Chapter 1

1) Nutritional care of people in the community is the primary responsibility of the
   a) school nurse, who is located at the closest school in the community.
   b) registered dietitian, who serves as the public health nutritionist.
   c) community volunteer, who has an intense interest in nutrition care.

2) The nutrients that provide energy include
   a) water, vitamins, and carbohydrates.
   b) carbohydrates, fat, and protein.
   c) vitamins, minerals, and fatty acids.
   d) dietary fiber, protein, and vitamins.

3) A bagel that provides 40 g of carbohydrate, 4 g of protein, and 1 g of fat provides
   a) 45 kcal.
   b) 180 kcal.
   c) 185 kcal.
   d) 440 kcal.

4) Diets that are most likely to provide optimal nutrition contain
   a) a variety of foods.
   b) high-quality protein.
   c) limited amounts of fat.
   d) mostly fruits and vegetables.

5) Malnutrition often is caused by
   a) acute illness.
   b) skipping meals.
   c) regular exercise.
   d) prolonged hospitalization.

6) Overnutrition results from
   a) acute illness over a short time.
   b) excess nutrient and energy intake over time.
   c) an inadequate exercise routine.
   d) eating a diet that is not varied in nutrients.

7) Vitamins function as
   a) coenzyme factors.
   b) sources of energy.
   c) regulatory agents.
   d) protein carriers.

8) The basic structural units of protein are
   a) amino acids.
   b) nucleic acids.
   c) monosaccharides.
   d) fatty acids.

9) The basic structural units of carbohydrates are
   a) polysaccharides.
   b) monosaccharides.
   c) starches.
   d) polypeptides.

10) A state of optimal physical, mental, and social well-being is referred to as
    a) metabolism.
    b) nutrition.
    c) health.
    d) health promotion.
11) Human energy is measured in
   a) metabolites.
   b) pounds.
   c) kilograms.
   d) kilocalories.

12) The main storage form of carbohydrates is
   a) glucose.
   b) glycerol.
   c) glycogen.
   d) glucagon.

13) The sum of all chemical changes that take place in the body is called
   a) nutrition.
   b) metabolism.
   c) dietetics.
   d) energy intake.

14) The system of reference values used for assessing and planning diets for healthy populations is called
   a) kilocalories.
   b) Choose My Plate.
   c) Dietary Reference Intakes (DRIs).
   d) basal energy expenditure.

15) Choose My Plate serves as a
   a) nutrition education tool for the public.
   b) reference guide for the hospitalized patient.
   c) summary of the typical American food intake pattern.
   d) guide to physical exercise across the health continuum.

Chapter 2

1) Carbohydrates play a major role in nutrition because they
   a) are easy to digest.
   b) provide a long-term energy store.
   c) do not increase the risk of heart disease.
   d) provide the major source of energy.

2) The carbohydrate form in which glucose is stored in the human body is
   a) starch.
   b) glycerol.
   c) glycogen.
   d) adipose tissue.

3) An example of a high-fiber meal is
   a) bean chili.
   b) macaroni and cheese.
   c) a bagel and orange juice.
   d) a beef and cheese burrito.

4) Wavelike contractions of the muscle fibers of the stomach and intestinal walls are called
   a) spirals.
   b) peristalsis.
   c) constriction.
   d) active transport.

5) The major site or organ in the body for metabolic processing of carbohydrates is the
   a) stomach.
   b) kidney.
   c) brain.
   d) liver.

6) The basic single unit of carbohydrate found in the body is
   a) sucrose.
   b) glucose.
   c) glycogen.
7) The building blocks for all carbohydrates are
   a) amino acids.
   b) monosaccharides.
   c) disaccharides.
   d) glycogen.

8) Sucrose is composed of
   a) glucose and fructose.
   b) glucose and galactose.
   c) glucose and glucose.
   d) glucose and lactose.

9) The organ that cannot function without glucose as an energy source is the
   a) liver.
   b) brain.
   c) kidneys.
   d) muscles.

10) Reasons to include dietary fiber in the diet include
    a) to provide a slowly digested form of energy.
    b) to provide sources of vitamins and minerals.
    c) to help normalize bowel function.
    d) prevention of dental caries.

11) A complex carbohydrate that is not digestible yet is important to the body is
    a) starch.
    b) sucrose.
    c) dietary fiber.
    d) glycogen.

12) The digestion of carbohydrates begins in the
    a) stomach.
    b) small intestine.
    c) mouth.

13) Nonnutritive sweeteners provide
    a) sweetness and energy.
    b) sweetness but no energy.
    c) energy but no sweetness.
    d) no energy and no sweetness.

14) The enzymes in the intestine responsible for digestion of carbohydrates are found specifically in the
    a) musculature.
    b) brush border.
    c) rugae.
    d) serosa.

15) To meet the published Dietary Reference Intakes, the grams of carbohydrate for a 1600 kcal/day diet would be
    a) 225 to 325.
    b) 235 to 255.
    c) 165 to 240.
    d) 180 to 260.

Chapter 3

1) Triglycerides are composed of
   a) three types of fat.
   b) glycerol and fatty acids.
   c) glycerol and amino acids.
   d) saturated and unsaturated fatty acids.

2) Saturated fatty acids are
   a) found only in animal products.
   b) solid at room temperature.
   c) the same as trans-fatty acids.
   d) fatty acids that contain double bonds.
3) An essential fatty acid is one that
   a) must be eaten at every meal.
   b) can be manufactured by the body.
   c) the body cannot manufacture for itself. Correct
   d) must be carefully regulated by the body.

4) When fats are hydrogenated, they become
   a) more solid.
   b) more unsaturated.
   c) less easily digested.
   d) carcinogenic.

5) Foods high in saturated fat include
   a) tortilla chips.
   b) fried fish.
   c) pork sausage.
   d) bean dip.

6) An example of an oil high in monounsaturated fatty acids is
   a) soybean oil.
   b) olive oil.
   c) safflower oil.
   d) lard.

7) The basic building blocks of fat are
   a) peptides and amino acids.
   b) monoglycerides and diglycerides.
   c) glycerol and fatty acids.
   d) saturated and unsaturated fats.

8) The major vehicles for the transport of fats in the bloodstream are
   a) lipoproteins.
   b) polypeptides.
   c) glycerol.
   d) fatty acids.

9) We need some fat in our diet to
   a) provide essential fatty acids. Correct
   b) maintain healthy bones.

10) A food source of cholesterol would be
    a) liver.
    b) legumes.
    c) avocado.
    d) mangos.

11) Trans fat may be found in
    a) apple skin.
    b) avocados.
    c) crackers.
    d) red meat.

12) An example of a food that contains invisible fat is
    a) cheese.
    b) butter.
    c) margarine.
    d) salt pork.

13) Fat digestion occurs mainly in the
    a) stomach.
    b) small intestine.
    c) liver.
    d) pancreas.

14) Bile is important for
    a) digestion of fat to fatty acids and glycerol.
    b) melting solid fats in the diet.
    c) emulsification of dietary fat.
    d) digestion of saturated fat in the diet.

15) An high dietary intake of cholesterol and saturated fat is associated with increased risk for
    a) pancreatic cancer.
    b) atherosclerosis.
    c) renal failure.
    d) diverticulitis.
Chapter 4

1) A protein that contains all indispensable amino acids in the correct proportion and ratio is
   a) perfect.
   b) fully digestible.
   c) complete.
   d) complementary.

2) An example of a body protein is
   a) bile salts.
   b) hemoglobin.
   c) glycogen.
   d) deoxyribonucleic acid (DNA).

3) Protein plays an important role in the body in
   a) body defense.
   b) protecting teeth.
   c) stimulating heartbeats.
   d) insulating internal organs.

4) If nitrogen intake exceeds nitrogen excretion, the condition is called
   a) catabolism.
   b) positive nitrogen balance.
   c) negative nitrogen balance.
   d) dynamic equilibrium.

5) A good example of complementary proteins is
   a) beans and rice.
   b) french fries and ketchup.
   c) oatmeal and honey.
   d) pancakes and orange juice.

6) Protein is composed of building units called
   a) amino acids.
   b) polypeptides.
   c) nucleic acids.
   d) nucleotides.

7) Two amino acids joined together are called a
   a) di-amino acid.

8) The term amino refers to compounds containing
   a) hydrogen.
   b) oxygen.
   c) nitrogen.
   d) carbon.

9) If 2 g of nitrogen is excreted in the urine for every 6.25 g of protein consumed, the body is said to be in
   a) nitrogen balance.
   b) catabolism.
   c) anabolism.
   d) deamination.

10) The primary function of protein in the body is
    a) tissue building.
    b) nerve transmission.
    c) digestion and absorption.
    d) intestinal motility.

11) The type of vegetarian diet composed entirely of plant foods and no animal foods is called a(n)
    a) vegan diet.
    b) lacto-vegetarian diet.
    c) ovo-vegetarian diet.
    d) lacto-ovo-vegetarian diet.

12) Pepsinogen is converted by hydrochloric acid in the stomach to
    a) dipeptidase.
    b) rennin.
    c) trypsin.
    d) pepsin.
13) Very high protein intakes may be associated with increased risks for
   a) intestinal cancers.
   b) osteoarthritis.
   c) cardiovascular disease.
   d) food allergies.

4) The hormone that stimulates the pancreas to release its secretions is
   a) estrogen.
   b) insulin.
   c) pancreatin.
   d) secretin.

14) A chronic deficiency of protein and energy is referred to as
   a) kwashiorkor.
   b) marasmus.
   c) emaciation
   d) stunted growth.

5) The primary nutritional function of the large intestine is
   a) absorption of amino acids.
   b) absorption of water.
   c) metabolism of nutrients.
   d) excretion of undigested food.

15) A strict vegetarian (vegan) may be most at risk for
   a) zinc deficiency.
   b) stunted growth.
   c) vitamin C deficiency.
   d) vitamin A excess.

Chapter 5

1) Mastication is an important part of digestion because it
   a) prepares the stomach to receive food.
   b) begins the process of digestion in the mouth.
   c) keeps the jaw muscles healthy.
   d) prepares the food for digestion by enzymes.

2) Compared with the pH in the small intestine, the pH in the stomach is
   a) lower.
   b) higher.
   c) the same.
   d) neutral.

3) Peptidases are enzymes that act on
   a) starch.
   b) triglycerides.
   c) proteins.
   d) amino acids.
10) The fingerlike projections in the small intestine that ensure maximal absorption of nutrients are called
   a) rugae.
   b) villi.
   c) mucosal folds.
   d) columnar cells.

11) Chyme is the word used for the intestinal contents when they are in the
   a) mouth.
   b) stomach.
   c) small intestine.
   d) large intestine.

12) Fat molecules enter into the bloodstream through the
   a) common bile duct.
   b) villi with the aid of bile.
   c) lymph vessels.
   d) main pancreatic duct.

13) Humans do not produce the enzymes needed to break down
   a) maltose.
   b) starch.
   c) fiber.
   d) polypeptides.

14) Phenylketonuria is caused by the inability to produce the enzyme needed to
   a) digest proteins containing phenylalanine.
   b) metabolize the amino acid phenylalanine.
   c) activate the amino acid phenylalanine.
   d) store the amino acid phenylalanine.

15) The part of the circulation system that transports blood from the intestines to the liver is called the
   a) systemic circulation.
   b) portal circulation.
   c) respiratory circulation.
   d) enteric circulation.