Williams' Basic Nutrition and Diet Therapy 17th edition Nix Test Bank

SKU: 9780443123641-TEST-BANK

Test Bank - Chapter 01

Q1: Promoting a health care service that improves diabetes management for the elderly in a community would assist in which of the following?

A. Supporting the national health goals Healthy People 2030 (Correct)
B. Reducing hunger in a subset of the United States population
C. Improving Medicare reimbursement claims
D. Providing access to primary health care services

Rationale: Healthy People 2030 has a wide influence and is the focus of the nation's main objective to promote health and prevent disease.

Q2: A patient requires a nutrition assessment. The most appropriate professional to perform the assessment is a

A. physician.
B. nurse.
C. public health nurse.
D. registered dietitian nutritionist. (Correct)

Rationale: The registered dietitian nutritionist (RDN) is the nutrition expert registered with the Commission of Dietetic Registration (CDR), the certifying agency of Academy of Nutrition and Dietetics. RDNs can also be referred to registered dietitians (RD), clinical nutrition specialist or a public health nutritionist. RDNs are the only professionals who have met strict educational and professional prerequisites and passed a national registration examination that properly prepares them to conduct a nutrition assessment.

Q3: The sum of all body processes inside living cells that sustain life and health is

A. science.
B. digestion.
C. metabolism. (Correct)
D. nutrition.

Rationale: Metabolism is the sum of all chemical changes that take place in the body. Metabolism provides energy, builds tissue, and regulates metabolic processes in the body.

Q4: The nutrients that provide the body with its primary source of fuel for energy are

A. vitamins.
B. minerals.
C. fiber.
D. carbohydrates. (Correct)

Rationale: Carbohydrates (e.g., starches and sugars) are the body's primary fuel to carry out necessary processes; fat is the secondary source of energy.

Q5: Which of the following is the most accurate statement regarding the functions of protein?

A. Proteins can be a primary fuel source even if there is adequate carbohydrate intake.
B. Proteins are a necessary nutrient to provide energy for the body in times of stress.
C. Proteins can be used as coenzyme factors during cell metabolism.
D. Proteins are essential to building and repairing tissues within the body. (Correct)

Rationale: The primary function of proteins is to provide amino acids, which are the building units necessary to building and repairing tissues within the body. This is a constant process that ensures adequate growth and maintenance of tissues for a strong body.

Q6: A 65-year-old man requires 2000 kcal/day without any specific fat or carbohydrate requirements. The approximate number of kilocalories per day from fat that his diet should provide is _____ kcal/day.

A. 400–700 (Correct)
B. 100–300
C. 500–800
D. 900–1200

Rationale: Fat should provide no more than 20% to 35% of the total kilocalories per day, so for a 2000-kcal diet, 400–700 kcal should be provided.

Q7: The body's main storage form of carbohydrate is

A. glycogen. (Correct)
B. glycerol.
C. glucagon.
D. glucose.

Rationale: Glycogen is a polysaccharide that is the main storage form of carbohydrate in the human body. It is mainly stored in the liver and to a lesser extent in muscle tissue.

Q8: The number of kilocalories provided by one slice of bread that contains 30 g carbohydrate, 3 g protein, and 1 g fat is _____ kcal.

A. 34
B. 136
C. 141 (Correct)
D. 306

Rationale: Calculate as follows: Carbohydrate provides 4 kcal/g, protein provides 4 kcal/g, and fat provides 9 kcal/g. Therefore: 30 g carbohydrate × 4 kcal/g = 120 kcal 3 g protein × 4 kcal/g = 12 kcal 1 g fat × 9 kcal/g = 9 kcal = 141 total kcal (120 kcal + 12 kcal + 9 kcal).

Q9: The number of kilocalories from fat in a sandwich that contains 22 g fat is _____ kcal.

A. 88
B. 132
C. 154
D. 198 (Correct)

Rationale: Fat provides 9 kcal/g. Thus, 22 g fat × 9 kcal/g = 198 kcal.

Q10: The number of kilocalories from protein in a sandwich that contains 15 g protein is _____ kcal.

A. 45
B. 60 (Correct)
C. 75
D. 135

Rationale: Protein provides 4 kcal/g. Thus, 15 g protein ■ 4 kcal/g = 60 kcal.

Q11: The basic building units of protein are called _____ acids.

A. fatty
B. amino (Correct)
C. nucleic
D. carboxyl

Rationale: The basic building units of protein are amino acids, which are necessary for building, repairing, and maintaining body tissues.

Q12: The main nutrients involved in metabolic regulation and control are

A. water and vitamins.
B. vitamins and minerals. (Correct)
C. vitamins and fatty acids.
D. minerals and carbohydrates.

Rationale: Vitamins and minerals are the key nutrients in regulating and controlling the many chemical processes in the body. Vitamins and minerals function as coenzyme factors, which are components of cell enzymes that govern cell chemical reactions in cell metabolism.

Q13: The dietary regimen that would provide optimal nutrition for a person who is recovering from an extended illness is a diet

A. low in protein, fat, and carbohydrates; high in minerals and vitamins; and very low in fiber.
B. providing adequate amounts of carbohydrates, protein, fat, minerals, and vitamins along with adequate water and fiber. (Correct)
C. high in protein, fiber, and fluid; low in carbohydrates; and adequate in vitamins and minerals.

D. with essential amounts of vitamins and minerals; high in protein; and low in fat, carbohydrates, and fiber.

Rationale: Optimal nutrition incorporates a varied diet supplying adequate amounts of all nutrients, including carbohydrates, protein, fat, vitamins, minerals, fiber, and fluid.

Q14: A young woman is 5 months pregnant. She currently lives in a condition of poverty and often runs out of money to buy food. Which clinical condition is she most at risk for?

A. Liver damage
B. Osteopenia
C. Undernutrition (Correct)
D. Overnutrition

Rationale: A person with undernutrition, or an intake less than the desired amounts of nutrients a person needs to sustain and maintain health, carries a greater risk for physical illness than a person receiving adequate nutrition. In this case, a young, pregnant woman living in poverty who cannot obtain the necessary nutrition for herself, and her baby is in a state of undernutrition, placing both at nutritional risk.

Q15: Which factors place a person at the highest risk for malnutrition?

A. Poor appetite, insufficient nutrient intake, poor hygiene, and depleted nutrition reserves
B. Poor hygiene, insufficient exercise, and excess carbohydrate intake
C. Depleted carbohydrate intake, poor hygiene, and excess calorie intake
D. Poor appetite, insufficient nutrient intake, depleted nutrition reserves, and a form of metabolic stress (Correct)

Rationale: Malnutrition appears when nutritional reserves are depleted, and nutrient and energy intake is not sufficient to meet day-to-day needs or added metabolic stress.

Q16: A 48-year-old male patient is admitted to the hospital with a left hip fracture. He weighs 248 lb. (54 lb. above his desired weight). He is considered to be in a state of overnutrition. Which statement is most accurate relative to his state of overnutrition?

A. Desired nutrients are consumed in excess amounts without the risk of malnutrition.
B. Because excess body fat is evident and excess calories are consumed, there is no risk of nutrient deficiency leading to malnutrition.
C. Even though excess body fat and excess nutrient intake are evident, there still may be a risk for some type of nutrient deficiency leading to malnutrition. (Correct)
D. Excess body weight may or may not be present along with excess consumption of carbohydrates and fat, which results in inadequate vitamin and mineral intake.

Rationale: Overnutrition results from excess nutrient and energy intake over time, resulting in excess weight and a state of obesity. Malnutrition can result from excess body weight and the lack of vitamin- and mineral-rich food consumption (e.g., consumption of fatty and carbohydrate-rich foods only).

Q17: Which is least likely to be a primary cause of malnutrition?

A. Conditions of poverty
B. Prolonged hospitalization
C. Homelessness
D. Exercise (Correct)

Rationale: Malnutrition appears when nutritional reserves are depleted and nutrient and energy intake is not sufficient to meet day-to-day needs or the additional requirements necessary during periods of stress; thus, exercise is not a factor.

Q18: Overnutrition is characterized by

A. overeating at a meal.
B. excess nutrient and energy intake over time. (Correct)
C. eating a diet with too much variety.
D. using dietary supplements.

Rationale: Overnutrition results from excess nutrient and energy intake over time or occurs when excessive amounts of nutrient supplements are consumed, resulting in tissue-damaging effects.

Q19: The Dietary Reference Intakes (DRIs) address the nutrient needs of

A. all adults.
B. most healthy population groups. (Correct)
C. minority ethnic groups.
D. pregnant women, infants, and children.

Rationale: The DRIs refer to a system of reference values that can be used for assessing and planning diets for healthy population groups and other purposes.

Q20: The Dietary Reference Intakes (DRIs) are developed by the

A. U.S. Public Health Service.
B. U.S. Food and Drug Administration (FDA).
C. Food and Nutrition Board of the Institute of Medicine. (Correct)
D. National Institutes of Health (NIH).

Rationale: DRIs are developed by the Food and Nutrition Board of the Institute of Medicine.

Q21: When not enough scientific evidence is available to establish a Recommended Dietary Allowance (RDA), the value used to guide intake is called the

A. Dietary Reference Intake (DRI).
B. tolerable upper intake level (UL).
C. estimated average requirement (EAR).
D. adequate intake (AI). (Correct)

Rationale: AI is used as a guide when not enough scientific data are available to establish the RDA figure.

Q22: You are asked to help plan meals for a monthly local community dinner meeting for the elderly. The tool that would be most helpful for planning healthy meals is the

A. Dietary Reference Intakes.
B. Dietary Guidelines for Americans.
C. MyPlate food guidance system. (Correct)
D. basic four food groups.

Rationale: MyPlate, provided by the U.S. Department of Agriculture, provides a valuable tool for meal planning, providing serving sizes for each food group and the ability to create a balanced meal from each group listed.

Q23: You are asked to explain the Dietary Guidelines for Americans to an adult community education class at the local college. The most appropriate areas to cover in teaching this topic include

A. appropriate amounts of sodium, saturated fat, cholesterol, trans-fatty acids, whole grains, and alcohol. (Correct)
B. adequate calories and protein for weight maintenance, smoking cessation, herbal supplements, and food fads.
C. the importance of low-carbohydrate diets, smoking cessation, herbal supplements, appropriate food groups, and sodium and potassium.
D. food security, weight maintenance, glucose monitoring, and blood pressure monitoring technique.

Rationale: The Dietary Guidelines outlines key recommendations to balance calories and maintain weight along with foods and food components to reduce including sodium, saturated fatty acids, cholesterol, trans-fatty acids, added fats and sugars, refined grains, along with recommendations for limiting alcohol.

Q24: A patient asks you what he should eat to maintain an optimal diet. An appropriate response would be to

A. eat a variety of foods and eat in moderation. (Correct)
B. avoid all fast food and processed foods.
C. eat only natural, organic foods.
D. use vitamin and mineral supplements to ensure adequate nutrients.

Rationale: An optimal diet contains a variety of foods and in appropriate quantities to maintain proper weight and health. All foods can fit into a healthy diet in moderation.

Q25: The goal of the MyPlate food guide is to promote

A. variety, proportion moderation, gradual improvements, and physical activity. (Correct)

B. physical activity, portion control, daily blood pressure monitoring, and gradual improvements in health.

C. portion control, daily physical activity, daily glucose monitoring, moderation, and variety.

D. variety, moderation, weighing food portions, daily blood pressure monitoring, and glucose monitoring.

Rationale: The goal of MyPlate is to promote variety, proportion moderation, gradual improvements, and physical activity.

Q26: A patient is to receive 2400 kcal/day while recovering from a motor vehicle accident. He is to receive 50% of calories from carbohydrates, 25% of calories from fat, and 25% of calories from protein. Which of the following represents the appropriate calories for each substrate?

A. 1500 kcal from carbohydrates, 500 kcal from fat, and 400 kcal from protein

B. 1400 kcal from carbohydrates, 600 kcal from fat, and 400 kcal from protein

C. 1200 kcal from carbohydrates, 600 kcal from fat, and 600 kcal from protein (Correct)

D. 1600 kcal from carbohydrates, 400 kcal from fat, and 400 kcal from protein

Rationale: 2400 kcal × 0.50 = 1200 kcal from carbohydrates; 2400 kcal × 0.25 = 600 kcal from fat; and 2400 kcal × 0.25 = 600 kcal from protein.

Q27: A patient is placed on a 2300-kcal diet. The health care provider is asked to calculate the grams of carbohydrates the patient is receiving on the diet. The number of grams of carbohydrates is

A. 50 g.

B. 35 g.

C. 250 g.

D. impossible to calculate from this data. (Correct)

Rationale: The percentage of carbohydrates in the diet typically ranges from 45% to 65% of the total calories depending on individual needs, tastes, habits, living situations, and energy demands. However, the health care provider would need to know the specific foods the patient is eating to calculate carbohydrate intake.

Q28: A 52-year-old single woman comes to the health professional for advice on maintaining optimal nutritional health. Her food intake records indicate that she likes to eat at fast food restaurants at least twice a week and relies on processed foods for the majority of her dietary intake. She maintains an active lifestyle and works part time at the local bank. Which step should the nurse take next to assist this individual?

A. Assess meal plan options along with the ability to prepare nutritious foods. (Correct)

B. Obtain laboratory values to further assess her nutrition status and recommend supplementing her diet with vitamins and minerals.

C. Find ways to decrease eating at fast food restaurants and incorporate physical exercise into her daily routine.

D. Recommend that she use the MyPlate food guide to change her eating style and attend cooking classes at the local community center.

Rationale: The American food environment has been constantly changing over the past several years, with more people eating out and consuming more processed foods. Educating people to follow the MyPlate food guide and the Dietary Guidelines for Americans is important to maintain a healthy lifestyle.

Q29: The person most at risk for malnutrition would be a(n)

A. active young adult who eats three to five servings of fruits and vegetables along with lean meats and fish and complex carbohydrates and exercises three times a week.
B. young child who refuses to eat peas, green beans, and broccoli but loves fruits and other vegetables.
C. middle-aged man undergoing chemotherapy for leukemia and who is having difficulty eating solid food. (Correct)
D. young weightlifter who has recently undergone surgery for a compound fracture of his left femur.

Rationale: Malnutrition appears when nutrition reserves are depleted, or nutrient and energy intake is not sufficient to meet the day-to-day needs along with the added metabolic stress. In this case, cancer and chemotherapy place an increased metabolic stress on the body and the patient is unable to consume enough food to meet his nutrient requirements, placing him at risk for malnutrition.

Q30: A 45-year-old diabetic male dietary history reveals that he enjoys a good breakfast with whole grain cereal and fruit. For lunch, he usually eats soup or an entre■e consisting of a salad and meat along with 2% milk and a sugary soda. He usually has an afternoon snack of chips and sugary soda, and dinner is eaten at a restaurant most days of the week where he chooses steaks, hamburgers, and fries or onion rings along with a salad and a beer or other high-calorie beverage. One of the most important recommendations for this patient would be

A. to not eat at restaurants on a regular basis unless he chooses salads only along with water.
B. to continue with whole grains, lean proteins, and vegetables, and replace sugary sodas with sugar-free beverages. (Correct)
C. to drink skim milk and eliminate soups, replacing them with fatty fish five meals a week.
D. to enjoy his diet as is but encourage adequate amounts of exercise throughout the week.

Rationale: The Choose MyPlate approach encourages making food choices for a healthy lifestyle including balancing calories; enjoying food but in a portion-controlled approach; encouraging whole grains, fruits, vegetables, and low-fat dairy; decreasing high-fat and sugary foods; and monitoring sodium. In this case, where diabetes is a concern as well, a meal plan emphasizing portion control, whole grains, vegetables, and drinks without sugar would be appropriate.

Review Questions-Self-Test - Chapter 01

Q1: 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. (Correct)
C. primary care physician, who serves on the medical board.
D. community volunteer, who has an intense interest in nutrition care.

Q2: The nutrients that provide energy include

A. water, vitamins, and carbohydrates.
B. carbohydrates, fat, and protein. (Correct)
C. vitamins, minerals, and fatty acids.
D. dietary fiber, protein, and vitamins.

Q3: 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. (Correct)
D. 440 kcal.

Q4: Diets that are most likely to provide optimal nutrition contain

A. a variety of foods. (Correct)
B. high-quality protein.
C. limited amounts of fat.
D. mostly fruits and vegetables.

Q5: Malnutrition often is caused by

A. acute illness.
B. skipping meals.
C. regular exercise.
D. prolonged hospitalization. (Correct)

Q6: Overnutrition results from

A. acute illness over a short time.
B. excess nutrient and energy intake over time. (Correct)
C. an inadequate exercise routine.
D. eating a diet that is not varied in nutrients.

Q7: Vitamins function as

A. coenzyme factors. (Correct)

B. sources of energy.
C. regulatory agents.
D. protein carriers.

Q8: The basic structural units of protein are

A. amino acids. (Correct)
B. nucleic acids.
C. monosaccharides.
D. fatty acids.

Q9: The following energy substance is not considered a nutrient

A. carbohydrate.
B. alcohol. (Correct)
C. fat.
D. water.

Q10: A state of optimal physical, mental, and social well-being is referred to as

A. metabolism.
B. nutrition.
C. health. (Correct)
D. health promotion.

Q11: Human energy is measured in

A. metabolites.
B. pounds.
C. kilograms.
D. kilocalories. (Correct)

Q12: The following energy substance provides 7 kcal/g

A. glucose.
B. fat.
C. alcohol. (Correct)
D. protein.

Q13: The sum of all chemical changes that take place in the body is called

A. nutrition.
B. metabolism. (Correct)
C. dietetics.
D. energy intake.

Q14: 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). (Correct)
D. basal energy expenditure.

Q15: Choose: My Plate serves as a

A. nutrition education tool for the public. (Correct)
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.