation is substituted, an assurance of
 satisfactory quality and service at fair prices
- The right to be heard: To be assured that consumer interests will receive full and sympathetic consideration in the formulation of government policy, and fair and expeditious treatment in its administrative tribunal
- The right to education: To have access to programs and information that help consumers make better marketplace decisions
- The right to redress: To work with established mechanisms to have problems corrected and to receive compensation for poor service or for products that do not function properly

Source: John F. Kennedy Presidential Library and Museum. Special message to Congress on protecting consumer interest, 15 March 1962. Digital Identifier JFKPOF-037-028. Available at: http://www.jfklibrary.org/Asset-Viewer/Archives/JFKPOF-037-028.aspx. Accessed August 24, 2011.

he made it a focus during a speech.¹² At that time, President Kennedy outlined four basic rights; later they were expanded to six basic rights. **BOX 1.3** shows the six basic consumer rights.

■ WHAT IS CONSUMER ADVOCACY?

Consumer advocacy reached new levels in 1965 when Ralph Nader¹³ published *Unsafe at Any Speed*, a book detailing the manufacturing flaws in the auto industry. Since that time, Nader has been a leading advocate for consumer health and safety. His followers, called Nader's Raiders, have been conducting research and providing advocacy for more than 40 years, spurring the creation and eventual passage into law of a wide range of consumer policy.

We health consumers need to take responsibility for the choices we make. A term for that is *caveat emptor*, which is a warning that means "let the buyer beware." The concept of *caveat emptor* came from the Romans and then became

part of English law, the Statute of Frauds, which was enacted by the English Parliament in 1677. It held that a victim of his own mistakes had little or no recourse in the courts. Today, *caveat emptor* is a principle of commerce stating that if no warranty is provided, then a customer buys at his or her own risk. All 50 states in the United States have incorporated this into their laws, and consequentially, it is very difficult to prosecute fraud.

A term that places responsibility on the *seller* is *caveat vendor*. This is a Latin term meaning "let the seller beware." The term implies that it is the seller's responsibility rather than the purchaser's to ensure that the goods or services offered for sale are able to deliver their intended purpose. Again, without a warranty, it is very difficult to get one's money returned for defective products or to prove fraud. Fraud is a deceitful, tricky, or willful act committed to gain an unfair or dishonest advantage or to make a profit (make money off someone else).

Part of the 2010 national budget included \$561 million to strengthen the integrity of Medicare and Medicaid with an emphasis on reducing health care fraud. ¹⁴ To protect the U.S. consumer, the U.S. Department of Health and Human Services Agency for Healthcare Research and Quality provides information about getting safer medical care, preventing errors, and getting quality medical care. Several states also have agencies and/or departments that focus on consumer protection. For example, the state of Maryland has an Office of Consumer Protection. Many consumer protection organizations focus on energy and environmental advocacy. An example of their efforts to protect people's health is establishing the Climate Action Plan, which focuses on reducing greenhouse gas emissions by 80% by the year 2050. ¹⁵

CONCLUSION

In sum, information in this chapter was intended to provide an introduction to concepts regarding the meaning of health, traditional or orthodox medicine, CAM therapies, and consumer health. To improve and maintain our health, we need to make intelligent decisions and become savvy health consumers.

Suggestions for Class Activities

Select one of the following and present your findings in class.

 Survey a group of friends to learn whether they have been ripped off when they purchased or used health products or services. Include the action taken and the results. Provide evidence relating it to the *caveat emptor/caveat vendor* concepts.

- Find a magazine that contains unreliable nutrition information or promotes faddism. Analyze your findings by relating them to health consumer concepts learned in this chapter. Prepare a poster of cutouts from the magazine.
- 3. Compare and contrast high carbohydrate, low fat, and low protein diets with high protein, high fat, and low carbohydrate diets, or compare and contrast other questionable diet plans.
- 4. Compare and contrast two weight control plans (e.g., Nutrisystem, Weight Watchers, Atkins) to obtain information about procedures used for weight reduction, drugs used, food product prices, costs of service, and related matters. Include your opinions and conclusions.

Review Questions

- 1. What is the meaning of health and disease?
- 2. How much is spent annually on health care in the United States?
- 3. What do the terms "orthodox medicine" and "CAM" mean?
- 4. How do orthodox medicine and alternative medicine differ?
- 5. Why do people seek alternative care?
- 6. Why is it important to become an intelligent health consumer?
- 7. What are the meanings of *caveat emptor* and *caveat vendor*?
- 8. What are the six basic consumers' rights?

Key Jerms

acupressure The application of pressure or localized massage to specific sites on the body to control symptoms such as pain or nausea.

acupuncture A traditional Chinese medicine treatment that uses stainless steel needles at specific points in the body to increase the flow of life energy known as Qi or Chi.

Alexander technique A technique for positioning and moving the body that is believed to reduce tension and discomfort.

allopathic medicine The traditional or conventional system of medicine that uses drugs, surgery, or radiation to prevent or treat diseases.

alternative medicine A system of practices not considered to be standard treatments. Examples are chiropractic

- medicine, Ayurvedic medicine, and traditional Chinese medicine.
- **Ayurvedic medicine (Ayurveda)** A traditional system of medicine of India. The word Ayurveda is a Sanskrit word that means *Science of Life* or *Sciences of Lifespan*.
- biofeedback A technique used to train people to control their own involuntary body processes such as heart rate, respirations, and even brain waves. It requires watching a monitor of some sort in order to change the rate using mental control.
- **consumer** A person who buys and uses goods. In this text, it means the person who buys and uses health-related goods
- **fraud** A deceitful, tricky, or willful act committed to gain an unfair or dishonest advantage or to make a profit (make money off someone else).
- **holistic health** Refers to the physical, emotional, spiritual, social, and mental domains of health. All should be seen as making up the whole person.
- **homeopathic medicine** Medicines prepared by extreme dilution. The fundamental concept of homeopathic is that "like cures like." Substances in the preparations are thought to stimulate the body's own healing response.
- **muscular dystrophy** A genetic disease group that is characterized by progressive weakness and degeneration of the skeletal muscles that control movement.
- **naturopathic medicine** A system of medical practices that relies on more natural healing methods (herbs, massage, exercise). It encompasses a belief in the body's ability to heal itself.

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