

**Test Bank for Your Health Today -
Choices in a Changing Society 2025
Release 1st Teague**

Correct answers located at the end of the chapter.

TRUE/FALSE - Write 'T' if the statement is true and 'F' if the statement is false.

- 1) Health is conceptualized as having several domains, such as physical, mental, social, and spiritual domains.
☐ true
☐ false
- 2) Individual choice is the only factor governing a person's ability to live a healthy lifestyle.
☐ true
☐ false
- 3) Health disparities occur when all people have the equal opportunity to attain their full health potential.
☐ true
☐ false
- 4) Factors such as income level, available health care services, and literacy are examples of social determinants of health.
☐ true
☐ false
- 5) In the United States, poor health outcomes are associated with environmental pollution, low educational attainment, and poverty.
☐ true
☐ false
- 6) Hispanic is considered one of the primary racial groups in the United States by the U.S. Census Bureau.
☐ true
☐ false
- 7) The terms *ethnicity* and *race* can be used interchangeably.
☐ true
☐ false
- 8) Advances in medical technology, lifestyle improvements, and environmental protections have produced significant and equal health benefits for most ethnic populations in the United States.
☐ true
☐ false
- 9) *Ethnicity* is a term used to describe a community based on common cultural origins and ancestry.
☐ true
☐ false

10) Compared to 16 other high-income countries (“peer countries”), the United States has the highest rates of obesity and diabetes.

- ☐ true
- ☐ false

11) In the United States, people in rural areas have a longer life expectancy than those in urban areas.

- ☐ true
- ☐ false

12) In the United States, Black women are 2 to 3 times more likely to die in childbirth than non-Hispanic white women.

- ☐ true
- ☐ false

13) U.S. racial minority groups had higher rates of COVID-19, diabetes, infant mortality, intentional injury, and premature death than the general population in 2020.

- ☐ true
- ☐ false

14) The rate of COVID-19 vaccination is lower among U.S. adults with a disability than among those without a disability.

- ☐ true
- ☐ false

15) During the COVID-19 pandemic, people earning higher incomes had less ability to physically distance, work from home, or take leave.

- ☐ true
- ☐ false

16) The terms *disease prevention* and *health promotion* refer to the same thing.

- ☐ true
- ☐ false

17) The slogan “a society in which all people can achieve their full potential for health and well-being across the lifespan” accurately expresses the general goals of *Healthy People 2030*.

- ☐ true
- ☐ false

18) *Healthy People 2030* includes a focus on health determinants.

- ☐ true
- ☐ false

19) Three of the leading health indicators in the United States—according to *Healthy People 2030*—are substance abuse, immunization, and mental health.

- ☐ true
- ☐ false

20) *Community* implies an interdependence between people and/or organizations within a defined region.

- ☐ true
- ☐ false

21) One key difference between the Health Belief Model and the Stages of Change Model for understanding individual health behavior change is that the Health Belief Model acknowledges the role of perception, while the Stages of Change Model does not.

- ☐ true
- ☐ false

22) The Stages of Change Model emphasizes that change happens not as a one-time event, but as a process.

- ☐ true
- ☐ false

23) Adam is in the contemplation stage of the Stages of Change Model when he decides that he will stop drinking alcohol at the beginning of next month.

- ☐ true
- ☐ false

24) In the maintenance stage of the Stages of Change Model for health behavior change, a new behavior has been in place for a minimum of two years.

- ☐ true
- ☐ false

25) For some types of behaviors, the maintenance stage of the Stages of Change Model can be an ongoing, lifelong process.

- ☐ true
- ☐ false

26) Activities such as developing social support systems and establishing goals and rewards help people to move through stages in the Stages of Change Model.

- ☐ true
- ☐ false

27) A successful behavior change plan will include strategies for dealing with potential barriers to change.

- ☐ true
- ☐ false

28) For a person to change a behavior successfully, they need to have a perceived sense of self-efficacy, a feeling that they can perform certain tasks.

- ☐ true
- ☐ false

- 29) A signed behavior change contract, with a family member or friend witnessing your new contracted commitment to change, is among the most effective tools for change.
- ☐ true
 - ☐ false
- 30) When implementing a behavior change plan that involves a long-term health goal, you should strictly avoid setting and rewarding interim goals.
- ☐ true
 - ☐ false
- 31) SMART is an acronym for Specific, Measurable, Attainable, Realistic, and Time-bound goals.
- ☐ true
 - ☐ false
- 32) In assessing your health risks, it is important to ignore any emotional reaction you may experience.
- ☐ true
 - ☐ false
- 33) Scientists typically consider the results of a single study to be conclusive and definitive.
- ☐ true
 - ☐ false
- 34) Of our 23 chromosome pairs, 22 are the same for females and males.
- ☐ true
 - ☐ false
- 35) The complete set of DNA is called a person's *genome*.
- ☐ true
 - ☐ false
- 36) Gene methylation is the process by which DNA sequences are changed and can be passed on to future generations.
- ☐ true
 - ☐ false
- 37) Genetic mutations are responsible for human diversity.
- ☐ true
 - ☐ false
- 38) If an individual receives a faulty, mutated copy of a gene from one parent, that person will most likely acquire a genetic disorder.
- ☐ true
 - ☐ false
- 39) Most genetic disorders are caused by single-gene mutations.
- ☐ true
 - ☐ false

40) Multifactorial disorders are those caused by the interaction of both environmental and genetic factors.

- ☐ true
- ☐ false

41) A family health tree is also called a *genogram* or a *genetic pedigree*.

- ☐ true
- ☐ false

42) The most relevant information from a family health tree includes age and major diseases, as well as cause of death for deceased relatives.

- ☐ true
- ☐ false

43) A pattern of illness on your family tree means that there is a higher probability you will be affected by that disease, and you should seek genetic counseling.

- ☐ true
- ☐ false

44) When evaluating a family health tree, a family member who has a heart attack at age 70 raises more genetic concerns than a relative who develops colon cancer at age 28.

- ☐ true
- ☐ false

45) Sade's mother was diagnosed with Alzheimer's disease at age 50.

Courtney's grandmother was diagnosed with Alzheimer's disease at age 82.

Sade's mother's disease is more likely to have a genetic component.

- ☐ true
- ☐ false

MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.

46) Which of the following is/are considered a social determinant of health?

- A) the physical environment
- B) values
- C) employment status
- D) heredity

47) Which of the following terms describes the process in which one adopts patterns of behavior that lead to greater life satisfaction?

- A) social determination
- B) health
- C) well-being
- D) self-efficacy

48) According to the socioecological model of health and wellness, which of the following is/are a factor in a person's natural physical environment?

- A) housing
- B) air quality
- C) access to health care services
- D) sanitation systems

49) Which of the following represents a society that supports equal opportunity for all people to attain their full health potential?

- A) health equity
- B) health disparities
- C) population health
- D) geography

50) Regarding life expectancy, where did the United States rank compared to other countries as of 2021?

- A) 15th
- B) 25th
- C) 46th
- D) 60th

51) Which of the following statements is TRUE about rural areas in the United States compared to urban areas?

- A) The risk of dying is lower in rural areas.
- B) Life expectancy is greater in rural areas.
- C) Obesity rates are higher in rural areas.
- D) Heart disease rates are lower in rural areas.

52) Which statement about the impacts of geography on health in the U.S. is accurate?

- A) Neighboring communities are most often common in opportunities for employment, education, and safety and also in health outcomes.
- B) Compared to adults in other high-income countries, U.S. adults have the highest rates of obesity and diabetes.
- C) Compared to adolescents in other high-income countries, U.S. adolescents have lower rates of unplanned pregnancy.
- D) People living in rural areas have longer life expectancy at all ages than people living in urban areas.

53) About what percentage of the United States population identified as members of nonwhite racial or ethnic minority groups in 2022?

- A) 10
- B) 20
- C) 30
- D) 40

54) Regarding socioeconomic status and its impact on health outcomes, which of the following statements is MOST accurate?

- A) Health outcomes show little association with income.
- B) Low income is typically not a barrier to accessing resources.
- C) People with lower incomes were less exposed to COVID-19 risk during the pandemic.
- D) Policies such as zoning laws and minimum wage requirements are a factor in health equity and access to opportunities.

55) Which of the following statements about health disparities is TRUE?

- A) Higher childbirth death rates for Black women is an example of a health disparity.
- B) In terms of health outcomes, racism and discrimination act at the individual level but not the systemic level.
- C) Health equity is defined as equal access to medical professionals.
- D) Income inequality in a community doesn't impact health outcomes, but lower income is linked to worse health status.

56) In the United States in 2020, life expectancy decreased to _____ years due to the COVID-19 pandemic.

- A) 68.9
- B) 76.9
- C) 82.9
- D) 85.9

57) In 2020, COVID-19 was the _____ leading cause of death in the United States.

- A) second
- B) third
- C) fourth
- D) fifth

58) Which of the following examples best illustrates a public health measure?

- A) preventing the spread of disease-carrying insects
- B) medical schools competing for research grants
- C) promoting a new surgical technique
- D) upgrading a local hospital's kidney dialysis equipment

59) What is the major goal of primary disease-prevention efforts?

- A) to detect diseases before they become symptomatic
- B) to find a cure for prevalent diseases
- C) to treat a person for particular problems associated with a disease
- D) to block the development of diseases and their consequences

60) Which of the following is an example of a health promotion action?

- A) public campaign to promote physical activity
- B) regulation of water quality
- C) public campaign to promote vaccination
- D) recommendations for mask-wearing in specific settings

61) Which of the following is a broad national health goal that is a priority of *Healthy People 2030*?

- A) Create social environments that promote good health for the aging population.
- B) Focus on promoting health for older individuals.
- C) Attain healthy, thriving lives free of preventable disease, disability, injury, and premature death.
- D) Achieve health equity, through building more greenspace, sidewalks, and trails.

62) *Healthy People 2030* places increased emphasis on “health determinants,” which

- A) are defined as a person's internal sense of control.
- B) are based on scientific studies.
- C) include both social and environmental determinants.
- D) target and measure important public health issues.

63) In the *Healthy People 2030* report, which area is considered a leading health indicator?

- A) total calorie consumption
- B) treatment for HIV
- C) health on school campuses
- D) oral health care

- 64) The Stages of Change Model of health behavior change emphasizes that
- A) people change only when faced with an illness.
 - B) change happens as a process.
 - C) change occurs only when the environment supports it.
 - D) changes are more effective when based on personal perceptions.
- 65) The aspect of personal health that is most within your control is
- A) human biology.
 - B) genetic inheritance.
 - C) lifestyle.
 - D) physical environment.
- 66) Recognizing that stopping smoking will improve both health and athletic performance for a college baseball player, along with weighing the pros and cons and quitting smoking, are typical signs of the _____ stage of change.
- A) precontemplation
 - B) action
 - C) preparation
 - D) contemplation
- 67) Jamar resolves to start exercising three times a week when their membership at a local gym begins in two weeks. In which stage of change in the Transtheoretical Model is Jamar operating?
- A) precontemplation
 - B) contemplation
 - C) action
 - D) preparation
- 68) In which stage of change in the Stages of Change Model, also called the Transtheoretical Model, does an individual intend to change a specific health behavior within the next six months?
- A) precontemplation
 - B) preparation
 - C) action
 - D) contemplation
- 69) Which of the following statements best illustrates a sense of self-efficacy?
- A) I should do it.
 - B) I shouldn't do it.
 - C) I can do it.
 - D) I can't do it.

70) Which of the following best illustrates a “SMART” goal?

- A) I will eat my meals at 7:00 a.m., noon, and 6:00 p.m. and limit myself to one snack daily.
- B) I will get more exercise in the new year.
- C) I will avoid situations in which I am tempted to eat junk food.
- D) I will make smart health choices in each major life activity.

71) Which statement best illustrates an action step while implementing a behavior change program?

- A) “Working out will help me build muscle.”
- B) “I hope to start working out every day.”
- C) “Beginning next week, I will work out three days a week.”
- D) “I’ve purchased exercise bands for the strength portion of my workouts.”

72) Which of the following is the primary definition of *health literacy*?

- A) navigating the health care system successfully
- B) achieving maximum wellness
- C) obtaining, understanding and successfully using health information
- D) accurately describing symptoms of illness to a health provider

73) A news report summarizes results of a study in which researchers interviewed 1,000 adults about their activity habits and stress levels over two years. This research study would be best categorized as

- A) basic medical research.
- B) an expert opinion.
- C) an epidemiological study.
- D) a formal clinical trial.

74) Which of the following statements about health risks is FALSE?

- A) A health risk is the probability of exposure to a hazard that can result in negative consequences.
- B) By definition, a health risk involves the probability or likelihood of an event occurring.
- C) All health risks can be avoided.
- D) Health risks include factors such as age, gender, family history, income, and education.

75) Information that is misleading when compared with the best available scientific evidence is referred to as

- A) health illiteracy.
- B) disinformation.
- C) misinformation.
- D) epidemiological evidence.

76) When looking online for information on his chronic health condition, Marco finds a website with testimonials from many people stating that his current treatment is unsafe and ineffective; the site offers a different treatment for sale. Marco does further research and can't find any negative studies about his current treatment in the National Medical Library database. Based on this scenario, the information at the first website is best described as

- A) disinformation.
- B) misinformation.
- C) evidence-based.
- D) peer-reviewed.

77) The purpose of making a clinical study *double-blind* is to

- A) reduce researcher bias.
- B) disguise the study's sponsors.
- C) guarantee the results.
- D) make the results depend on the outcomes of other studies.

78) Which of the following statements is true concerning medical research studies?

- A) To be considered reliable, the same results must be obtained by no other researchers conducting the same study.
- B) Researchers assign participants to either a treatment group or control group according to the order in which participants register for the study.
- C) Clinical studies attempt to establish cause-and-effect relationships.
- D) Subjects are not randomly assigned to either a treatment group or control group.

79) Of the following, the best type of website on which to research health issues is one that is sponsored by a(n)

- A) educational institution.
- B) commercial health organization.
- C) individual.
- D) drug company.

80) In what type of research do scientists conduct studies on a cellular level which serves as a baseline of scientific knowledge?

- A) clinical studies
- B) epidemiological studies
- C) basic medical research studies
- D) market research studies

81) Which of the following statements about cells and genes is FALSE?

- A) Each chromosome contains hundreds to thousands of genes.
- B) The sequencing of bases within a gene is of little significance if all bases are present.
- C) Each cell contains 23 pairs of chromosomes.
- D) Our bodies are made up of about 260 different types of cells.

82) Deoxyribonucleic acid, or DNA, includes which of the following?

- A) a triple helix
- B) four bases
- C) proteins
- D) a nucleus

83) When a change occurs in a gene, it is called a(n)

- A) allele.
- B) mutation.
- C) recessive gene.
- D) chromosomal disorder.

84) What are alternative forms of the same gene referred to as?

- A) recessive genes
- B) alleles
- C) mutations
- D) chromosomes

85) Genetic disorders caused by multiple genes interacting with the environment are called

- A) polygenic.
- B) multifactorial.
- C) autosomal.
- D) ecological.

86) Genes turn on or off to regulate the activity of

- A) multifactorial disorders.
- B) mutation.
- C) differentiation.
- D) RNA.

87) Gene methylation is

- A) a process by which environment can change the way DNA is used by cells without changing the nucleotide sequence.
- B) a visual representation of the genetic history of several generations of a family.
- C) the interaction of multiple genes and environmental factors resulting in nucleotide changes in specific genes that in turn lead to disease.
- D) is the process that determines which inherited allele of a gene is expressed in a given individual.

88) What is the main purpose of creating a family health tree?

- A) to discover your personal health risks and strengths
- B) to estimate your life expectancy
- C) to identify environmental factors that influence your health
- D) to illustrate patterns of lifestyle habits in your family

89) Which of the following statements is true regarding family health trees?

- A) Results from genetic testing are required to create a family health tree.
- B) Lifestyle habit information should not be included.
- C) A family health tree traces a family's origin.
- D) Basic information for each relative in the family health tree includes date of birth, major diseases and injuries, age, and cause of death.

90) What information found in a family health tree indicates that a disease might have a genetic link?

- A) appearance of a disease in one family member
- B) a family member with multiple cancers
- C) presence of a disease in family members with poor health habits
- D) onset of a disease at a late age

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

91) The term _____ refers to a relative state in which a person maximizes their physical and emotional functioning to live a full and satisfying life.

92) _____ health is the study of health outcomes in or between groups of individuals such as college students.

93) In 1947, the World Health Organization (WHO) broke new ground with its positive definition of *health* as a state of complete physical, mental, and _____ well-being.

94) The _____ model of health addresses the interrelationships that influence your health.

98) The term for the ability of an individual to interact effectively with other people and with their social environment is social _____.

95) Your health is affected by your _____ physical environment (including schools, sanitation, and transportation) and your natural physical environment (such as air and water quality).

99) Health _____ occurs when all people have an equal opportunity to attain their full health potential.

96) External environmental conditions that can be altered by social and health policies and programs are known as the social _____ of health.

100) The _____ People initiative identifies significant preventable threats to health and sets national health objectives aimed at improving the quality of life for all Americans.

97) The more accurate way to view race is as a(n) _____ category, rather than a biological one.

101) The sense of identity that individuals draw from a common ancestry, as well as a common national, religious, tribal, language, or cultural origin, is referred to as _____.

102) Activities directed towards improving the health of people, or activities employing resources shared by members of a town or region, is known as _____ health.

105) Often someone will have to try several times to make a change before it sticks. A backslide into a former health state is known as a(n) _____.

103) To understand why people make the health choices they do, the _____ Model uses the constructs of perceived susceptibility, seriousness of consequences, benefits of action, and barriers to action.

106) In the Stages of Change Model, a person in the _____ stage intends to change a specific health behavior within the next six months.

104) The _____ Model, one of the widely accepted frameworks for understanding individual health behavior change, is also referred to as the Stages of Change Model.

107) In the Stages of Change Model, a sixth stage called _____ occurs when the new behavior is firmly entrenched in a person's lifestyle.

108) The term _____ refers to an internal state in which a person believes that they can perform a task.

109) If you participate in a(n) _____ study, you have received a particular treatment, screening, or diagnostic test in order to identify whether a drug, product, or behavior produces a particular effect.

110) _____ is the coordinated and deliberate effort to circulate known false information for financial, power, or reputational gain.

111) The series of four bases arranged to form a distinct message, located at a certain location along a chromosome, is called a(n) _____.

112) The tightly coiled molecule within the nucleus of a cell that contains an entire set of genetic instructions is called deoxyribonucleic acid, or _____.

113) The two chains that DNA consists of are joined in a double _____ structure.

114) Characteristics such as height or skin color are determined by the interaction of multiple genes at multiple sites on different _____.

115) Once a cell is _____, it can no longer become other cell types.

116) Changes that occur during the process of parents passing genes to their children are called_____.

120) An illustration of an individual's family genetic history is commonly referred to as a family health_____.

117) A single-gene_____, such as whether earlobes are detached or attached, is determined by either a dominant or a recessive gene.

118) A mutated gene that is not expressed when paired with a dominant or healthy gene is called_____.

119) A health condition caused by interactions among one or more genes and the environment is called a(n)_____ disorder.

Answer Key

Test name: Chapter 01

- | | |
|-----------|-----------|
| 1) TRUE | 38) FALSE |
| 2) FALSE | 39) FALSE |
| 3) FALSE | 40) TRUE |
| 4) TRUE | 41) TRUE |
| 5) TRUE | 42) TRUE |
| 6) FALSE | 43) FALSE |
| 7) FALSE | 44) FALSE |
| 8) FALSE | 45) TRUE |
| 9) TRUE | 46) C |
| 10) TRUE | 47) C |
| 11) FALSE | 48) B |
| 12) TRUE | 49) A |
| 13) TRUE | 50) C |
| 14) TRUE | 51) C |
| 15) FALSE | 52) B |
| 16) FALSE | 53) D |
| 17) TRUE | 54) D |
| 18) TRUE | 55) A |
| 19) FALSE | 56) B |
| 20) TRUE | 57) B |
| 21) FALSE | 58) A |
| 22) TRUE | 59) D |
| 23) FALSE | 60) A |
| 24) FALSE | 61) C |
| 25) TRUE | 62) C |
| 26) TRUE | 63) D |
| 27) TRUE | 64) B |
| 28) TRUE | 65) C |
| 29) TRUE | 66) D |
| 30) FALSE | 67) D |
| 31) TRUE | 68) D |
| 32) FALSE | 69) C |
| 33) FALSE | 70) A |
| 34) TRUE | 71) C |
| 35) TRUE | 72) C |
| 36) FALSE | 73) C |
| 37) TRUE | 74) C |
| | 75) C |
| | 76) A |
| | 77) A |

- | | |
|-------------------|-------------------|
| 78) C | 118) Short Answer |
| 79) A | 119) Short Answer |
| 80) C | 120) Short Answer |
| 81) B | |
| 82) B | |
| 83) B | |
| 84) B | |
| 85) B | |
| 86) C | |
| 87) A | |
| 88) A | |
| 89) D | |
| 90) B | |
| 91) Short Answer | |
| 92) Short Answer | |
| 93) Short Answer | |
| 94) Short Answer | |
| 95) Short Answer | |
| 96) Short Answer | |
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| 100) Short Answer | |
| 101) Short Answer | |
| 102) Short Answer | |
| 103) Short Answer | |
| 104) Short Answer | |
| 105) Short Answer | |
| 106) Short Answer | |
| 107) Short Answer | |
| 108) Short Answer | |
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| 113) Short Answer | |
| 114) Short Answer | |
| 115) Short Answer | |
| 116) Short Answer | |
| 117) Short Answer | |

Chapter 1

Self, Family, and Community

RESOURCES AT A GLANCE

CONNECT (<https://www.mheducation.com/highered/discipline/health-human-performance.html>)

These activities are described in greater detail below.

- Pretest, Reading Quizzes, and Posttest
- Personal Health Portfolio Activities (submitted and scored online)
- Myth or Fact Video Activity
- Public Health Is Personal
- Life Stories
- You Make the Call
- Who's at Risk?
- Matching/Sequencing and Classification Activities
- Instructor Resources (Instructor's Manual, Test Bank, PowerPoint Slides, Media Bank, Application-Based Activities Guide)

Find out more about Connect by contacting your McGraw Hill Learning Technology Representative. Find your representative [here](#).

GENERAL HEALTH INFORMATION

For the latest health information, check the current issues of:

- *Annual Editions: Health* (visit McGraw Hill Create at <https://create.mheducation.com> and select Annual Editions from the Create Collections menu)
- Mayo Clinic Health Information (<https://www.mayoclinic.org/patient-care-and-health-information>)
- MedlinePlus (<https://www.medlineplus.gov/>)
- KFF Health News (<https://kffhealthnews.org/>)
- NPR Health (<https://www.npr.org/sections/health>)
- CNN health headlines (<https://www.cnn.com/health>)
- *Time* magazine (<https://www.time.com/>)
- *Newsweek* (<https://www.newsweek.com/>)
- U.S. News and World Report (<https://www.usnews.com/>)
- ABC (<https://abcnews.go.com>)
- CBS (<https://www.cbsnews.com/>)
- MSNBC (<https://www.msnbc.com>)

For additional information on other teaching and learning resources, including course management systems, contact your local McGraw Hill representative.

LEARNING OBJECTIVES

After completing this chapter, the student will be able to do the following:

1. Define health, wellness, and the individual dimensions of wellness.
2. Identify the factors outside individual behavior that determine health.
3. Describe public and community health practices and policies.
4. Outline how to apply models of health behavior change.
5. Create a plan for behavior change.
6. Explain how heredity and genetics can influence an individual's patterns of health and illness.
7. Evaluate health and wellness information.

KEY TERMS AND DEFINITIONS

health A state of complete physical, mental, social, and spiritual well-being.

socioecological model of health A framework that recognizes the interrelationship between individuals and their environment; emphasizes that where we live, work, and play strongly influences our health.

population health The health outcomes of a group of individuals, including the distribution of those outcomes within the group.

health disparities Differences in health outcomes between populations.

health equity When all people have the opportunity to attain their full health potential.

ethnicity The sense of identity an individual draws from national, religious, tribal, language, and cultural origins.

public health The study and practice of health promotion and disease prevention at the population level.

health promotion Public health–related actions designed to maintain a current healthy state or advance to a more desirable state.

community health Issues, events, and activities related to the health of a whole community, as well as activities directed toward bettering the health of the public and/or activities employing resources available in common to members of the community.

self-efficacy An internal state in which you feel competent to perform a specific task.

health literacy The ability to find, understand, and use information and services to inform health-related decisions and actions.

misinformation Information that is inaccurate or misleading relative to the best scientific evidence.

disinformation A subset of misinformation that is intentionally promoted to serve a

malicious purpose, such as for financial, power, or reputational gain.

health risk The probability of an exposure to a hazard that can result in negative consequences.

deoxyribonucleic acid (DNA) A nucleic acid molecule that contains the encoded, heritable instructions for all of a cell's activities; DNA is the genetic material passed from one generation to the next.

genome The total set of an organism's DNA.

chromosome The gene-carrying structure found in the nucleus of a cell, composed of tightly wound molecules of DNA.

differentiation The process by which an unspecialized cell divides and gives rise to a specialized cell.

mutation An alteration in the DNA sequence of a gene.

allele Alternative forms of a gene.

multifactorial disorder A disorder caused by the interaction of genetic and environmental factors.

family health tree A diagram illustrating the patterns of health and illness within a family; also called a genogram or genetic pedigree.

LECTURE OUTLINE

I. Your Health in Context

A. Health and Well-Being

- Health: a state of complete physical, mental, social, and spiritual well-being.
- Not merely the absence of disease and infirmity.
- Physical health. Biological integrity.
- Mental health. Emotional and intellectual capabilities, or an individual's subjective sense of well-being.
- Social health. The ability to interact effectively with others and the social environment.
- Spiritual health. An interconnectedness to self, to significant others, and to the community.

B. What Determines Health?

- Sociological model of health identifies the complex levels and interrelationships that influence your health.
- Your unique set of characteristics.
- Your social and physical environments.
- According to the model, friends, family, community norms, economic, social, and public policy, and even global events such as pandemics and climate change affect your health opportunities.
- Many social determinants of health influence the options you have and the choices you make.

- Environmental factors that influence your health can be divided into built and natural factors.

C. Population Health

- Life Expectancy:
 - The number of years a person can expect to live.
- The United States experienced more deaths per capita from COVID-19 than any other high-income country.
- COVID-19 was the third leading cause of death in the United States in 2020.
- U.S. life expectancy in 2020 was estimated to have decreased from 78.9 to 76.9 years.
- Population health: the study of health outcomes in or between groups of individuals.
- Can reveal why the gains are not equally shared.
- Demographics. Statistical information about groups of people.

D. Health Equity

- Healthy equity: when all people have the equal opportunity to attain their full health potential.
- Health disparities: result from systemic and avoidable social and economic practices and policies that create barriers for some groups.
- Americans have greater health risks than individuals in other 16 high-income countries.
- Geography:
 - Health disparities are also seen between rural and urban U.S. regions.
- Ethnicity and Race:
 - Health improvements are not shared equally.
 - Ethnicity. Drawn from common ancestry and common origins—national, religious, tribal, language, and cultural.
 - Race. An ethnic grouping based on physical characteristics; a social category rather than a biological one.
 - Many racial minorities have higher rates of COVID-19, cancer, diabetes, cardiovascular disease, and infant and maternal mortality.
 - Racism and discrimination are factors at both the individual and systemic levels.
- Socioeconomic Status:
 - Socioeconomic status has perhaps the most significant impact on health outcomes.
 - In the COVID-19 pandemic, people with lower incomes have less ability to physically distance, work from home, or take leave.
 - Worse health status is strongly associated with poverty.
 - Income inequality also has a strong negative impact on the health of a community.
- Health Care:

- The United States differs from other high-income countries in that other countries provide universal access to care.
- Health behaviors, genetics, and social and environmental factors are more significant, however.
- Age:
 - A life-course approach to health recognizes the importance of our health trajectory.
 - A life-course approach is recognizing that there are critical phases in your life during which healthy or harmful environments have the potential for greater impact.
 - Adverse childhood experiences significantly affect long-term health.

II. Your Health and Your Community's Health

A. Public Health

- Public health: discipline focused on the health of populations of people.
- Health promotion: actions designed to maintain a current health state or encourage a more desirable state of health.
- Disease prevention: defensive actions to ward off specific diseases and their consequences.
- Initiatives must balance the needs and rights of individuals against the needs and rights of others.

B. Community Health

- Community health activities are directed toward improving the health of a whole community or employing resources shared by the members of the community.
- Multiple agencies within the Department of Health and Human Services.
- Nongovernmental organizations.

C. The *Healthy People* Initiative

- Goals of *Healthy People 2030*:
 - Attain healthy, thriving lives free of preventable disease, disability, injury, and premature death.
 - Achieve health equity, eliminate disparities, and achieve health literacy to improve the health of all.
 - Create social, physical, and economic environments that promote attaining full potential health and well-being for all.
 - Promote healthy development, healthy behaviors, and well-being across all life stages.
- Leading Health Indicators:
 - Oral health care.
 - Consumption of calories from added sugars.
 - Drugs overdose deaths.
 - Exposure to unhealthy air.

- Homicides.
- Household food insecurity and hunger.
- Seasonal influenza vaccination.
- Knowledge of HIV status.
- Health insurance coverage.
- Suicides.
- Infants and maternal deaths.
- Reading proficiency.
- Childhood and adolescent obesity.
- Tobacco use and other substance use.
- Employment rates.
- Rates of diabetes, hypertension, and colon cancer screening.
- Aerobic physical activity and muscle-strengthening activity.

D. Individual Choice vs. Societal Responsibility

- Ethical Questions:
 - Are individuals responsible for their health choices, given the powerful influence of their environment?
 - Should individuals be held accountable for the costs to society of poor health choices?
 - Is the government justified in enacting health-related laws, regulations, and policies?
 - Should society take action to prevent people from taking risks?
 - Is health a basic right?

III. Your Personal Health Choices

A. Health-Related Behavior Choices

- These are choices concerning your physical, mental, emotional, spiritual, and social well-being.
- Interesting questions arise when we consider why people make choices that don't enhance their health.
- Why don't they change behaviors they know are hurting them?

B. The Health Belief Model

- Health Belief Model: Health behaviors are influenced by four perceptions.
 - Perceived susceptibility.
 - Perceived seriousness of consequences.
 - Perceived benefits of specific action.
 - Perceived barriers to taking action.

C. The Stages of Change Model

- Stages of Change Model: takes into account thinking, feelings, behaviors, relationships, and other factors; also known as the Transtheoretical Model (TTM).
 - Precontemplation.
 - Contemplation.

- Preparation.
- Action.
- Maintenance.
- Termination.
- The model recognizes that change happens as a process, not a one-time event.
- Self-efficacy, an internal state in which you feel competent to perform a specific task, is a significant factor.
- Relapse, a backslide into a former health state, is the rule rather than the exception.

D. Creating a Behavior Change Plan

- Accept responsibility for your own health and make a commitment to change.
- Ask yourself the following questions:
 - Is there a health behavior I would like to change?
 - Why do I want to change this behavior?
 - What barriers am I likely to encounter?
 - Am I ready to change the behavior?
- Making an initial commitment is an important step.
- Change to a new behavior:
 - Set goals.
 - Develop action steps.
 - Identify benefits.
 - Identify positive enablers.
 - Sign a behavior change contract.
 - Create benchmarks.
 - Assess accomplishments and revise, if necessary.

E. Being an Informed Consumer of Health Information

- Developing health literacy: the ability to read, understand, and act on health information.
- Identifying misinformation.
 - Information that is inaccurate or misleading relative to scientific evidence.
- Disinformation.
 - A subset of misinformation that is intentionally promoted to serve a malicious purpose, such as for financial, power, or reputational gain.
- Emotional responses affect how we interpret and react to information.
- Many factors contribute to health risk—the probability of exposure to a hazard that can result in negative consequences.
- Understanding Medical Research Studies:
 - Learn how to understand medical research studies.
 - Basic medical research, epidemiological studies, and clinical studies.
- Careful consideration of health recommendations involves asking a series of critical questions:
 - Formal study or expert opinion?
 - If it was a formal clinical study, randomized and double-blind?

- People in the study similar to you?
- How many participants?
- Who sponsored or funded the study?
- Published in a reputable, peer-reviewed journal?

IV. Your Health and Your Family Health History

A. Health and History Factors

- Who we are as individuals is the result of a complex, ongoing interaction among us.
- Environmental factors of many kinds.
- Our lifestyle choices.
- Our genetic inheritance.

B. DNA and Genes: The Basis of Heredity

- The nucleus of every human cell contains the entire set of genetic instructions stored in deoxyribonucleic acid or DNA.
 - The body's instruction book.
- Genome.
 - Complete set of a person's DNA.
- Within the nucleus, DNA is divided into 23 pairs of chromosomes.
- One pair of chromosomes is the sex chromosomes.
 - XX in biological females; XY in biological males.
- Most cells become specialized, taking on characteristic shapes or functions.
 - Skin, bone, nerve, and muscle.
 - The process is called differentiation.
- Stem cells are unspecialized cells.
 - Present in an embryo (embryonic stem cells).
 - Adult stem cells are retained within tissues.

C. Genetic Inheritance

- Mutation: a change in a gene.
 - Some mutations are harmful, some are beneficial, and some have no effect.
 - Mutations allow for human diversity.
- Alternate forms of genes called alleles are responsible for traits such as eye color.
 - Alleles can be dominant or recessive.
- Most characteristics (such as height or skin color) are determined by the interaction of multiple genes at multiple sites on different chromosomes.
- Multifactorial disorders: conditions caused by interactions among one or more genes and the environment. Examples include:
 - heart disease,
 - cancer,
 - diabetes,
 - obesity, and
 - schizophrenia.
- Epigenetics.

D. Creating a Family Health Tree

- Family health tree: a visual representation of your family's genetic history.
- Also called a genogram or genetic pedigree.
- A health tree can help you see your family's patterns of health and illness within a family.
- Pinpoints areas of special concern or risk for you.

E. What Can You Learn From Your Health Tree?

- An early onset of the disease is more likely to have a genetic component.
- The appearance of a disease in multiple individuals on the same side of the family is more likely to have a genetic correlation.
- A family member with multiple cancers represents a greater likelihood of genetic association.
- The presence of disease in those with good health habits is more suggestive of a genetic cause.
- The main use of a health tree is to highlight your personal health risks and strengths.

In Review

1. How are health and well-being defined?
2. What factors influence a person's health?
3. What health-related trends are occurring in our society?
4. What is health-related behavior change?
5. What challenges do we face in changing our health behavior?
6. How do genes affect your health?

CONNECT STUDENT ACTIVITIES AND ASSIGNMENTS

- **Chapter 1 Pretest:** This 12-question pretest tests the student's current knowledge of the chapter content.
- **Reading Quiz: Your Health in Context:** This eight-question quiz tests the student's knowledge of the section "Your Health in Context."
 - **Classification Activity:** The Social Determinants of Health: Students classify examples as environmental or individual factors in health.
 - **Who's at Risk? Variations in Leading Causes of Death Among Americans:** This short quiz tests the student's analysis of the information presented.
- **Reading Quiz: Your Health and Your Community's Health:** This six-question quiz tests the student's knowledge of section "Your Health and Your Community's Health."
 - **Public Health Is Personal: What Is Public Health?** Students reflect on how public health measures have shaped their daily lives and are asked to come up

with one unmet public health need.

- **Reading Quiz: Your Personal Health Choices:** This 10-question quiz tests the student's knowledge of the section "Your Personal Health Choices."
 - **Matching/Sequencing Activity: Defining Stages of Change in the Transtheoretical Model:** Students match each stage of change to its example and then order the stages in the correct order.
 - **Matching/Sequencing Activity: Applying the Transtheoretical Model:** Students demonstrate understanding of transtheoretical model applications.
- **Reading Quiz: Reading Quiz: Your Health and Your Family Health History:** This six-question quiz tests the student's knowledge of the section "Your Health and Your Family Health History."
 - **Life Stories: Michaela: A Family History of Breast Cancer:** Students respond to reflection questions about Michaela's story.
 - **You Make the Call: Is It Time for a Single-Payer System for Health Care in the United States?** Students discuss their opinions on the issue.
- **Key Term Review:** Students complete matching activities to review key term definitions.
- **Chapter 1 Posttest:** This 12-question posttest tests the student's knowledge of the chapter content.
- **Personal Health Portfolio: Physical and Mental Health Assessment:** Students take the RAND Short Form 36 assessment and respond to critical thinking questions on their results.
- **Personal Health Portfolio: Behavior Change Contract:** Students outline personal behavior change goals and strategies.
- **Personal Health Portfolio: Creating a Family Health Tree:** Students create their own family health tree.

Additional Health and Human Performance assignable content (Concept Clips, NewsFlash, NutritionCalc Plus) is available from the HHP course-wide content dropdown menu in Connect. Other available assignment types include SmartBook, Video Capture, Writing Assignments, and Application-Based Activities (described below).

APPLICATION-BASED ACTIVITIES

For more information about Application-Based Activities, refer to the documentation posted on the Instructor Resources site in Connect.

Myth or Fact: Behavior Change

Can students distinguish myth from fact on topics related to behavior change?

Personal Health Portfolio: Physical and Mental Health Assessment: Students take the RAND Short Form 36 assessment and respond to critical thinking questions on their results.

Personal Health Portfolio: Behavior Change Contract: Students outline personal behavior change goals and strategies.

Personal Health Portfolio: Creating a Family Health Tree: Students create their own family health tree.

Self-Assessment: Stages of Change for Healthy Lifestyle Behaviors: This self-assessment includes a stages of change questionnaire for healthy lifestyle behaviors; it concludes with follow-up reflection and application questions.

MEDIA BANK

Myth or Fact: Reevaluating Behavior Change Goals

Myth or fact? Frequently reevaluating and changing goals is a clear indication that a behavior change program is failing. Watch the video to find out.

Concept Clip: Transtheoretical Model of Behavior Change

The video describes the transtheoretical model of behavior change (stages of change) and strategies for moving forward in the cycle of change.

LIFE STORIES DISCUSSION QUESTIONS

Life Stories: Michaela: A Family History of Breast Cancer

1. What obstacles—psychological as well as logistical—do you think make it hard for people to find out more about their family health histories?
2. What conditions or diseases seem to run in your family? What behavioral choices or environmental factors might increase or decrease the likelihood that these conditions will actually occur?

ORGANIZATIONS, HOTLINES, AND WEBSITES

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

American Cancer Society

This website features a wide range of information about cancer, including statistics, prevention, and treatment approaches. It also offers resources such as cancer survivors' network and support programs.

www.cancer.org

American Heart Association

This site emphasizes prevention of heart disease and offers publications and other resources to promote heart-healthy living. It includes easy to understand information on cardiac diseases and conditions.

www.heart.org

Centers for Disease Control and Prevention

The CDC provides a wide variety of information, including materials on HIV infection, national health statistics, travelers' health information, and governmental nutrition recommendations.

www.cdc.gov

CDC Office of Public Health Genomics (OPHG)

Includes information on the impact of human genetics research on health and disease prevention; and provides publications on birth defects and related topics.

<https://www.cdc.gov/genomics/php/about/index.html>

Gene Reviews

This organization offers authoritative information on genetics testing and its use in the diagnosis and management of disease and genetic counseling.

<https://www.ncbi.nlm.nih.gov/books/NBK1116/>

Genetics Society of America

This professional organization includes more than 4,000 scientists and educators in the field of genetics.

It publishes information on advances in genetics through its journal, *Genetics*.

www.genetics-gsa.org

GeneWatch UK

Featuring developments in genetics technologies from the perspective of public interest, environmental protection, and animal welfare, this group explores topics ranging from genetically modified crops and foods to genetic testing of humans.

www.genewatch.org

Genome Research

International peer-reviewed journal featuring research on the genome biology of all organisms and significant advances in genomic medicine.

<http://genesdev.cshlp.org/>

Health Canada

Information on a variety of health topics.

<https://www.canada.ca/en/health-canada.html>

Healthy People 2030

Healthy People 2030 includes information on objectives, progress reviews, and priority areas.

<https://odphp.health.gov/healthypeople>

LabX Presented by the National Academy of Sciences

LabX is a public engagement testbed at the NAS. Site contains interactive activities where you can discover the many uses of DNA and how it may affect your life.

<https://labx.org>

MedlinePlus: Genetic Disorders

A gateway to many sources of information about genetic disorders.

<https://medlineplus.gov/geneticdisorders.html>

National Center for Biotechnology Information

Genes and Disease: Provides information and links on the role of genes in many human diseases.

<https://www.ncbi.nlm.nih.gov/books/NBK22183/>

The National Center for Complementary and Integrative Health (NCCAIH)

This organization provides information on complementary and alternative medicine.

Their website includes publications, information for researchers, FAQs, and useful links.

www.nccam.nih.gov

National Council Against Health Fraud (NCAHF)

Focusing on consumer protection law, the NCAHF addresses issues such as product labeling and warranties, proof of safety and effectiveness, and accountability for those who violate the law. NCAHF views health misinformation, fraud, and quackery as public health problems.

<https://quackwatch.org/ncahf/>

National Health Information Center (NHIC)

This organization helps put consumers and health professionals in touch with the organizations that are best able to provide answers to health-related questions.

<https://odphp.health.gov/our-work/national-health-initiatives/health-literacy/resources/national-health-information-center>

National Heart, Lung, and Blood Institute (NHLBI)

Blood Diseases and Resources Information: Provides background information on blood diseases as well as materials on recent research into possible treatments.

<https://www.nhlbi.nih.gov/about/divisions/division-blood-diseases-and-resources>

National Institute of Diabetes and Digestive and Kidney Disorders (NIDDK)

Provides information on a variety of hereditary diseases, including cystic fibrosis, hemochromatosis, and lactose intolerance.

www.niddk.nih.gov

National Organization for Rare Disorders

Provides a searchable database that includes information summaries and links on many genetic disorders.

www.rarediseases.org

National Society of Genetic Counselors

This society offers FAQs about genetic counselors including information about genetic counseling and suggestions for finding a counselor.

www.nsgc.org

National Wellness Institute

This site includes wellness links, a wellness resource directory, a national health observances calendar, and other useful information.

www.nationalwellness.org

Online Mendelian Inheritance in Man

An online searchable database of human genes and genetic disorders; the information is technical but very well referenced.

<https://www.ncbi.nlm.nih.gov/omim>

U.S. Food and Drug Administration

The FDA site provides information on many products it regulates, such as food, drugs, medical devices, biologics, and cosmetics. Its news section highlights hot topics in health.

www.fda.gov

Other government websites with health-related materials include these:

National Institutes of Health www.nih.gov

National Library of Medicine www.nlm.nih.gov

World Health Organization <https://www.who.int/>