

## Chapter 1 – Overview of Nutrition and Health

An. Dif. Page(s)

True/False

- |   |   |    |  |
|---|---|----|--|
| b | K | 6  | 1. Minerals and water are organic and yield energy in the human body.<br>a. true<br>b. false   |
| a | K | 7  | 2. An excess intake of any energy nutrient can lead to becoming overweight.<br>a. true<br>b. false   |
| a | K | 8  | 3. The Dietary Reference Intakes reflect the collaborative efforts of scientists to produce a set of standards for the amount of energy, nutrients, other dietary components, and physical activity that best support health.<br>a. true<br>b. false |
| a | K | 8  | 4. To ensure that the vitamin and mineral recommendations meet the needs of as many people as possible, the recommendations are set near the top end of the range of the population's estimated average requirements.<br>a. true<br>b. false         |
| a | K | 9  | 5. Dietary Reference Intakes are values that are appropriate to use for planning and assessing diets for individuals and groups.<br>a. true<br>b. false  |
| a | A | 12 | 6. Consuming nutrient-dense foods can help control your calorie intake.<br>a. true<br>b. false   |
| a | K | 24 | 7. The ingredients list on a food label must list the ingredients in descending order of predominance by weight.<br>a. true<br>b. false  |
| a | A | 27 | 8. A package of prunes states that the product is a good fiber source and the Nutrition Facts panel indicates the product contains 12% of the Daily Value for dietary fiber. Can this product legally make this claim?<br>a. yes<br>b. no            |

- b A 27 9. A carton of yogurt claims that it is fat free and the Nutrition Facts panel indicates the product contains 5 grams of fat per serving. Can this product legally make this claim?
- yes
  - no
- b A 27 10. A package of cookies claims that the cookies are low calorie, and the Nutrition Facts panel indicates that each cookie contains 70 calories. Can this product legally make this claim?
- yes
  - no

### Nutrition in Practice – Finding the Truth about Nutrition

- a K 35 11. Some nutritionists are registered dietitians, but others are self-described experts whose training is minimal or nonexistent.
- true
  - false

### Multiple Choice

- b A 3 1. The reason that most of us enjoy turkey and pumpkin pie at Thanksgiving is due to:
- habit.
  - associations.
  - values.
  - emotional state.
- c K 3 2. Personal preference plays a significant part in the food choices of an individual. Widely shared preferences include:
- a desire for sour tastes.
  - significant nutritional value.
  - tastes for salt and sugar.
  - a craving for protein.
- c A 4 3. You are at a friend's house for dinner and high-fat foods are being served. You go ahead and consume these foods primarily because of:
- emotional state.
  - associations.
  - social interaction.
  - ethnic heritage.
- a K 4 4. Which of the following foods best exemplify the Asian culture?
- soybeans, squid, rice, peanuts
  - tomatoes, olives, fish, mozzarella cheese
  - tortillas, corn, avocado, refried beans
  - black-eyed peas, biscuits, peaches, beef

- a K 4 5. Which of the following characterizes the diet of most ethnic groups?
- excludes milk
  - excludes green leafy vegetables
  - excludes grains and grain products
  - excludes meat and meat products
- b A 5 6. Orange juice fortified with calcium to help build strong bones is an example of a(n):
- phytochemical.
  - functional food.
  - organic food.
  - convenience food.
- d K 6 7. All of the following nutrients are organic except:
- carbohydrate.
  - fat.
  - protein.
  - minerals.
- c K 6 8. The kcalorie content of a food depends on how much it contains of each of the following except:
- carbohydrate.
  - fat.
  - water.
  - protein.
- b K 6 9. Which of the following statements about vitamins is true?
- They are inorganic.
  - They facilitate the release of energy from the other three organic nutrients.
  - They are the medium in which all of the body's processes take place.
  - They provide energy to the body.
- c K 6 10. The essential nutrients are those:
- the body can make for itself.
  - that are predominant in most foods.
  - that must be obtained from foods.
  - included in the main DRI table.
- c K 6 11. Which of the following becomes a major fuel for the body only when the other fuels are unavailable?
- carbohydrate
  - fat
  - protein
  - water

- d K 6
12. All of the following are energy-yielding nutrients except:
- carbohydrate.
  - protein.
  - fat.
  - vitamins.
- a K 6
13. Vitamins provide \_\_\_\_ kcalories per gram.
- 0
  - 4
  - 7
  - 9
- b A 7
14. How many kcalories are provided by a food that contains 25 g carbohydrate, 6 g protein, and 5 g fat?
- 172
  - 169
  - 142
  - 102
- c K 7
15. Which nutrient has the greatest energy density?
- carbohydrate
  - protein
  - fat
  - vitamins
- c A 7
16. How many fat kcalories are in a food which contains 15 grams of fat?
- 60
  - 105
  - 135
  - 215
- a A 7
17. Your friend always refers to meat as protein. You try to correct her by stating that:
- practically all foods contain mixtures of the energy-yielding nutrients.
  - protein is not the predominant nutrient in meat.
  - protein-rich foods are always high in fat.
  - meat contains more carbohydrate than protein.
- d K 7
18. Alcohol:
- is a nutrient.
  - promotes maintenance and repair in the body.
  - is not metabolized into energy.
  - contributes to body fat.

- c K 7 19. All of the following contain mixtures of the energy nutrients except:
- beef.
  - potato.
  - oil.
  - legumes.
- d K 8 20. Dietary Reference Intakes are designed to:
- recommend numbers of servings of food to eat per day.
  - help food manufacturers decide on product contents and processing methods.
  - meet minimum nutrient needs to prevent malnutrition in people.
  - specify nutrient needs that best support the health of people in the United States and Canada.
- d K 8 21. The Recommended Dietary Allowances:
- are designed primarily to prevent toxicities.
  - are set when there is a lack of scientific data to generate an Adequate Intake.
  - focus on all dietary components.
  - are the foundation of the Dietary Reference Intakes.
- a K 8 22. Which of the following Dietary Reference Intake categories is most appropriately used to develop and evaluate nutrition programs for groups?
- Estimated Average Requirement
  - Tolerable Upper Intake Level
  - Adequate Intake
  - Recommended Dietary Allowance
- d K 8 23. Consumers who take vitamin/mineral supplements should be aware that excessive intakes can pose hazards, and refer to the \_\_\_\_\_ values of the Dietary Reference Intakes.
- Adequate Intake (AI)
  - Estimated Average Requirement (EAR)
  - Recommended Dietary Allowance (RDA)
  - Tolerable Upper Intake Level (UL)
- a K 8-9 24. Which of the following statements is not true regarding the Dietary Reference Intakes?
- The DRI are designed to merely prevent nutrient deficiency diseases.
  - The DRI focus on disease prevention.
  - The DRI focus on adequacy of nutrients.
  - The DRI apply to the diets of individuals.
- b K 9 25. Dietary Reference Intakes may be used to:
- treat persons with diet-related illnesses.
  - assess dietary nutrient adequacy.
  - specify the minimum daily intake of all nutrients.
  - estimate energy needs.

- b K 9 26. A good indicator that an individual's energy intake is appropriate is a healthy:
- height.
  - weight.
  - elbow breadth.
  - body composition.
- b K 9 27. An individual's Estimated Energy Requirement (EER) is deemed adequate in the absence of:
- bone loss.
  - weight gain or loss.
  - obvious signs of malnutrition.
  - body fat.
- c K 10 28. According to the DRI committee, protein should provide \_\_\_\_\_ of daily kcalories.
- 45-65%
  - 20-35%
  - 10-35%
  - 8-21%
- a K 10 29. The data collected in nutrition surveys is used by the government to:
- establish public policy on nutrition education.
  - regulate nutrition labeling on food products.
  - decide what nutrition issues will be granted funds for research.
  - assess the effectiveness of government publications about nutrition.
- d K 10 30. One of the first nutritional surveys taken before World War II suggested:
- at least 90% of the population had adequate nutritional intakes.
  - 75% of the population needed to change their eating habits.
  - less than 5% of the population were eating appropriately.
  - up to one-third of the population might be eating poorly.
- c K 10 31. Major reports regarding the contribution of diet and nutrition status to the health of the people of the United States depend on information collected by the:
- Continuing Survey of Food Intakes by Individuals.
  - National Health and Nutrition Examination Survey.
  - National Nutrition Monitoring Program.
  - Nationwide Food Consumption Survey.
- c K 10 32. *Healthy People* is a program that sets goals every \_\_\_\_ years for improving the nation's health.
- 5
  - 7
  - 10
  - 20

- d K 12 33. Nutrient density refers to foods that:
- are iron-rich.
  - contain a mixture of carbohydrate, fat, and protein.
  - carry nutrient labeling information.
  - deliver the most nutrients for the least amount of kcalories.
- b K 12 34. Research confirms that a common contributor to three of the leading causes of death is:
- undernutrition.
  - overnutrition.
  - lack of exercise.
  - genetics.
- c K 12-13 35. The six diet planning principles include:
- adequacy, B vitamins, carbohydrates, meat, variety, and portion control.
  - abundance, balance, carbohydrates, moderation, vegetables, and variety.
  - adequacy, balance, kcalorie control, moderation, variety, and nutrient density.
  - abundance, B vitamins, kcalorie control, milk, vegetables, and nutrient density.
- b A 12-13 36. Which of the following have the highest nutrient density?
- lamb, ice cream, and pre-sweetened cereal
  - whole-grain bread, poultry, and skim milk
  - cottage cheese, sweet potatoes, and ham
  - dried apples, legumes, and pancakes
- b A 12-13 37. Which of the following foods would provide the highest nutrient density for calcium?
- cheddar cheese
  - fat-free milk
  - ice cream
  - frozen yogurt
- c K 13 38. Foods such as potato chips, candy, and colas are called *empty-kcalorie foods* because they:
- are inexpensive.
  - are lacking in calories.
  - provide calories but little nutrients.
  - should be eaten in moderation.
- a A 14 39. You are advising a client on components of the *Dietary Guidelines for Americans*. Which of the following would you include in your advice?
- Keep total fat intake between 20 and 35% of kcalories.
  - Decrease intake of milk and milk products to two servings per day.
  - Decrease intake of whole grains and other complex carbohydrates.
  - Increase intake of *trans* fats and saturated fats.

- a K 15 40. Running at a pace of 6.5 miles/hour is an example of a:
- vigorous-intensity physical activity.
  - moderate-intensity physical activity.
  - muscle-strengthening physical activity.
  - anaerobic physical activity.
- d K 15 41. Health care professionals can be most successful at motivating others to become more physically active when they:
- design age-specific programs.
  - develop workplace wellness programs.
  - deliver weekly lectures on the topic.
  - demonstrate a physically active lifestyle.
- a K 15,16 42. Which type of physical activities are recommended by the ACSM for developing and maintaining fitness?
- cardiorespiratory, strength, and flexibility training
  - a balance of low-, moderate-, and vigorous-intensity activities
  - aerobic physical activity only
  - a combination of team sports and brisk walking
- e K 17 43. The group that is not a basic member of the USDA Food Guide is the:
- milk group.
  - vegetables group.
  - fruits group.
  - grains group.
  - solid fats and added sugars group.
- c A 18 44. A client consumes the following foods from the grain group of the USDA Food Guide: ½ cup oatmeal, 2 slices of bread, 3 cups popped popcorn, and 1 cup pasta. How many ounce equivalents did the client consume?
- 2
  - 4
  - 6
  - 8
- c K 20 45. According to the USDA Food Guide, someone who needs 2000 kcal/day should consume \_\_\_\_ cup(s) of milk or the equivalent in milk products each day.
- one
  - two
  - three
  - four
  - five
- a K 21 46. The USDA Food Guide:
- emphasizes nutrient-dense foods within each food group.
  - is a very rigid guide for providing a balanced diet.
  - fails to encourage the consumption of whole grains.
  - does not specify portion sizes.



- b K 21 47. The difference between the kcalories needed to supply nutrients and those needed for energy is referred to as:
- nutrient density.
  - discretionary kcalorie allowance.
  - recommended kcalorie allowance.
  - excess kilocalories.
- c K 22 48. For comparison purposes, 3 ounces of meat can be visualized as being about the size of:
- a 9-volt battery.
  - a CD case.
  - a deck of cards.
  - a paperback book.
- a A 8,14,23,25 49. You are assessing your own diet. Which of the following would be the most practical tool to use?
- MyPyramid
  - EARs
  - DVs
  - Dietary Guidelines for Americans*
- d K 24 50. Which of the following statements is true regarding nutrition information on foods?
- Nutrition information is required for the 20 most frequently eaten fresh fruits and vegetables.
  - Food manufacturers held to strict standards, called standards of identity, are not required to list ingredients on their labels.
  - Raw fish and single-ingredient meat and poultry products must provide nutrition information on labels.
  - Plain coffee, tea, spices and other foods containing few nutrients are exempt from nutrition labeling requirements.
- c K 25 51. A set of nutrient standards designed strictly for use on food labels is called the:
- Recommended Dietary Allowances.
  - Dietary Reference Intakes.
  - Daily Values.
  - FAO recommendations.
- a K 26 52. The Nutrition Facts label must contain information about which minerals, according to labeling standards?
- calcium and iron
  - calcium and magnesium
  - iron and potassium
  - iron and zinc

- b K 27 53. To be labeled as “healthy,” a food must be low in total, saturated, and *trans* fat, cholesterol, and sodium, and contain at least \_\_\_\_\_% of the DV for vitamin A, vitamin C, iron, calcium, protein, or fiber.
- 5
  - 10
  - 15
  - 20
- b K 28 54. Which of the following health claims linking nutrients and food constituents to disease states is not on the FDA’s “A” list?
- calcium and osteoporosis
  - zinc and immune system response
  - folate and neural tube defects
  - dietary fat and cancer
- d K 29 55. According to the FDA’s Health Claims Report Card, food label claims with a “B,” “C,” or “D” grade:
- must have the highest degree of scientific support.
  - must provide an insert with a detailed explanation of the scientific support backing the claim.
  - cannot be sold.
  - must bear a statement explaining the degree of scientific evidence backing the claim.
- b K 29 56. Statements on the label of a food or dietary supplement about the substance’s effect on a structure or function of the body are called:
- “B” list claims.
  - structure-function claims.
  - scientific evidence.
  - unsupported claims.

#### Nutrition in Practice – Finding the Truth about Nutrition

- d K 33-34 57. Which of the following is not a red flag of junk science?
- a product that promises of a quick and easy fix
  - a claim made to help sell a product
  - a simple conclusion drawn from a complex study
  - an abstract published on the NLM’s PubMed website
- a K 34 58. When searching the Internet for a credible source of nutrition information, one should go to the website of a:
- government health agency.
  - national health food store chain.
  - multi-level marketing company that sells supplements.
  - popular fitness magazine.

- c K 35
59. The FDA advises consumers that:
- a product that is labeled as “natural” and “non toxic” is always safe to use.
  - products based on “ancient remedies” are preferable to those based on modern “scientific breakthroughs.”
  - they should be suspicious of product claims that use impressive-sounding medical terms.
  - an offer of a “money-back” guarantee from the manufacturer means the product is more likely to be effective.
- b K 35
60. The primary nutrition expert on the health care team is the:
- dietetic technician.
  - registered dietitian.
  - nutritionist.
  - nutrition consultant.

### Essay

- |       |  |
|-------|--|
| 3-5   | 1. Identify and give an example of each of the thirteen factors which influence food choices.  |
| 6-7   | 2. Provide a rationale for the following statement: "Too much meat is just as fattening as too many potatoes."                               |
| 8-10  | 3. List and briefly describe the major categories of Dietary Reference Intakes and their uses.   |
| 12-13 | 4. List the six principles of diet planning and briefly describe each one.   |
| 15-17 | 5. From the list of benefits of a physically active lifestyle presented in your text, choose six that apply directly to you and explain why. |
| 25    | 6. Identify characteristics of the Daily Values used on food labels, and explain their appropriate uses.                                     |

**Matching**

- |   |   |                |  |
|---|---|----------------|--|
| c | 8 | 1. AI          | a. a set of values for the dietary nutrient intakes of healthy people in the United States and Canada.   |
| i | 9 | 2. AMDR        | b. a set of values reflecting the average daily amounts of nutrients considered adequate to meet the known nutrient needs of practically all healthy people in a particular life stage and gender group; a goal for dietary intake by individuals. |
| e | 8 | 3. deficient   | c. a set of values that are used as guides for nutrient intakes when scientific evidence is insufficient to determine RDA.   |
| a | 8 | 4. DRI         | d. the lowest continuing intake of a nutrient that will maintain a specified criterion of adequacy.  |
| f | 9 | 5. EAR         | e. in regard to nutrient intake, the amount below which almost all healthy people can be expected, over time, to experience deficiency symptoms.   |
| h | 9 | 6. EER         | f. the average daily nutrient intake levels estimated to meet the requirements of half of the healthy individuals in a given age and gender group.   |
| b | 8 | 7. RDA         | g. A set of values reflecting the highest average daily nutrient intake levels that are likely to pose no risk of toxicity to almost all healthy individuals in a particular life stage and gender group.  |
| d | 8 | 8. requirement | h. the dietary energy intake level that is predicted to maintain energy balance in a healthy adult of a defined age, gender, weight, and physical activity level consistent with good health.  |
| g | 9 | 9. UL          | i. ranges of intakes for the energy-yielding nutrients that provide adequate energy and nutrients and reduce the risk of chronic disease.  |