Student name:\_\_\_\_\_\_\_\_\_\_

**1)** Which of the following is an example of a phytochemical?

A) Carotenoids   
 B) Cholesterol  
 C) Fiber  
 D) Enzymes

**2)** Which of the following is true about the energy content of nutrients?

A) Lipids supply 7 kcal per gram.   
 B) Carbohydrates and proteins supply 4 kcal per gram.  
 C) Alcohol supplies 9 kcal per gram.  
 D) Lipids and alcohol supply 9 kcal per gram.

**3)** Where is the chief site of alcohol metabolism?

A) Brain   
 B) Stomach  
 C) Liver  
 D) Kidneys

**4)** The Nurses' Health Study includes more than 280,000 participants. When participants enrolled in the study, they agreed to have their lifestyle behaviors and health parameters assessed repeatedly over the coming years so that researchers could explore relationships between lifestyle and health risks. The Nurses' Health Study is a \_\_\_\_\_\_ cohort study.

A) prospective   
 B) retrospective

**5)** According to the Food and Nutrition Board (FNB) of the National Academy of Sciences, \_\_\_\_\_\_ of caloriesshould come from fat.

A) 20% to 35%   
 B) 45% to 65%  
 C) 10% to 35%

**6)** According to the Food and Nutrition Board (FNB) of the National Academy of Sciences, \_\_\_\_\_\_ of caloriesshould come from carbohydrates.

A) 20% to 35%   
 B) 45% to 65%  
 C) 10% to 35%

**7)** Over the past 40 years, rates of \_\_\_\_\_\_ have declined among American adults.

A) deaths of cardiovascular disease   
 B) cancer screenings  
 C) obesity  
 D) diabetes

**8)** Which of the following is a characteristic of vitamins?

A) Provide energy   
 B) Become structural components of the body  
 C) Enable chemical processes in the body  
 D) Made in sufficient quantities by the body

**9)** A person with a deficiency of alcohol dehydrogenase would

A) become intoxicated at low levels of alcohol intake.   
 B) have a high tolerance for alcohol.  
 C) be able to pass a breathalyzer test even with a blood alcohol concentration of 0.08 or higher.  
 D) feel ill due to an accumulation of acetaldehyde in the blood.

**10)** A meal consisting of a cheeseburger, large fries, and a chocolate shake provides a total of 1120 kcal. If 40% of total kcal in this meal come from fat, how many grams of fat are in this meal?

A) 64 grams   
 B) 112 grams  
 C) 448 grams  
 D) 50 grams

**11)** The main function of carbohydrates is to

A) provide energy.   
 B) promote growth and development.  
 C) regulate body processes.  
 D) prevent cancer.

**12)** A \_\_\_\_\_\_ is generally a fake medicine used to disguise the identify of the treatments in an experiment.

A) placebo   
 B) control  
 C) case  
 D) hypothesis

**13)** Carbohydrates provide \_\_\_\_\_\_ kcal per gram.

A) 4   
 B) 7  
 C) 9  
 D) 0

**14)** In the United States, approximately \_\_\_\_\_\_ of adults are overweight or obese.

A) one-quarter   
 B) one-third  
 C) one-half  
 D) two-thirds

**15)** Which of the following nutrients provide no calories?

A) Alcohol   
 B) Proteins  
 C) Carbohydrates  
 D) Vitamins

**16)** Studies indicate an association between TV advertising of foods and drinks and \_\_\_\_\_, especially in the United States.

A) dollars spent at restaurants   
 B) purchase of more nutritious products from grocery stores  
 C) the prevalence ofchildhood obesity  
 D) the number of mealseaten at home

**17)** Which of the following is the *smallest* unit of measurement?

A) Centigram   
 B) Milligram  
 C) Microgram  
 D) Kilogram

**18)** Penelope tracked her food and beverage intake for three days using NutritionCalc Plus. Her analysis showed an average intake of 1760 kcal and 42 grams of fat per day. According to her data, her usual diet provides approximately

A) 21% of kcal from fat.   
 B) 2% of kcal from fat.  
 C) 10% of kcal from fat.  
 D) 17% of kcal from fat.

**19)** The most rigorous type of controlled experiment is a

A) Meta-analysis   
 B) Randomized controlled trial  
 C) Cohort study  
 D) Case-control study

**20)** To reduce their risk formany chronic diseases, Americans should limit their intakes of

A) saturated fats.   
 B) whole grains.  
 C) phytochemicals.  
 D) carbonated water.

**21)** Which of the following trends has a negative effect on American food habits?

A) More offerings of chicken and fish in restaurants as alternatives to beef   
 B) Social changes that are leading to a general time shortage for many of us  
 C) The variety of new, low-fat products in the grocery store  
 D) Widespread availability of information on the nutritional content of fast foods

**22)** Which of the following is the *largest* unit of measurement?

A) Centigram   
 B) Milligram  
 C) Microgram  
 D) Kilogram

**23)** Which of the following is true about the North American dietary pattern?

A) Most of our protein comes from plant sources.   
 B) Approximately half of our carbohydrates come from simple sugars.  
 C) Most of our fats come from plant sources.  
 D) Our dietary fiber intake is excessive.

**24)** The essential nutrients

A) must be consumed at every meal.   
 B) are required for infants but not adults.  
 C) can be made in the body when they are needed.  
 D) cannot be made by the body and therefore must be consumed to maintain health.

**25)** According to surveys from the United States Department of Agriculture, what is the most commonly consumed vegetable in the United States?

A) Tomatoes   
 B) Potatoes  
 C) Lettuce  
 D) Corn

**26)** Pat purchases a 2-liter bottle of root beer. This would be approximately

A) 2 quarts.   
 B) 4 cups.  
 C) 2 gallons.  
 D) 2 pints.

**27)** What substances, present in fruits and vegetables, provide significant health benefits such as reducing the risk of cancer?

A) Phytochemicals   
 B) Beta blockers  
 C) Deoxidizers  
 D) Free radicals

**28)** A serving of breakfast cereal provides 160 total calories and 8 grams of added sugars. Added sugars provide \_\_\_\_\_\_ of total kcal in this breakfast cereal.

A) 45%   
 B) 20%  
 C) 5%  
 D) 35%

**29)** The disease characterized by fatty infiltration of the liver and replacement of functioning liver cells with fibrous connective tissue is known as

A) cirrhosis.   
 B) liver cancer.  
 C) hepatitis.  
 D) Crohn's disease.

**30)** Of all the alcohol sources, \_\_\_\_\_\_ often is singled out as the best choice because of the added bonus of the many phytochemicals present.

A) red wine   
 B) wine coolers  
 C) light beer  
 D) hard cider

**31)** According to the Food and Health Survey, what is the leading factor that influences food purchases among American consumers?

A) Healthfulness   
 B) Convenience  
 C) Price  
 D) Taste

**32)** Vitamins and minerals \_\_\_\_\_\_ be broken down to provide energy.

A) cannot   
 B) can

**33)** An 80-proof alcoholic beverage contains \_\_\_\_\_\_ percent alcohol.

A) 20   
 B) 40  
 C) 80  
 D) 100

**34)** Fiber and starch belong to the class of nutrients known as

A) carbohydrates.   
 B) protein.  
 C) lipids.  
 D) minerals.

**35)** Cancer is a group of diseases characterized by

A) high blood sugar.   
 B) uncontrolled cell growth.  
 C) high blood pressure.  
 D) high levels of blood lipids.

**36)** Which class of nutrients comprises approximately 60% of body weight?

A) Water   
 B) Protein  
 C) Carbohydrate  
 D) Minerals

**37)** A recipe calls for 140 grams of chicken breast. This is equivalent to \_\_\_\_\_\_ ounces of chicken breast.

A) 5   
 B) 3920  
 C) 8.75  
 D) 1.4

**38)** A kilocalorie is a measure of

A) heat energy.   
 B) fat in food.  
 C) nutrients in food.  
 D) sugar and fat in food.

**39)** Which of the following is an essentialnutrient?

A) Alcohol   
 B) Carbohydrates  
 C) Phytochemicals  
 D) Zoochemicals

**40)** According to the Food and Nutrition Board (FNB) of the National Academy of Sciences, \_\_\_\_\_\_ of caloriesshould come from protein.

A) 20% to 35%   
 B) 45% to 65%  
 C) 10% to 35%

**41)** Which of the following are reasons older adults are more susceptible to the damaging effects of alcohol?

A) Older adults tend to have lower lean body mass and lower body water content.   
 B) The rate of alcohol metabolism decreases with age.  
 C) Alcohol can interact with medications in the body.  
 D) All of these choices are correct.

**42)** An overarching goal of *Healthy People 2030* is to

A) help people live free of preventable disease, disability, injury, and premature death.   
 B) implement a universal health care system.  
 C) set standards for nutrient intakes in the United States.  
 D) develop policies that promote physical activity among Americans of all ages.

**43)** On average, Americans consume approximately \_\_\_\_\_\_% of total calories as fat.

A) 34   
 B) 22  
 C) 28  
 D) 55

**44)** One cup of chocolate milk contains 15 grams of carbohydrates, 8 grams of fat, and 8 grams of protein. This cup of chocolate milk supplies \_\_\_\_\_\_ kcal.

A) 164   
 B) 124  
 C) 279  
 D) 31

**45)** Per gram, which of the following provides the most energy?

A) Carbohydrates   
 B) Proteins  
 C) Alcohol  
 D) Fats

**46)** Water is one of the six classes of essential nutrients.

⊚ true  
 ⊚ false

**47)** Over the past several decades, the consumption of fluid milk in the United States has

A) increased.   
 B) decreased.  
 C) remained the same.

**48)** Which of the following accurately describes the term hypothesis?

A) A test made to examine the validity of an educated guess   
 B) An educated guess by a scientist to explain a phenomenon  
 C) A study of how disease rates vary among different population groups  
 D) An explanation for a phenomenon that has numerous lines of evidence to support it

**49)** Which of the following terms describes *physiological* (internal) influences that encourage us to find and eat food?

A) Appetite   
 B) Hunger  
 C) Satiety  
 D) Saturation

**50)** When researchers complete a research study and prepare a manuscript describing their work for publication, they seek out an evaluation of work by professionals of similar competence to themselves. This helps to ensure that the work is objective and of high quality. This evaluation process is known as

A) compentency check.   
 B) performance review.  
 C) independent critique.  
 D) peer review.

**51)** Hypertension is the medical term that refers to

A) high blood pressure.   
 B) high blood sugar.  
 C) high blood lipids.  
 D) high muscle tone.

**52)** The *Dietary Guidelines* recommends that adults of legal drinking age can choose not to drink, or to drink in moderation by limiting intake to \_\_\_\_\_ drink(s) or less in a day for men or \_\_\_\_\_ drink(s) or less in a day for women, on days when alcohol is consumed.

A) 1; 0   
 B) 2; 1  
 C) 3; 2  
 D) 4; 3

**53)** In the \_\_\_\_\_ experimental design, neither the participants nor the researchers are aware of each participant’s assignment (test or placebo) or the outcome of the study until it is completed.

A) uncontrolled   
 B) case-control  
 C) double-blind  
 D) single-blind

**54)** Which of the following terms describes *psychological* (external) influences that encourage us to find and eat food?

A) Appetite   
 B) Hunger  
 C) Satiety  
 D) Saturation

**55)** "Nutrition" is

A) the science that links foods to health and disease.   
 B) the study of diet and disease patterns among various populations.  
 C) the use of dietary supplements to cure diseases.  
 D) the practice of eating only healthy foods.

**56)** Which of the following most accurately describes the term epidemiology?

A) A test made to examine the validity of an educated guess   
 B) An educated guess by a scientist to explain a phenomenon  
 C) A study of how disease rates vary among different population groups  
 D) An explanation for a phenomenon that has numerous lines of evidence to support it

**57)** All of the essential nutrients function as regulators of body processes.

⊚ true  
 ⊚ false

**58)** Which of the following is the leading nutrition-related cause of death in the United States?

A) Heart disease   
 B) Cancer  
 C) Diabetes  
 D) Pneumonia

**59)** Which of the following is a function of water?

A) Provides energy   
 B) Transports nutrients and wastes  
 C) Structural component of bone  
 D) Prevents oxidative damage to cell membranes

**60)** Protein

A) is a major component of body structures.   
 B) supplies 9 kcal per gram.  
 C) is the body's main source of fuel during physical activity.  
 D) functions as a solvent.

**61)** A serving of ranch salad dressing has 5 grams of fat. How many calories come from fat in 1 serving of ranch salad dressing?

A) 5 kcal   
 B) 20 kcal  
 C) 25 kcal  
 D) 45 kcal

**62)** A warning sign or symptom of alcohol poisoning is

A) semiconsciousness or unconsciousness.   
 B) rapid breathing.  
 C) skin that is hot to the touch.  
 D) insomnia.

**63)** Which of the following terms refers to a state in which a person is satisfied after eating and there is no further desire to eat?

A) Satiety   
 B) Hunger  
 C) Appetite  
 D) Saturation

**64)** Which of the following are substances in plant foods that *cannot* be digested in the stomach or small intestine?

A) Starch   
 B) Disaccharides  
 C) Dietary fiber  
 D) Simple sugars

**65)** Diabetes is a group of diseases characterized by

A) high blood sugar.   
 B) uncontrolled cell growth.  
 C) high blood pressure.  
 D) high levels of blood lipids.

**66)** A statistical examination that pools the data from multiple research studies to determine overall trends is called a

A) meta-analysis.   
 B) randomized controlled trial.  
 C) cohort study.  
 D) peer review.

**67)** A nutrition-related objective from *Healthy People 2030* is to

A) reduce the proportion of households that experience food insecurity.   
 B) increase the consumption of added sugars.  
 C) increase the consumption of sodium.  
 D) reduce the proportion of adults who are at a healthy weight.

**68)** Which of the following individuals is engaging in binge drinking?

A) A woman who drinks two 12-fl oz cans of beer while eating steamed crabs.   
 B) A man who drinks four shots of whiskey at a bachelor party.  
 C) A woman who drinks three 5-fl oz glasses of wine at a cocktail party.  
 D) A man who drinks a six-pack of 12-fl oz bottles of beer at a cookout.

**69)** Minerals can

A) provide energy.   
 B) be destroyed during cooking.  
 C) be degraded by the body.  
 D) become part of body structures.

**70)** Which of the following is characteristic of lipids?

A) Supplies 4 kcal per gram   
 B) Adds structural strength to bones and muscles  
 C) Supplies a concentrated form of fuel for the body  
 D) Adds sweetness to food

**71)** Studies suggestthat about \_\_\_\_\_\_ of a person’s risk for developing alcohol use disorders isgenetic.

A) 10%   
 B) 25%  
 C) 50%  
 D) 95%

**72)** Osteoporosis is a condition of compromised \_\_\_\_\_\_ health.

A) cardiovascular   
 B) bone  
 C) kidney  
 D) brain

**73)** Which of the following nutrients can be broken down by human enzymes to yield energy?

A) Lipids   
 B) Fiber  
 C) Vitamins  
 D) Minerals

**74)** Which of the following includes all energy-yielding substances?

A) Carbohydrates, lipids, protein, water   
 B) Vitamins, minerals, carbohydrates, lipids, protein  
 C) Alcohol, carbohydrates, lipids, protein  
 D) Carbohydrates, lipids, protein, vitamins, minerals, water

**Answer Key**Test name: chapter 1

1) A

2) B

3) C

4) A

5) A

6) B

7) A

8) C

9) A

10) D

1120 kcal× 0.40 = 448 kcal from fat  
 448 kcal from fat ÷ 9 kcal/gram = 49.8 grams of fat

11) A

12) A

13) A

14) D

15) D

16) C

17) C

18) A

42 grams of fat × 9 kcal/g = 378 kcal from fat  
 378 kcal from fat ÷ 1760 total kcal = 0.21 × 100 = 21% of total kcal from fat

19) B

20) A

21) B

22) D

23) B

24) D

25) B

26) A

1 quart is approximately equal to 1 liter (0.946 L).

27) A

28) B

8 grams of added sugars × 4 kcal/gram = 32 kcal from added sugars  
 32 kcal from added sugars ÷ 160 total kcal = 0.20 × 100 = 20% of total kcal from added sugars

29) A

30) A

31) D

32) A

33) B

34) A

35) B

36) A

37) A

140 g ÷ 28 g/oz = 5 oz

38) A

39) B

40) C

41) D

42) A

43) A

44) A

15 g carbohydrates x 4 kcal/g = 60 kcal from carbohydrates  
 8 g protein x 4 kcal/g = 32 kcal from protein  
 8 g fat x 9 kcal/g = 72 kcal from fat  
 60 + 32 + 72 = 164 kcal

45) D

46) TRUE

47) B

48) B

49) B

50) D

51) A

52) B

53) C

54) A

55) A

56) C

57) FALSE

58) A

59) B

60) A

61) D

5 grams of fat× 9 kcal/g = 45 kcal from fat.

62) A

63) A

64) C

65) A

66) A

67) A

68) D

69) D

70) C

71) C

72) B

73) A

74) C