

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

- 1) Which of the following is NOT a function of water in the body? 1) _____
- A) helps to transport nutrients and oxygen
 - B) helps to regulate nervous impulses and muscle contraction
 - C) helps to excrete waste products
 - D) provides a source of energy to work and play

Answer: D

- Explanation: A)
B)
C)
D)

- 2) What is another name for a study of a particular disease in a large population? 2) _____
- A) a single-blind study
 - B) a double-blind study
 - C) an observational study
 - D) a model study

Answer: C

- Explanation: A)
B)
C)
D)

- 3) Joan's dinner contains 210 grams of carbohydrate, 60 grams of protein, and 52 grams of fat. What percent of kilocalories in this meal comes from carbohydrate? 3) _____
- A) 54%
 - B) 22%
 - C) 35%
 - D) 25%

Answer: A

- Explanation: A)
B)
C)
D)

- 4) In the United States and Canada, what set of standards defines the recommended intake values for various nutrients for healthy people? 4) _____
- A) Dietary Reference Intakes (DRIs)
 - B) Acceptable Macronutrient Distribution Range (AMDR)
 - C) Estimated Average Requirement (EAR)
 - D) Tolerable Upper Intake Level (UL)

Answer: A

- Explanation: A)
B)
C)
D)

5) What is the group given a specific treatment or intervention during an experiment called? 5) _____
A) the blind group B) the experimental group
C) the double-blind group D) the control group

Answer: B
Explanation: A)
B)
C)
D)

6) How many classes of nutrients are there? 6) _____
A) three B) six C) four D) eight

Answer: B
Explanation: A)
B)
C)
D)

7) Which dietary standard, expressed as percentages of total energy, defines the recommended intake range for the macronutrients? 7) _____
A) Acceptable Macronutrient Distribution Range (AMDR)
B) Tolerable Upper Intake Level (UL)
C) Estimated Average Requirement (EAR)
D) Recommended Dietary Allowance (RDA)

Answer: A
Explanation: A)
B)
C)
D)

8) The BRFSS is the government 8) _____
A) agency that conducts medical research in the United States.
B) agency that protects the health and safety of the American people.
C) survey that tracks lifestyle habits that increase risks for developing chronic diseases.
D) survey that tracks nutrition education programs in the United States.

Answer: C
Explanation: A)
B)
C)
D)

9) Which of the following nutrients is the MOST energy dense? 9) _____
A) carbohydrate B) vitamins C) fat D) protein

Answer: C
Explanation: A)
B)
C)
D)

- 10) The American Society for Nutrition (ASN) and other similar professional nutrition organizations 10) _____
A) lobby the government on behalf of pharmaceutical companies.
B) set the Dietary Reference Intakes (DRIs).
C) publish reliable nutrition research studies.
D) sponsor the National Health and Nutrition Examination Survey (NHANES).

Answer: C

Explanation: A)
B)
C)
D)

- 11) What is the first step of the scientific method? 11) _____
A) Design and conduct an experiment. B) Observe a phenomenon.
C) Collect and analyze data. D) Formulate a hypothesis.

Answer: B

Explanation: A)
B)
C)
D)

- 12) Which of the following is NOT a primary function of dietary protein? 12) _____
A) repairing damaged structures
B) serving as a primary source of energy for the body
C) building new cells and tissues
D) regulating metabolism and fluid balance

Answer: B

Explanation: A)
B)
C)
D)

- 13) What trend has been shown in research studies funded by pharmaceutical companies? 13) _____
A) bias towards showing ineffectiveness of competing products
B) over-reporting of a drug's side effects
C) bias towards reporting positive results of drug being studied
D) research journals rejecting publication of such studies

Answer: C

Explanation: A)
B)
C)
D)

- 14) What is the term for an imitation treatment that has no known physical effect or therapeutic value 14) _____
on the subjects in a research study?
A) double-blind trial B) single-blind trial
C) theory D) placebo

Answer: D

Explanation: A)
B)
C)
D)

15) Prevalent among U.S. Southerners during the early 1900s, pellagra was first thought to be an infectious disease. Today we know that it is caused by a deficiency of _____
A) protein. B) niacin. C) vitamin C. D) vitamin A.

Answer: B
Explanation: A)
 B)
 C)
 D)

16) Which of the following is an example of an inorganic nutrient? _____
A) stearic acid (fat) B) calcium (mineral)
C) dietary fiber (carbohydrate) D) vitamin A (vitamin)

Answer: B
Explanation: A)
 B)
 C)
 D)

17) Which of the following nutrients are inorganic? _____
A) vitamins B) minerals C) fats D) carbohydrates

Answer: B
Explanation: A)
 B)
 C)
 D)

18) The highest average amount of a nutrient that can be consumed without a risk of adverse health effects to almost all individuals in a particular age and gender group is called the _____
A) Recommended Daily Allowance (RDA).
B) Acceptable Macronutrient Distribution Range (AMDR).
C) Adequate Intake (AI).
D) Tolerable Upper Intake Level (UL).

Answer: D
Explanation: A)
 B)
 C)
 D)

19) According to the Acceptable Macronutrient Distribution Range (AMDR), up to what percentage of your daily Calories should be provided by carbohydrates? _____
A) 70% B) 75% C) 35% D) 65%

Answer: D
Explanation: A)
 B)
 C)
 D)

20) Jane consumed a breakfast that contained 85 grams of carbohydrate, 20 grams of protein, and 18 grams of fat. How many kilocalories did Jane eat at breakfast? 20) _____
A) 1,007 kilocalories B) 582 kilocalories
C) 123 kilocalories D) 152 kilocalories

Answer: B
Explanation: A)
B)
C)
D)

21) Overconsumption of which nutrient has the greatest potential for toxicity? 21) _____
A) vitamin C B) vitamin D C) thiamin D) niacin

Answer: B
Explanation: A)
B)
C)
D)

22) Which of the following describes the vitamins A, D, E, and K? 22) _____
A) potentially toxic B) excreted via the urine
C) soluble in water D) not stored to any extent in the body

Answer: A
Explanation: A)
B)
C)
D)

23) Which of the following is FALSE? 23) _____
A) Fats are an important energy source for our bodies at rest and during low-intensity exercise.
B) Fats are soluble in water.
C) Fats are composed of carbon, hydrogen, and oxygen.
D) Fats yield more Calories per gram than carbohydrate or protein.

Answer: B
Explanation: A)
B)
C)
D)

24) Inorganic nutrients that are NOT broken down by the human body or destroyed by heat or light are called 24) _____
A) fats. B) vitamins. C) minerals. D) proteins.

Answer: C
Explanation: A)
B)
C)
D)

- 25) What term is commonly used to describe foods that are grown without the use of synthetic pesticides? 25) _____
 A) inorganic B) genetically modified organism (GMO)
 C) vegetarian D) organic
 Answer: D
 Explanation: A)
 B)
 C)
 D)
- 26) Which of the following professional titles has NO definition or laws regulating it? 26) _____
 A) licensed nutritionist B) registered dietitian
 C) nutritionist D) medical doctor
 Answer: C
 Explanation: A)
 B)
 C)
 D)
- 27) Of the following nutrients, which contains nitrogen? 27) _____
 A) proteins B) water C) carbohydrates D) lipids
 Answer: A
 Explanation: A)
 B)
 C)
 D)
- 28) Which of the following chronic diseases is NOT strongly associated with dietary choices? 28) _____
 A) heart disease B) Alzheimer's disease
 C) obesity D) type 2 diabetes
 Answer: B
 Explanation: A)
 B)
 C)
 D)
- 29) The National Health and Nutrition Examination Survey (NHANES) collects dietary information of Americans by using a 29) _____
 A) website where individuals can self-report their dietary intake online.
 B) personal interview and physical examination.
 C) written survey that collects information using a food likes and dislikes questionnaire.
 D) telephone survey that collects information using a food frequency questionnaire.
 Answer: B
 Explanation: A)
 B)
 C)
 D)

30) Which of the following are examples of carbohydrate-rich foods? 30) _____
A) beef and pork B) bacon and eggs
C) wheat and lentils D) butter and corn oil

Answer: C

Explanation: A)
B)
C)
D)

31) What are the two groups that vitamins are classified into? 31) _____
A) macrosoluble and microsoluble B) trace and major
C) fat-soluble and water-soluble D) nonnutritive and nutritive

Answer: C

Explanation: A)
B)
C)
D)

32) A research study funded by a company that stands to benefit from a positive assessment is an example of a 32) _____
A) double blind. B) single blind.
C) placebo effect. D) conflict of interest.

Answer: D

Explanation: A)
B)
C)
D)

33) Amino acids are the smallest unit of a 33) _____
A) carbohydrate. B) vitamin. C) protein. D) lipid.

Answer: C

Explanation: A)
B)
C)
D)

34) The type of study that compares a group of individuals with a disease to another similar but healthy group is called a(n) 34) _____
A) double-blind study. B) intervention study.
C) case control study. D) clinical trial.

Answer: C

Explanation: A)
B)
C)
D)

35) What is the standard used to estimate the daily nutrient needs of half of all healthy individuals? 35) _____
A) Recommended Dietary Allowance (RDA) B) Estimated Average Requirement (EAR)
C) Tolerable Upper Intake Level (UI) D) Adequate Intake (AI)

Answer: B

Explanation: A)
B)
C)
D)

36) One of the earliest developments in the field of nutrition linking nutritional deficiency to illness 36) _____
was the discovery that eating citrus fruits prevents
A) pellagra. B) strokes. C) cancer. D) scurvy.

Answer: D

Explanation: A)
B)
C)
D)

37) Which of the following indicates that a nutrition website may not be a reliable source of 37) _____
information?
A) website address with a ".com" ending
B) website address with a ".gov" ending
C) recently updated website
D) list of registered dietitians who contribute to the website

Answer: A

Explanation: A)
B)
C)
D)

38) The building blocks of proteins are called 38) _____
A) saccharides. B) nitrogen fragments.
C) fatty acids. D) amino acids.

Answer: D

Explanation: A)
B)
C)
D)

39) Lauren's friend has recommended that she take a vitamin C supplement before undergoing oral surgery. Lauren is concerned about consuming too much of the supplement. Which of the following nutrient standards would assist Lauren in determining the highest amount of the supplement that would be safe for her to consume? 39) _____

- A) Tolerable Upper Intake Level (UL)
- B) Estimated Average Requirement (EAR)
- C) Recommended Dietary Allowance (RDA)
- D) Acceptable Macronutrient Distribution Range (AMDR)

Answer: A

Explanation: A)
B)
C)
D)

40) Proteins are NOT found in 40) _____
A) dairy products. B) water.
C) meats, fish, and poultry. D) seeds, nuts, and legumes.

Answer: B

Explanation: A)
B)
C)
D)

41) Which of the following BEST describes minerals? 41) _____
A) inorganic micronutrients found in a variety of foods
B) nutrients that are needed in large amounts by the body
C) micronutrients that are easily destroyed by heat and light
D) micronutrients that are broken down easily during digestion

Answer: A

Explanation: A)
B)
C)
D)

42) The chemicals found in foods that are critical to human growth and function are called 42) _____
A) antibodies. B) nutrients. C) carcinogens. D) bacteria.

Answer: B

Explanation: A)
B)
C)
D)

- 43) What is the leading federal agency in the United States that protects human health and safety? 43) _____
- A) American Dietetic Association (ADA)
 - B) National Institutes of Health (NIH)
 - C) Centers for Disease Control and Prevention (CDC)
 - D) United States Department of Agriculture (USDA)

Answer: C

- Explanation: A)
B)
C)
D)

- 44) Which statement is FALSE concerning the field of nutrition? 44) _____
- A) Nutrition is the study of how food nourishes the body.
 - B) Nutrition involves studying the factors that influence eating patterns.
 - C) Nutrition is an ancient science that dates back to the fourteenth century.
 - D) Nutrition encompasses how we consume, digest, absorb, and store food.

Answer: C

- Explanation: A)
B)
C)
D)

- 45) Your grandmother has recently been diagnosed with type 2 diabetes. Which of the following professionals is MOST likely to be qualified to offer your grandmother assistance in planning her diabetic diet? 45) _____
- A) nutritionist
 - B) PhD in exercise science
 - C) medical doctor (MD)
 - D) registered dietitian (RD)

Answer: D

- Explanation: A)
B)
C)
D)

- 46) A slice of pumpkin bread contains 5 grams of fat, 40 grams of carbohydrate, and 5 grams of protein. What percent of the bread's Calories are from fat? 46) _____
- A) 75%
 - B) 10%
 - C) 40%
 - D) 20%

Answer: D

- Explanation: A)
B)
C)
D)

47) Dr. Sullivan is conducting a clinical trial to determine if vitamin Z can improve test performance of students in an introductory college nutrition course. Dr. Sullivan puts all the student names in a hat and draws names to determine if they will be placed in the control or the experimental group. The experimental group receives a capsule of vitamin Z and the control group a "sugar pill" that tastes and looks identical to the vitamin Z capsule. Neither Dr. Sullivan nor the participants knows who is receiving which treatment. This experiment is BEST described as 47) _____

- A) double-blind, random selection, placebo-controlled.
- B) single-blind, random selection, placebo-controlled.
- C) double-blind, placebo-controlled.
- D) single-blind, random selection.

Answer: A

Explanation: A)
B)
C)
D)

48) An important source of energy for muscles during times of rest and low-intensity exercise is 48) _____

- A) fat.
- B) water.
- C) protein.
- D) vitamins.

Answer: A

Explanation: A)
B)
C)
D)

49) Vitamin C and the B vitamins are termed 49) _____

- A) fat-soluble vitamins.
- B) water-soluble vitamins.
- C) trace vitamins.
- D) nonessential vitamins.

Answer: B

Explanation: A)
B)
C)
D)

50) Which of the following is the primary link between poor nutrition and higher mortality rates? 50) _____

- A) Alzheimer's disease
- B) obesity
- C) cancer
- D) iron-deficiency anemia

Answer: B

Explanation: A)
B)
C)
D)

51) The primary source of fuel for the body is 51) _____

- A) vitamins and minerals.
- B) carbohydrates.
- C) proteins.
- D) fats and oils.

Answer: B

Explanation: A)
B)
C)
D)

- 52) Which of the following nutrients is organic? 52) _____
 A) iron B) protein C) water D) sodium
 Answer: B
 Explanation: A)
 B)
 C)
 D)
- 53) A blogger has written a post about the benefits of an artificial sweetener for weight loss. Which of the following would be the best evidence to support these claims? 53) _____
 A) testimonials from people who have used the sweetener
 B) conclusions from a research study funded by the manufacturer of the sweetener
 C) conclusions from one scientific study
 D) research published in a peer-reviewed journal
 Answer: D
 Explanation: A)
 B)
 C)
 D)
- 54) A hypothesis or group of related hypotheses that have been confirmed through repeated scientific experiments is known as a(n) 54) _____
 A) fact. B) theory. C) phenomenon. D) experiment.
 Answer: B
 Explanation: A)
 B)
 C)
 D)
- 55) For dinner, Carol consumes 250 grams of carbohydrate, 50 grams of protein, and 30 grams of fat. In addition, Carol decides that she wants a glass of wine with her meal. If she drinks one glass of wine containing 10 grams of alcohol, how many total kilocalories does she consume in this meal? 55) _____
 A) 340 kilocalories B) 1,806 kilocalories
 C) 2,820 kilocalories D) 1,540 kilocalories
 Answer: D
 Explanation: A)
 B)
 C)
 D)
- 56) Which of the following is an example of disease that is directly caused by a nutritional deficiency? 56) _____
 A) type 2 diabetes B) heart disease C) pellagra D) cancer
 Answer: C
 Explanation: A)
 B)
 C)
 D)

57) What is the primary source of fuel for the brain? 57) _____
A) vitamins B) fats C) proteins D) carbohydrates
Answer: D
Explanation: A)
B)
C)
D)

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

58) A beverage that contains 20 grams of alcohol mixed with a diet soda has approximately 140 kilocalories. 58) _____
Answer: True False
Explanation:

59) Protein's primary role is to provide energy for the body. 59) _____
Answer: True False
Explanation:

60) Poor nutrition is strongly associated with three chronic diseases that fall within the group of top ten causes of death in the United States. 60) _____
Answer: True False
Explanation:

61) The earliest discoveries in the field of nutrition focused on nutritional deficiencies and illness. 61) _____
Answer: True False
Explanation:

62) Minerals maintain their chemical structure and are not broken down during digestion. 62) _____
Answer: True False
Explanation:

63) For an experiment to be consistent with the principles of the scientific method, it must be repeatable. 63) _____
Answer: True False
Explanation:

64) "Wellness" is a multidimensional process that includes one's physical, emotional, social, occupational, and spiritual health. 64) _____
Answer: True False
Explanation:

65) The macronutrients include carbohydrates, lipids, and proteins. 65) _____
Answer: True False
Explanation:

66) A registered dietitian is a health professional who has earned at least a bachelor's degree, has completed supervised clinical training, and has successfully completed a national dietetics exam. 66) _____
Answer: True False
Explanation:

- 67) Because they are needed in relatively large quantities, vitamins and minerals are considered macronutrients. 67) _____
Answer: True False
Explanation:
- 68) The Dietary Reference Intakes (DRIs) are dietary standards that should be applied only to healthy individuals. 68) _____
Answer: True False
Explanation:
- 69) Nutrigenomics is an ancient specialty area of nutritional research. 69) _____
Answer: True False
Explanation:
- 70) The term nutritionist has no precise definition or laws regulating it. 70) _____
Answer: True False
Explanation:
- 71) Vitamins provide 4 kilocalories per gram. 71) _____
Answer: True False
Explanation:
- 72) The energy derived from food is expressed in units called kilocalories. 72) _____
Answer: True False
Explanation:
- 73) Because water does not provide any Calories to the body, scientists do not consider it a nutrient. 73) _____
Answer: True False
Explanation:
- 74) A double-blind experiment is one in which neither the researchers nor participants know which group is assigned to which treatment. 74) _____
Answer: True False
Explanation:
- 75) Macronutrients are nutrients that contain inorganic components. 75) _____
Answer: True False
Explanation:
- 76) In the second half of the twentieth century, nutrition researchers failed to find a link between nutrition and the development of chronic diseases. 76) _____
Answer: True False
Explanation:
- 77) Cryogenics is a new area of research that seeks to uncover the links between our genes, our environment, and our diet. 77) _____
Answer: True False
Explanation:

78) The National Institutes of Health (NIH) plays a limited role in researching nutrition-related issues. 78) _____

Answer: True False

Explanation:

79) A placebo is the misrepresentation of a product, program, or service for financial gain. 79) _____

Answer: True False

Explanation:

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

80) Describe how nutrition and physical activity influence wellness.

Answer: Answers will vary.

81) The Dietary Reference Intakes (DRIs) for most nutrients consist of four separate values: Estimated Average Requirement (EAR), Recommended Dietary Allowance (RDA), Adequate Intake (AI), and Tolerable Upper Intake Level (UL). Explain what each of these values represents.

Answer: Answers will vary.

82) What are the four goals of the Healthy People Plan 2020? What specific nutrition and physical activity goals are included?

Answer: Answers will vary.

83) List the primary classes of nutrients. For each class of nutrients, note whether it is organic or inorganic and how many kilocalories per gram it provides, if any.

Answer: Answers will vary.

84) Nutrition professionals debate whether or not consumers should be advised to stop eating "junk food" and other "bad" foods. Summarize the arguments on both sides of the debate.

Answer: Answers will vary.

Answer Key
Testname: C1

- 1) D
- 2) C
- 3) A
- 4) A
- 5) B
- 6) B
- 7) A
- 8) C
- 9) C
- 10) C
- 11) B
- 12) B
- 13) C
- 14) D
- 15) B
- 16) B
- 17) B
- 18) D
- 19) D
- 20) B
- 21) B
- 22) A
- 23) B
- 24) C
- 25) D
- 26) C
- 27) A
- 28) B
- 29) B
- 30) C
- 31) C
- 32) D
- 33) C
- 34) C
- 35) B
- 36) D
- 37) A
- 38) D
- 39) A
- 40) B
- 41) A
- 42) B
- 43) C
- 44) C
- 45) D
- 46) D
- 47) A
- 48) A
- 49) B
- 50) B

Answer Key

Testname: C1

- 51) B
- 52) B
- 53) D
- 54) B
- 55) D
- 56) C
- 57) D
- 58) TRUE
- 59) FALSE
- 60) TRUE
- 61) TRUE
- 62) TRUE
- 63) TRUE
- 64) TRUE
- 65) TRUE
- 66) TRUE
- 67) FALSE
- 68) TRUE
- 69) FALSE
- 70) TRUE
- 71) FALSE
- 72) TRUE
- 73) FALSE
- 74) TRUE
- 75) FALSE
- 76) FALSE
- 77) FALSE
- 78) FALSE
- 79) FALSE
- 80) Answers will vary.
- 81) Answers will vary.
- 82) Answers will vary.
- 83) Answers will vary.
- 84) Answers will vary.