

# Chapter 1

## Nutrition: Choices for Health

### Multiple-Choice Questions

1. A comprehensive list of every single nutrient essential to the function of the human body would consist of about how many different nutrients?
  - a. 6
  - b. 20
  - c. 40
  - d. 100

Answer: c; page 2; Level of Difficulty: Easy

2. Nutrient density is a term used to describe
  - a. total nutritional content of a food item
  - b. the number of different essential nutrients in a food item
  - c. the caloric content of a food item
  - d. the ratio of nutrient content of a food compared to its caloric content

Answer: d; page 2-3; Level of Difficulty: Medium

3. About 80% of American females do not meet recommendations for which food group?
  - a. grains
  - b. dairy
  - c. meats
  - d. fruits

Answer: b; Table 1.1 page 2; Level of Difficulty: Medium

4. The average American consumes about \_\_\_\_ teaspoons of added sugar per day?
  - a. 5
  - b. 10
  - c. 20
  - d. 30

Answer: c; Table 1.1 page 2; Level of Difficulty: Easy

5. If you compare one serving of broccoli to one serving of french fries, which of the following is true?

- a. as both are vegetables, they will provide a similar amount of calories and nutrients
- b. french fries will provide more calories and less vitamin A, vitamin C, and calcium
- c. french fries will provide more calories and vitamin A, vitamin C, and calcium
- d. broccoli contains more calories and vitamin A and vitamin C

Answer: b; Figure 1.2, page 3; Level of Difficulty: Medium

6. Undernutrition and overnutrition are both forms of malnutrition.

- a. true
- b. false

Answer: a; pages 3-4; Level of Difficulty: Medium

7. Which of the following is associated with overnutrition?

- a. osteoporosis
- b. anemia
- c. failure to thrive
- d. obesity and type 2 diabetes

Answer: d; pages 3-4; Level of Difficulty: Medium

8. Technically speaking, malnutrition refers to

- a. vitamins and minerals only
- b. consuming at least a minimum amount of nutrients
- c. consuming an optimal amount of nutrients
- d. avoiding undernutrition

Answer: c; pages 3-4; Level of Difficulty: Hard

9. Which is not an example of undernutrition?

- a. developing scurvy because of inadequate Vitamin C intake
- b. developing osteoporosis because of inadequate Calcium or Vitamin D intake
- c. reduced growth due to lack of adequate protein intake
- d. developing high blood pressure due to excess salt intake

Answer: c; pages 3-4; Level of Difficulty: Hard

10. The six classes of essential nutrients are
- carbohydrates, lipids, proteins, water, vitamins, and minerals
  - carbohydrates, lipids, proteins, vitamins, minerals, and fiber
  - carbohydrates, lipids, proteins, vitamins, minerals, and organic molecules
  - macronutrients, micronutrients, water, phytochemicals, fiber, and organic molecules

Answer: a, pages 4-5; Level of Difficulty: Medium

11. All of the following are examples of carbohydrates except
- sugars
  - starches
  - proteins
  - fiber

Answer: c; pages 4-5; Level of Difficulty: Easy

12. All of the following are examples of lipids except
- cholesterol
  - sugars
  - saturated fat
  - unsaturated fat

Answer: b; pages 4-5; Level of Difficulty: Medium

13. Which of the following statements about proteins is false?
- proteins are composed of amino acids
  - different proteins are different due to different combinations of amino acids used in each type of protein
  - dietary protein from animal sources better matches the amino acid needs of humans compared to dietary protein derived from plants sources
  - proteins are made of amino acids, vitamins, and minerals

Answer: d; pages 4-5; Level of Difficulty: Hard

14. Nutrients are classified as macronutrients and micronutrients. Which of the following is NOT considered a macronutrient?
- carbohydrate
  - minerals
  - protein
  - fat

Answer: b; pages 4-5; Level of Difficulty: Easy

15. Deficient intake of this nutrient is known to produce scurvy:
- a. Vitamin C
  - b. Vitamin D
  - c. Vitamin A
  - d. iron

Answer: a; pages 3-5; Level of Difficulty: Easy

16. Deficient intake of this nutrient is known to produce osteoporosis:
- a. Vitamin C
  - b. Vitamin D
  - c. Vitamin A
  - d. iron

Answer: b; pages 3-5; Level of Difficulty: Easy

17. Deficient intake of this nutrient is known to produce night blindness:
- a. Vitamin C
  - b. Vitamin D
  - c. Vitamin A
  - d. iron

Answer: c; pages 3-5; Level of Difficulty: Medium

18. The term “Calorie” is used in nutrition as a label for
- a. the total nutrient content of a food item
  - b. the amount of energy a food item provides when eaten
  - c. the amount of fat a food item contains
  - d. the heat contained within a food item

Answer: b; page 6; Level of Difficulty: Easy

19. Technically speaking, which phrase below is correct?
- a. 1 Calorie = 1,000 calories
  - b. 1 calorie = 1,000 Calories
  - c. 1 kCal = 1 kcal
  - d. 1 kcal = 1,000 kCal

Answer: a; page 6, Level of Difficulty: Hard

20. Which nutrient does not provide the human body with energy?
- a. carbohydrate
  - b. minerals
  - c. lipids
  - d. proteins

Answer: b; page 6; Level of Difficulty: Medium

21. Per gram, which choice contains the highest amount of energy?
- a. carbohydrate
  - b. alcohol
  - c. protein
  - d. lipid

Answer: d; page 6, Level of Difficulty: Medium

22. A meal containing 50 grams of carbohydrates, 30 grams of lipids, and 30 grams of protein will contain approximately how many Calories?
- a. 400
  - b. 500
  - c. 600
  - d. 700

Answer: c; page 6, Level of Difficulty: Hard

23. The process called homeostasis can be regulated by nutrient availability. Which choice listed below is not a homeostatic parameter?
- a. body temperature
  - b. blood pressure
  - c. blood sugar level
  - d. water, lipids, and proteins

Answer: d; page 7, Level of Difficulty: Hard

24. Phytochemicals and zoochemicals are
- a. food items derived from plants and animals, respectively
  - b. nutrients used by plants and animals, respectively
  - c. non-essential substances that may be beneficial to health
  - d. nutrients such as vitamins and minerals

Answer: c; page 7; Level of Difficulty: Easy

25. In addition to choosing foods for nutritional value, we often choose foods to eat for other reasons. Which of the following is not an example of these ‘non-nutritive’ reasons?
- a. availability of specific food items
  - b. we tend to consume foods we are familiar with
  - c. eating foods associated with specific holidays or religious practices
  - d. none of the above, a, b, and c are all examples

Answer: d; page 7-11, Level of Difficulty: Medium

26. Which would be best described as an emotional or psychologically-driven food choice?
- a. eating corn on the cob when in season
  - b. eating ethnic foods you ate as a child
  - c. eating chocolate or ice cream after a bad day at work
  - d. eating foods specific to religious practices

Answer: c; page 7-11; Level of Difficulty: Easy

27. For a food item to include the word “healthy” on the label, the food item must
- a. be low in fat and sodium and be a good source of one or more important nutrients
  - b. be studied by scientist to prevent disease
  - c. contain vitamins and minerals
  - d. be low in calories

Answer: a; page 9; Level of Difficulty: Hard

28. What simple phrase is a good key to help you choose a healthy diet?
- a. choose low calorie foods high in nutrient density
  - b. choose disease preventing foods whenever possible
  - c. choose a variety of foods, balance your food choices, and practice moderation
  - d. choose foods based on their availability and nutrient content

Answer: c; page 11-13; Level of Difficulty: Medium

29. Which statement is not a good reason to incorporate variety in your diet?
- a. different foods will supply different essential nutrients to your body
  - b. variety in your diet may help prevent becoming bored with healthy food items
  - c. a single food choice cannot provide all essential nutrients

- d. variety eliminates the need for vitamin and mineral supplements

Answer: d; page 11-12, Level of Difficulty: Medium

30. An appropriate way to include balance in your diet and lifestyle is to
- a. eat equal amounts of animal-derived and plant-derived foods
  - b. eat equal amounts of protein and carbohydrates
  - c. eat equal amounts of vitamins and minerals
  - d. match your consumption of calories to your activity level

Answer: d; pages 11-12, Level of Difficulty: Medium

31. Which is not an example of moderation in your diet and lifestyle?
- a. going back for seconds on all dinner items, rather than just the item you like best
  - b. eating dessert occasionally
  - c. balancing an extra dessert with extra exercise
  - d. sharing a restaurant entrée or dessert with your dinner companion

Answer: a; page 12-13, Level of Difficulty: Hard

32. The validity of nutrition information may be compromised, even on network television news stories because:
- a. reporters may not be trained dietitians
  - b. news stories may be exaggerated to make them more enticing
  - c. reporters typically do not talk to real nutrition scientists
  - d. news reporters often do not care if their stories are factual

Answer: b; page 13-14, Level of Difficulty: Easy

33. The scientific method depends on which sequence of events?
- a. form a theory, conduct the experiment, develop a hypothesis, make an observation
  - b. develop a hypothesis, conduct the experiment, make an observation, form a theory
  - c. conduct the experiment, develop a hypothesis, form a theory, make an observation
  - d. make an observation, develop a hypothesis, conduct the experiment, form a theory

Answer: d; page 14-17, Level of Difficulty: Hard

34. Continued acceptance of a scientific theory depends on
- a. the ability of other scientists to confirm the original research and results
  - b. increased funding of the research
  - c. number of years since the development of the theory
  - d. how the hypothesis was formed

Answer: a; page 14-17; Level of Difficulty: Hard

35. When subjects do not know which treatment they are receiving in a clinical trial, but the researchers do, the study is called:
- a. single-blind
  - b. double-blind
  - c. anecdotal
  - d. collaboration

Answer: a; page 17, Level of Difficulty: Medium

36. In a controlled study, if neither the subjects nor the investigators know which subjects are receiving treatment, the study is called a(n)
- a. single-blind study
  - b. double-blind study
  - c. variable study
  - d. undirected study

Answer: b; page 17, Level of Difficulty: Medium

37. Which of the following is NOT considered an objective measurement?
- a. an amount of weight that can be lifted off the ground
  - b. body fat content
  - c. weight lifters stating they feel 'pumped up'
  - d. measured circumference of the bicep muscle

Answer: c; page 15-17, Level of Difficulty: Easy



38. In a controlled experiment, the group that is NOT subject to treatment is called
- the experimental group
  - the placebo effect
  - the control group
  - the double-blind group

Answer: c; page 15-17, Level of Difficulty: Easy

40. Researchers study whether caffeine has any effect on short-term memory. In the first part of the study, two groups of subjects are given capsules that look identical. Group A receives caffeine and Group B receives a harmless neutral substance. Group B is being give a
- stimulant
  - catalyst
  - placebo
  - simulation factor

Answer: c; page 15-17, Level of Difficulty: Hard

41. In order for a nutrition researcher to complete an experiment using human subjects, all of the following are true except:
- the purpose of the experiment must be explained to participants
  - participants must receive a written explanation of the project
  - a committee of scientists and non-scientists must review and approve of the project
  - federal guidelines mandate that human subjects must be paid to participate in such studies

Answer: d; page 16, Level of Difficulty: Hard

42. In order for a nutrition researcher to complete an experiment using animal subjects, all of the following are true except:
- federal guidelines now only allow animal research for cancer experiments
  - the pain and suffering of animals in a study are taken into consideration
  - a committee of scientists and non-scientists must review and approve of the project
  - the actual need or priority of the research is judged before the project is approved

Answer: a; page 16, Level of Difficulty: Medium

43. After a nutrition experiment is completed, a report describing the project is read, analyzed, and evaluated by two or more researchers who were not involved in the research study. Before the article is published, they examine it to ensure that the experiment was not flawed and that the results were interpreted correctly. This system is called

- a. experimental consultation
- b. experimental design
- c. peer review
- d. journal critique

Answer: c; page 17, Level of Difficulty: Easy

44. Approximately 1000 high school students were asked to keep a record of how much vitamin C was consumed by keeping food records. This information was compared with the students' incidences of colds. This type of study is called:

- a. an intervention study
- b. a clinical trial
- c. a laboratory study
- d. an epidemiological study

Answer: d; page 18, Level of Difficulty: Hard

45. One group of individuals is asked to eat a diet high in fruits, vegetables, and dairy foods while a second group of individuals is asked to eat a diet with lower amounts of fruits, vegetables, and dairy foods. The two groups' blood pressure readings are monitored and compared. This is an example of

- a. an intervention study
- b. a clinical trial
- c. a laboratory study
- d. an epidemiological study

Answer: a; page 18, Level of Difficulty: Hard

46. Comparison of the amount of a particular nutrient consumed with the amount of the nutrient excreted is characteristic of which type of study?

- a. depletion-repletion study
- b. balance study
- c. collection study
- d. epidemiological study

Answer: b; page 18; Level of Difficulty: Hard

47. When judging nutrition information, which is the least important factor?
- a. how the study was funded
  - b. the design of the study
  - c. how many people authored the study report
  - d. where the study was published

Answer: c; page 19; Level of Difficulty: Hard

48. Which of the following would be the least reliable source of information about herbal supplements?
- a. a government publication
  - b. a registered dietitian
  - c. a pamphlet published by a health food store
  - d. a peer-reviewed article available on the internet

Answer: c; page 19, Level of Difficulty: Easy

49. A radio advertisement features a woman who professes to have lost 10 pounds in three days with a new herbal supplement. This type of claim is
- a. material
  - b. anecdotal
  - c. substantiated
  - d. objective

Answer: b; page 19-21, Level of Difficulty: Medium

50. Which of the following is a common source of anecdotal evidence?
- a. single-blind studies
  - b. double-blind studies
  - c. results from a minimum of three experiments
  - d. testimony of individuals

Answer: d; page 19-21; Level of Difficulty: Easy