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

**1)** The science of food; the nutrients and substances therein; and their action, interaction, and balance in relation to health and disease is a definition of \_\_\_\_\_\_\_\_.

A) life   
 B) energy metabolism  
 C) nutrition  
 D) food science

**2)** The leading cause of nutrition-related death in the United States is \_\_\_\_\_\_\_\_.

A) heart disease   
 B) homicide  
 C) suicide  
 D) diabetes

**3)** Nutrients causing some signs of poor health when consumed in less than adequate amounts are called \_\_\_\_\_\_\_\_.

A) essential nutrients   
 B) nonessential nutrients  
 C) nutritional supplements  
 D) trace nutrients

**4)** Energy-yielding nutrients include \_\_\_\_\_\_\_\_.

A) vitamins, minerals, and water   
 B) carbohydrates, proteins, and fats  
 C) trace minerals and fat-soluble vitamins  
 D) iron, vitamin C, and potassium

**5)** Sugars, starches, and dietary fibers are examples of \_\_\_\_\_\_\_\_.

A) proteins   
 B) vitamins  
 C) carbohydrates  
 D) minerals

**6)** Which of the following are sources of carbohydrates?

A) Grains   
 B) Fruits  
 C) Vegetables  
 D) All of these aresources of carbohydrates.

**7)** Which is NOT a complex carbohydrate?

A) Glycogen   
 B) Glucose  
 C) Fiber  
 D) Starch

**8)** Macronutrients are needed in \_\_\_\_\_\_\_ quantities in the diet, as compared to micronutrients.

A) larger   
 B) smaller  
 C) similar

**9)** Carbohydrates can be described as \_\_\_\_\_\_\_\_.

A) sugars, starches, and fibers   
 B) compounds needed in tiny amounts  
 C) made of building blocks called amino acids  
 D) inorganic molecules regulating chemical reactions and comprising part of some body structures

**10)** An important function of carbohydrates is to \_\_\_\_\_\_\_\_.

A) supply energy   
 B) provide amino acids  
 C) absorb and transport vitamins  
 D) promote growth and tissue repair

**11)** Which of the following are complex carbohydrates not broken down by digestive processes:

A) glycogen   
 B) enzymes  
 C) fiber  
 D) starches

**12)** Glucose is classified as a \_\_\_\_\_\_\_\_.

A) simple sugar   
 B) dietary starch  
 C) polysaccharide  
 D) dietary fiber

**13)** A triglyceride is an example of a \_\_\_\_\_\_\_\_.

A) protein   
 B) carbohydrate  
 C) lipid  
 D) vitamin

**14)** Lipids can be described as \_\_\_\_\_\_\_\_.

A) sugars, starches, and fibers   
 B) compounds needed in minute amounts  
 C) mostly fats and oils  
 D) made of building blocks called amino acids

**15)** The major form of lipid in foods is a(n) \_\_\_\_\_\_\_\_.

A) triglyceride   
 B) amino acid  
 C) fatty acid  
 D) glycerol

**16)** The main structural material of the body is \_\_\_\_\_\_\_\_.

A) lipid   
 B) carbohydrate  
 C) protein  
 D) minerals

**17)** Proteins are formed by linking together \_\_\_\_\_\_\_\_.

A) fatty acids   
 B) amino acids  
 C) glycerol  
 D) chlorine compounds

**18)** Proteins can be described as \_\_\_\_\_\_\_\_.

A) sugars, starches, and fibers   
 B) mostly fats and oils  
 C) made of building blocks called amino acids  
 D) inorganic molecules regulating chemical reactions and comprising part of some body structures

**19)** The main function of vitamins is to \_\_\_\_\_\_\_\_.

A) provide the main structural building blocks of the body   
 B) provide essential fatty acids  
 C) enable chemical reactions in the body to occur  
 D) improve digestion processes

**20)** Examples of water-soluble vitamins include \_\_\_\_\_\_\_\_.

A) vitamins A and E   
 B) vitamins D and K  
 C) vitamin C and the B-vitamins  
 D) calcium and iron

**21)** Which of the following is a trace mineral?

A) Sodium   
 B) Calcium  
 C) Iron  
 D) Potassium

**22)** Minerals are needed for \_\_\_\_\_\_\_\_.

A) skeletal system   
 B) functioning of the nervous system  
 C) water balance  
 D) All of these choices are correct.  
 E) None of these choices are correct.

**23)** Which of the following is a vital component of the body, acting as a solvent, lubricant, temperature regulator, and transport medium:

A) fat   
 B) carbohydrate  
 C) protein  
 D) water

**24)** Energy obtained by the body from food is used to \_\_\_\_\_\_\_\_.

A) build new compounds   
 B) move the muscles  
 C) transmit nerve impulses  
 D) balance ions within cells  
 E) perform all of these functions

**25)** Phytochemicals are \_\_\_\_\_\_\_\_.

A) available in vitamin and mineral supplements only   
 B) essential parts of a diet  
 C) chemicals found in plants and animal products  
 D) plant substances that provide health benefits

**26)** Which of the following is the term for a food that provides health benefits beyond the vitamins and minerals it contains?

A) Functional food   
 B) Formative food  
 C) Phytonutrient  
 D) Probiotic

**27)** "The amount of heat required to raise the temperature of 1000 grams of water one degree Celsius" is the definition of \_\_\_\_\_\_\_\_.

A) energy   
 B) kilojoule  
 C) kilocalorie  
 D) physiological fuel value

**28)** In North America, the main sources of protein are \_\_\_\_\_\_\_\_.

A) rice, beans, and corn   
 B) meat and pasta  
 C) meat, seafood, eggs, and dairy products  
 D) pasta, breads, and potatoes

**29)** About 50% of the American dietary intake of carbohydrate is derived from \_\_\_\_\_\_\_\_.

A) animal sources   
 B) dietary fats and oils  
 C) dietary starches  
 D) dietary fiber

**30)** Most North Americans could improve their diets by \_\_\_\_\_\_\_\_.

A) eating more foods rich in vitamins A and E   
 B) increasing sodium intake  
 C) lowering iron and calcium intake  
 D) eating fewer whole-grain breads

**31)** The psychological desire to eat certain foods and reject others is defined by:

A) hunger   
 B) the physical needfor food  
 C) appetite  
 D) culture

**32)** Many factors influence food choices. Which factor relates to the knowledge, beliefs, religion, and traditions shared by a group of people?

A) Food marketing   
 B) Lifestyle  
 C) Education and occupation  
 D) Culture

**33)** Which factor(s) affect food choice?

A) Lifestyle   
 B) Food cost  
 C) Food marketing  
 D) None of these factors affect food choice.  
 E) All of these factors affect food choice

**34)** When body systems are operating normally and nutrient stores are being maintained, an individual is said to be \_\_\_\_\_\_\_\_.

A) in desirable nutritional status   
 B) in a state of overnutrition  
 C) experiencing undernutrition  
 D) experiencing malnutrition

**35)** Nutrition-related objectives of Healthy People include \_\_\_\_\_\_\_\_.

A) increasing fat intake, vitamin A intake, and reducingobesity   
 B) reducing adult obesity, increasing calcium intake, and increasing sodium intake  
 C) increasing vegetable intake, increasing calcium intake, and reducing childhood obesity  
 D) lowering fat intake, increasing protein intake, and increasing blood cholesterol

**36)** The main objective of Healthy People 2030 is to help Americans \_\_\_\_\_\_\_\_.

A) attain healthy, thriving lives and well being, free frompreventable disease disability, injury, and premature death.   
 B) lose weight and increase vegetable intake  
 C) by promoting intake of minerals among those age 2 years and older  
 D) increase intake of fruits, vegetables, and whole grains

**37)** An environmental assessment includes studying a person's \_\_\_\_\_\_\_\_.

A) education and economic background   
 B) family medical history  
 C) usual dietary intake  
 D) medication use

**38)** An evaluation of nutritional health includes \_\_\_\_\_\_\_\_.

A) anthropometric measurements   
 B) dietary assessment  
 C) biochemical assessment  
 D) medical history  
 E) All of these choices are correct

**39)** \_\_\_\_\_ dictate(s) the types and amounts of nutrients in food that will be transformed and reassembled into body structures and compounds.

A) Essential fats   
 B) Genes  
 C) Energy expenditure  
 D) Dietary choices

**40)** A possible explanation for a natural phenomenon is a \_\_\_\_\_\_\_\_.

A) law   
 B) model  
 C) theory  
 D) hypothesis

**41)** The study of the distribution of disease in human populations is \_\_\_\_\_\_\_\_.

A) epidemiology   
 B) dermatology  
 C) statistics  
 D) biometry

**42)** A study that compares matched individuals with and without a known medical condition is known as a \_\_\_\_\_\_\_\_.

A) double-blind study   
 B) matched study  
 C) case-control study  
 D) control group study

**43)** An inert substance with no biological activity or a fake medicine that is used in controlled experiments is called a \_\_\_\_\_\_\_\_.

A) placebo   
 B) blind substance  
 C) double-blind substance  
 D) controlled substance

**44)** A study that examines changes in health as people move from one country to another is called a \_\_\_\_\_\_\_\_.

A) cohort study   
 B) migrant study  
 C) case-control study  
 D) control group study

**45)** In a double-blind study, who knows which participants are getting the treatment or placebo?

A) Only the researchers   
 B) Only the participants  
 C) Only an independent third party  
 D) Both the researchers and participants

**46)** Which is NOT a characteristic of anessential nutrient?

A) It has a specific biological function.   
 B) Removing it from the diet causes a reduction in biological function.  
 C) Adding it to a deficient diet restores body functions back to normal if it is added before permanent damage occurs.  
 D) The body can create these nutrients on its own.

**47)** Which nutrients regulate body processes?

A) Proteins and carbohydrates   
 B) Carbohydrates, somelipids, and water  
 C) Some lipids, some vitamins, and some minerals.  
 D) All nutrients help regulate body processes.

**48)** Which is true about saturated fats?

A) Saturated fats raise blood cholesterol.   
 B) Saturated fats tend to be solid at room temperature.  
 C) Many animal fats are rich in saturated fats.  
 D) Saturated fatsprovide 9 kilocalories per gram.  
 E) All of thesestatements are true.

**49)** Which is true about essential fatty acids?

A) The body can makethem from nonessential fatty acids.   
 B) They help regulate blood pressure and nerve transmission.  
 C) They are found primarily in deep-fried foods.  
 D) They are linked toincreased risk of heart disease.

**50)** Which element is found in protein, but not in carbohydrates?

A) Nitrogen   
 B) Carbon  
 C) Hydrogen  
 D) Oxygen

**51)** Which nutrients are organic compounds?

A) Water and carbohydrates   
 B) Carbohydrates and protein  
 C) Fats and minerals  
 D) Water and minerals

**52)** Which nutrient is an inorganic substance?

A) Vitamin A   
 B) Zinc  
 C) Protein  
 D) Thiamin

**53)** Which nutrients do NOT provide energy?

A) Water and carbohydrate   
 B) Minerals and vitamins  
 C) Vitamins and protein  
 D) Water, minerals, and lipids

**54)** Which is NOT true of water?

A) It is a medium for transporting nutrients throughout the body.   
 B) It is an organic substance.  
 C) It is the nutrient needed in the largest quantity.  
 D) It acts as a lubricant in the body.

**55)** A snack bar contains about 17 grams of carbohydrates, 1 gram of fat, and 1 gram of protein. How many kcals does it contain?

A) 19   
 B) 43  
 C) 81  
 D) 210

**56)** One slice of bread contains 18 g carbohydrates, 4 g protein, and 1.5 g fat. Approximately how many kcal are in one slice?

A) 24   
 B) 94  
 C) 100  
 D) 210

**57)** If a total of 2000 kcal were consumed (energy came from 250 grams of carbohydrates, 66 grams of fat, and 102 grams of protein), what percentage of energy comes from carbohydrates, fat, and protein?

A) 30% carbohydrate, 50% fat, and 20% protein   
 B) 50% carbohydrate, 35% fat, and 15% protein  
 C) 20% carbohydrate, 30% fat, and 50% protein  
 D) 50% carbohydrate, 30% fat, and 20% protein

**58)** Undernutrition can lead to \_\_\_\_\_\_\_\_.

A) depleted nutrient stores   
 B) possible slowdown in metabolic processes  
 C) few symptoms in the early stages  
 D) All of these responses are correct.

**59)** An example of anthropometric assessment is \_\_\_\_\_\_\_\_\_.

A) analyzing compounds in the blood   
 B) assessing the ability to walk  
 C) measuring skinfold thickness  
 D) taking a medical history

**60)** Which is a limitation of nutritional assessment?

A) Many signs andsymptoms of nutrient deficiency disease are not very specific.   
 B) Many signs andsymptoms of nutrient deficiency disease take a long time to occur.  
 C) It is hard to linkmany signs and symptoms to dietary intake.  
 D) All of these arelimitations of nutritional assessment.  
 E) None of these are limitations of nutritional assessment.

**61)** Major chronic diseases, such as heart disease, certain cancers, and cirrhosis of the liver, may be related to \_\_\_\_\_\_\_\_.

A) eating a healthy diet   
 B) eating a poor diet  
 C) exercising regularly  
 D) taking nutritional supplements

**62)** A potential health problem associated with high dietary fat intake is \_\_\_\_\_\_\_\_.

A) cataracts   
 B) lung cancer  
 C) colon cancer  
 D) osteoporosis

**63)** A health problem most likely NOT associated with low intake of fruits and vegetables is \_\_\_\_\_\_\_\_.

A) colon cancer   
 B) liver disease  
 C) cataracts  
 D) lung cancer

**64)** What health practices would reduce the risk for chronic diseases?

A) Eating a healthfuldiet   
 B) Not smoking andlimiting alcohol intake  
 C) Limiting stress oradjusting the causes of the stress  
 D) All of these choices are correct.  
 E) None of these choices are correct.

**65)** A person genetically at risk for heart disease could potentially delay the onset of this disease by \_\_\_\_\_\_\_\_.

A) getting regular exercise   
 B) avoiding obesity  
 C) eating a healthy diet  
 D) All of these choicesare correct.  
 E) None of these choices are correct.

**66)** Which of the following is most likely a dependable source for up-to-date, accurate nutrition information?

A) Supplement manufacturer's website   
 B) Registered dietitian/nutritionist  
 C) Health food store manager  
 D) Women's magazine

**67)** The study of how a person's genes interact with nutrients is termed \_\_\_\_\_\_\_\_\_\_\_\_\_.

A) genetic counseling   
 B) nutritional genomics  
 C) genetic metabolomics  
 D) nutritional nucleic acid pool

**68)** For which of the following titles must the individual be college educated and pass a national examination administered by the Academy of Nutrition and Dietetics?

A) Medical doctor   
 B) Registered dietitian/nutritionist  
 C) Certified nutritionist  
 D) Certified nutrition therapist

**69)** Which of the following nutritional assessment would best be used to determine if there is a subclinical deficiency present?

A) Anthropometric assessment   
 B) Clinical assessment  
 C) Environmental assessment  
 D) Biochemical assessment

**70)** How is a placebo group used in an experiment?

A) All subjects are similar.   
 B) All subjects receive a treatment.  
 C) Neither subjects nor researchers know who is receiving treatment.  
 D) One group of subjects receives a treatment and the other group receives a fake treatment.

**71)** A critical evaluation and synthesis of research studies focusing on a specific topic that is useful for health-care providers is a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A) systematic review   
 B) peer-reviewed journal  
 C) hypothesis  
 D) epidemiological study

**72)** Which of the following can be used as a tool to help make informed healthcare decisions:

A) e-Library of Evidence for Nutrition Actions   
 B) USDA Nutrition Evidence Library  
 C) Evidence Analysis Library  
 D) Cochrane Collaboration  
 E) All of the responses are correct

**73)** Which of the following cannot add fat to the body?

A) Alcohol   
 B) Proteins  
 C) Carbohydrates  
 D) Inorganic nutrients

**74)** Which of the following is the least reputable source of a nutrition claim?

A) Paid spokesperson   
 B) Author affiliated with nationally recognized university  
 C) Medical physician  
 D) Registered dietitian

**75)** Which of the follow would be considered the best nutritional advice:

A) Recommendations based on a single study.   
 B) All carbohydrates are “bad”.  
 C) Consume more fruits and vegetables.  
 D) Use a diet pill for quick weight loss and easy results.

**76)** Polysaccharides are also called simple carbohydrates.

⊚ true  
 ⊚ false

**77)** A micronutrient is a substance that cannot be separated into simpler substances by chemical processes.

⊚ true  
 ⊚ false

**78)** The term "oil " refers to lipids that are generally liquid at room temperature.

⊚ true  
 ⊚ false

**79)** Vitamins can be divided into 3 groups: water-soluble, fat-soluble, and alcohol-soluble.

⊚ true  
 ⊚ false

**80)** Water-soluble vitamins are excreted more readily than fat-soluble vitamins.

⊚ true  
 ⊚ false

**81)** Phytochemicals are physiologically active compounds that areconsidered essential nutrients.

⊚ true  
 ⊚ false

**82)** Zoochemicals are physiologically active compounds found in plants.

⊚ true  
 ⊚ false

**83)** A Kilocalorie measures the amount of heat energy.

⊚ true  
 ⊚ false

**84)** A clinical sign of a nutrient deficiency is one that is apparent to a health-care provider, such as aches and pains.

⊚ true  
 ⊚ false

**85)** Overnutrition can lead to excess stores of nutrients.

⊚ true  
 ⊚ false

**86)** People in the United States today are generally more at risk for overnutrition than undernutrition.

⊚ true  
 ⊚ false

**87)** A poor diet is a risk factor for the major chronic diseases seen today.

⊚ true  
 ⊚ false

**88)** In the future, gene therapy may help to treat inherited diseases.

⊚ true  
 ⊚ false

**89)** An animal model is a disease in laboratory animals that closely mimics a human disease.

⊚ true  
 ⊚ false

**90)** In the U.S., dietary supplements are rigorously regulated by the Food and Drug Administration.

⊚ true  
 ⊚ false

**91)** Supplement manufacturers must prove the supplement is safe before they can sell it in the U.S.

⊚ true  
 ⊚ false

**92)** Almost all foods that have fat contain both saturated and unsaturated fats.

⊚ true  
 ⊚ false

**93)** *Trans* fatty acids are most commonly found in deep-fried foods, cookies, crackers, stick margarine, and shortening.

⊚ true  
 ⊚ false

**94)** Cooking is more likely to destroy fat-soluble vitamins than water-soluble vitamins.

⊚ true  
 ⊚ false

**95)** Omega-3 fatty acids are a type of zoochemical provided by fatty fish.

⊚ true  
 ⊚ false

**96)** Clinical signs generally occur in the early stage of nutrient deficiency.

⊚ true  
 ⊚ false

**97)** Family medical history is a major risk factor in the development of many nutrition-related diseases.

⊚ true  
 ⊚ false

**98)** A person genetically predisposed to a diet-related disease can do little to delay the onset of the disease.

⊚ true  
 ⊚ false

**Answer Key**Test name: chapter 1

1) C

2) A

3) A

4) B

5) C

6) D

7) B

8) A

9) A

10) A

11) C

12) A

13) C

14) C

15) A

16) C

17) B

18) C

19) C

20) C

21) C

22) D

23) D

24) E

25) D

26) A

27) C

28) C

29) C

30) A

31) C

32) D

33) E

34) A

35) C

36) A

37) A

38) E

39) B

40) D

41) A

42) C

43) A

44) B

45) C

46) D

47) C

48) E

49) B

50) A

51) B

52) B

53) B

54) B

55) C

56) C

57) D

58) D

59) C

60) D

61) B

62) C

63) B

64) D

65) D

66) B

67) B

68) B

69) D

70) D

71) A

72) E

73) D

74) A

75) C

76) FALSE

77) FALSE

78) TRUE

79) FALSE

80) TRUE

81) FALSE

82) FALSE

83) TRUE

84) TRUE

85) TRUE

86) TRUE

87) TRUE

88) TRUE

89) TRUE

90) FALSE

91) FALSE

92) TRUE

93) TRUE

94) FALSE

95) TRUE

96) FALSE

97) TRUE

98) FALSE