

Chapter 2 Tools for Healthy Eating

Multiple Choice

1. The average amount of a nutrient that is known to meet the needs of 50 percent of the individuals in a similar age and gender group is known as the

- A. Estimated Average Requirement (EAR).
- B. Recommended Dietary Allowance (RDA).
- C. Adequate Intake (AI).
- D. Dietary Reference Intakes (DRI).

ANS: A

REF: 33

2. The highest amount of a nutrient that can be consumed without harm in a similar age and group of individuals is the

- A. Recommended Dietary Allowance (RDA).
- B. Adequate Intake (AI).
- C. Dietary Reference Intakes (DRI).
- D. Tolerable Upper Intake Level (UL).

ANS: D

REF: 33

3. According to the Acceptable Macronutrient Distribution Range (AMDR), what percentage of your daily calories should be provided by carbohydrates?

- A. 20 to 35 percent
- B. 45 to 65 percent
- C. 10 to 35 percent
- D. 5 to 20 percent

ANS: B

REF: 33

4. According to the Acceptable Macronutrient Distribution Range (AMDR), what percentage of your daily calories should be provided by fat?

- A. 20 to 35 percent
- B. 45 to 65 percent
- C. 10 to 35 percent
- D. 5 to 20 percent

ANS: A

REF: 33

5. Which of the following types of health claim is based on evidence that is still emerging?

- A. authorized health claim
- B. qualified health claim
- C. health claim based on authoritative statements
- D. structural/functional claim

ANS: B

REF: 56

6. Which of the following do NOT have an Acceptable Macronutrient Distribution Range (AMDR)?

- A. fats
- B. vitamins
- C. carbohydrates
- D. proteins

ANS: B
REF: 33

7. Which of the following was developed out of concern over the incidence of overnutrition among Americans?

- A. Acceptable Macronutrient Distribution Range (AMDR)
- B. Dietary Reference Intakes (DRIs)
- C. *Dietary Guidelines for Americans*
- D. Estimated Average Requirement

ANS: C
REF: 35

8. According to the *Dietary Guidelines for Americans 2005*, how much time should you spend exercising?

- A. 30 minutes every day
- B. 30 minutes three times per week
- C. 60 minutes four times per week
- D. 90 minutes once per week

ANS: A
REF: 36

9. Which statement about alcohol consumption is FALSE?

- A. A woman of childbearing age who may become pregnant should avoid alcohol.
- B. A person taking medication that can interact with alcohol should avoid alcohol.
- C. Consuming alcohol in moderation may be heart-healthy for some individuals
- D. A lactating woman should limit alcohol intake to two servings per day.

ANS: D
REF: 37

10. MyPyramid is a food guidance system that illustrates the recommendations in the *Dietary Guidelines for Americans* and what you should consume to meet

- A. the Dietary Reference Intakes.
- B. the *Healthy People 2020* goals.
- C. the DASH diet.
- D. Daily Values.

ANS: A
REF: 38

11. According to MyPyramid, which food group has the widest color band, indicating it should provide the bulk of your diet?

- A. fruits
- B. vegetables
- C. meat and beans
- D. grains

ANS: D
REF: 39

12. According to MyPyramid, which of these foods would be considered low in nutrient density?

- A. carrots
- B. fruit drinks
- C. nonfat yogurt
- D. lean meat

ANS: B
REF: 40

13. Which of the following is NOT the preferred way of preparing meat and poultry?

- A. broil
- B. bake
- C. fry
- D. grill

ANS: C

REF: 42

14. According to MyPyramid, how many cups of low-fat milk, or its equivalent, should be consumed daily for all calorie levels?

- A. 2
- B. 3
- C. 4
- D. 5

ANS: B

REF: 43

15. When estimating portion size, a woman's fist is about

- A. a quarter cup of pasta.
- B. half a cup of pasta.
- C. one cup of pasta.
- D. two cups of pasta.

ANS: C

REF: 44

16. According to MyPyramid, how many servings from the grain group should a moderately active female who needs 2,000 calories daily consume?

- A. 3
- B. 4
- C. 5
- D. 6

ANS: D

REF: 42

17. According to MyPyramid, how many servings from the vegetable group should a moderately active female who needs 2,000 calories daily consume?

- A. 1
- B. 2 1/2
- C. 3 1/2
- D. 4

ANS: B

REF: 42

18. Which of the following is NOT required on a standard food label?

- A. the name and address of the manufacturer
- B. the net weight
- C. a list of ingredients
- D. a nutrient content claim

ANS: D

REF: 48

19. Which of the following does NOT need to be on a food label?

- A. vitamin D

- B. vitamin C
- C. calcium
- D. iron

ANS: A

REF: 48

20. In what order are ingredients listed on a food label?

- A. alphabetical
- B. random
- C. liquids first, then solids
- D. descending order by weight

ANS: D

REF: 48

21. Which of the following are reference levels used only on food labels?

- A. Dietary Reference Intakes
- B. Estimated Average Requirements
- C. Daily Values
- D. Recommended Dietary Allowances

ANS: C

REF: 50

22. If one cup of reduced-fat milk provides 8 percent of your Daily Value for fat, this means that

- A. 8 percent of the calories in the milk are from fat.
- B. 8 percent of the calories in the milk are from saturated fat.
- C. the cup of milk provides 8 percent of the total fat allowed in the day.
- D. the cup of milk provides 8 percent of the total calories allowed in the day.

ANS: C

REF: 50

23. A food is considered high in a nutrient if it provides

- A. 5 percent or more of the Daily Value.
- B. 10 percent or more of the Daily Value.
- C. 15 percent or more of the Daily Value.
- D. 20 percent or more of the Daily Value.

ANS: C

REF: 50

24. The term *fat-free* on a food label is an example of

- A. a structure/function claim.
- B. a nutrient content claim.
- C. an authorized health claim.
- D. a qualified health claim.

ANS: B

REF: 52

25. Which of the following compounds found in tomatoes may reduce the risk of prostate cancer?

- A. lycopene
- B. probiotics
- C. beta-glucan
- D. anthocyanins

ANS: A

REF: 59

26. A food label claims that the food is a "good source of vitamin C." This means that the food
- A. provides 50 percent of the Daily Value for vitamin C.
 - B. provides more than 20 percent of the Daily Value for vitamin C.
 - C. provides 10 to 19 percent of the Daily Value for vitamin C.
 - D. has vitamin C in it, but the amount is undetermined.

ANS: C

REF: 54

27. Which of the following is NOT a MyPyramid tip for making food choices?

- A. Vary your veggies.
- B. Make half your grains whole.
- C. Move away from milk.
- D. Go lean with protein.

ANS: C

REF: 42

28. A health claim linking dietary fat and cancer is an example of

- A. an authorized health claim.
- B. a qualified health claim.
- C. a health claim based on authoritative statements.
- D. a nutrient content claim.

ANS: A

REF: 55

29. All of the following are found on a food label EXCEPT

- A. *trans* fat.
- B. polyunsaturated fat.
- C. sugars.
- D. dietary fiber.

ANS: B

REF: 49

30. Which of the following is NOT a structure/function claim?

- A. The soluble fiber in beans can help you lower your cholesterol.
- B. Calcium builds strong bones.
- C. Fiber maintains regularity.
- D. Antioxidants help support a healthy immune system.

ANS: A

REF: 53

True/False

1. A person who is overnourished can also be malnourished.

ANS: TRUE

REF: 31

2. All foods with a health claim can also be marketed as functional foods.

ANS: TRUE

REF: 56

3. The claim "calcium builds strong bones" is an example of a health claim.

ANS: FALSE

REF: 54

4. A "reduced fat" cookie must have at least 25 percent less fat per serving than the original type.

ANS: TRUE

REF: 54

5. The definitions for the terms "lean" and "extra lean" are based only on the total fat content of the product.

ANS: FALSE

REF: 54

6. A food labeled "low in calories" has fewer calories than a food labeled "reduced calories."

ANS: TRUE

REF: 54

7. The Dietary Reference Intakes (DRIs) are issued by the Food and Drug Administration.

ANS: FALSE

REF: 32

8. Fat should comprise 20 to 35 percent of your daily calories.

ANS: TRUE

REF: 33

9. The food guidance systems from Great Britain, Korea, Portugal, and Puerto Rico all recommend a plant-based diet with some lean meats, poultry, and fish.

ANS: TRUE

REF: 38

10. Whole milk is more nutrient dense than skim milk.

ANS: FALSE

REF: 40

11. A food labeled "calorie free" must have zero calories.

ANS: FALSE

REF: 54

12. The Daily Value for protein is not listed on most labels.

ANS: TRUE

REF: 50

13. The Daily Values (DVs) on the food label are based on a 1,500-calorie diet in order to discourage obesity.

ANS: FALSE

REF: 50

14. A soup labeled "low sodium" would have less sodium than a food labeled "less sodium."

ANS: TRUE

REF: 53

15. A qualified health claim is less well-established than an authorized health claim.

ANS: TRUE

REF: 55

16. A single serving of a functional food is enough to gain the beneficial effect of the food compound.

ANS: FALSE

REF: 59

17. A phytochemical is found in plant-based foods, and a zoochemical is found in animal-based foods.

ANS: TRUE
REF: 58

18. Studies show that if you give people larger portions of food, they eat more at that meal.

ANS: TRUE
REF: 46

19. Americans typically don't eat enough fiber, vitamin A, vitamin C, and iron.

ANS: TRUE
REF: 50

20. The DRIs are listed on the nutrition facts panel to help consumers make wise choices.

ANS: FALSE
REF: 49

Matching

Match the appropriate acronym to its definition.

- A. Reference values for the essential nutrients needed to maintain good health, to prevent chronic diseases, and to avoid excesses.
- B. The average amount of a nutrient that meets the needs of 97 to 98 percent of the individuals in a similar group.
- C. The approximate amount of a nutrient that groups of similar individuals are consuming to maintain good health.
- D. The average amount of a nutrient that is known to meet the needs of 50 percent of the individuals in a similar age and gender group.
- E. The highest amount of a nutrient that can be consumed daily without harm.

- 1. EAR
- 2. RDA
- 3. AI
- 4. UL
- 5. DRI

- 1. ANS: D REF: 33
- 2. ANS: B REF: 33
- 3. ANS: C REF: 33
- 4. ANS: E REF: 33
- 5. ANS: A REF: 32

Match each term to its definition.

- A. a measure of nutrients per calorie
- B. diet containing mostly nutrient-rich foods with little added sugars and unhealthy fats
- C. the relationship of one food entity to another; depicted by the width of the bands in MyPyramid
- D. having a diet made of many food groups; depicted by the numerous colorful bands in MyPyramid
- E. the several MyPyramids available online that are adaptable to your needs

- 6. moderation
- 7. variety
- 8. personalization
- 9. proportionality
- 10. nutrient density

- 6. ANS: B REF: 39

- 7. ANS: D REF: 39
- 8. ANS: C REF: 39
- 9. ANS: E REF: 39
- 10. ANS: A REF: 40

Completion

1. The nutrition facts panel lists the Daily Values for vitamin C and vitamin _____. (Be sure to capitalize your answer.)

ANS: A
REF: 49

2. The Estimated Average Requirement (EAR) is the average amount of a nutrient that is known to meet the needs of _____ percent of the individuals in a similar age and gender group. (Be sure you give your answer in numeral form, i.e. "5" vs. "five.")

ANS: 50
REF: 33

3. Based on the EAR, the _____ represents an amount that meets the needs of 97 to 98 percent of healthy individuals in an age/gender group. (Be sure to give your answer as an acronym, using capital letters.)

ANS: RDA
REF: 33

4. The range of intakes for the energy-containing nutrients are called the Acceptable Macronutrient _____. Range. (Be sure to capitalize the first letter.)

ANS: Distribution
REF: 33

5. The higher the consumption above the UL, the higher the risk of _____.

ANS: toxicity
REF: 32

6. The most recent food guidance system released by the USDA for American consumers is _____. (Be sure to capitalize as appropriate for this term.)

ANS: MyPyramid
REF: 38

7. The widths of the color bands in MyPyramid reinforce _____, or how much of your total diet should be eaten from each of the five food groups.

ANS: proportionality
REF: 39

8. The thinnest yellow band in MyPyramid represents _____.

ANS: oils
REF: 39

9. The different color bands in MyPyramid reinforce _____, to encourage a diet that contains all food groups.

ANS: variety
REF: 39

10. Nutrient _____ refers to the amount of nutrients a food contains in relationship to the number of calories it contains.

ANS: density

REF: 40

11. The _____ Values listed on the Nutrition Facts panel of a product are general reference levels for the nutrients listed on the food label. (Be sure to capitalize the first letter.)

ANS: Daily

REF: 50

12. If a serving of a food provides _____ percent or more of the DV, it is considered high in that nutrient. (Be sure you give your answer in numeral form, i.e. "5" vs. "five.")

ANS: 20

REF: 50

13. A(n) _____ food is one that has been shown to have a positive effect on your health beyond its basic nutrients.

ANS: functional

REF: 58

14. Compounds in plant foods, such as lycopene, that have been shown to reduce the risk of certain diseases are called _____.

ANS: phytochemicals

REF: 58

15. Compounds in animal food products that are beneficial to human health are known as _____.

ANS: zoochemicals

REF: 58

16. The three types of claims on food products are nutrient content claims, _____ claims, and structure/function claims.

ANS: health

REF: 52

17. The _____ on a food label are listed in descending order by weight.

ANS: ingredients

REF: 48

18. The AMDRs are ranges set for carbohydrates, fats, and _____.

ANS: proteins

REF: 33

19. It is recommended that _____ should comprise between 10 and 35 percent of your daily caloric intake.

ANS: protein

REF: 33

20. Found in dairy products such as yogurt, _____ are a functional food and may support intestinal health.

ANS: probiotics

REF: 59

Short Answer

1. What five reference values comprise the Dietary Reference Intakes (DRIs)? Provide both the abbreviation and the full title for each value.

ANS: The five reference values are EAR–Estimated Average Requirements; UL–Tolerable Upper Intake Level; RDA–Recommended Dietary Allowance; AI–Adequate Intake; and AMDR–Acceptable Macronutrient Distribution Range.

REF: 32

2. Explain how a person can be obese and malnourished at the same time.

ANS: A person can be obese due to an excessive intake of calories but still not be getting the required amounts of nutrients and can therefore be malnourished. Malnourishment is the long-term outcome of consuming a diet that doesn't meet nutrient needs.

REF: 30

3. What is the difference between the Estimated Average Requirement (EAR) and the Recommended Dietary Allowance (RDA)?

ANS: The EAR is an average requirement, whereas the RDA is a value set that covers the needs of 97 to 98 percent of the population.

REF: 33

4. Why is exceeding the Tolerable Upper Intake Level (UL) for a nutrient not recommended?

ANS: Consuming more than the UL for a nutrient may result in toxicity and damage to organs, especially the liver.

REF: 33

5. How can you "spend" your discretionary calorie allowance?

ANS: These calories can be used for extra servings from the food groups (grain, fruit, vegetable, meat and milk) or as added fat, sweets, or desserts.

REF: 42

Essay

1. List strategies that you can use at home, when eating out, and when shopping to control your portion sizes.

ANS: At home, measure food to develop an "eye" for correct sizes, use smaller plates, keep serving dishes off the table, store leftovers in measured portions, avoid eating snacks directly from the bag or box, and cook smaller portions. When eating out, ask for half orders, choose an appetizer as the entrée, and take part of the meal home. When shopping, read food labels, buy pre-portioned servings, and divide packages of snacks into individual portions.

REF: 47

2. Compare and contrast a food guidance system from another country with MyPyramid.

ANS: Students may compare the U.S. pyramid to the Asian one and notice that grains are still the foundation of a healthy diet. However, the Asian diet does not include dairy. The Mediterranean diet includes daily olive oil and meat only once or twice a month. It has more fish in it than does the U.S. pyramid, and it also recommends moderate alcohol intake.

REF: 38

3. Describe a one-day meal plan that only contains high-nutrient-dense foods and adheres to the MyPyramid food guidance system.

ANS: Answers will vary but may include nutrient-dense choices such as the following: Grain group: Eat at least 6 servings (half from whole grains) per day—whole-grain cereal and skim milk, fruit, brown rice, and whole-grain breads. Vegetable group: 2 1/2 cups per day of fresh, frozen, and canned vegetables, dried peas, and beans. Fruits: 2 cups of dried fruits, whole fruit. Milk: 3 cups of low-fat or nonfat milk, ice cream, cheese, and yogurt. Meat and beans: 5 1/2 ounces of dried beans and peas, eggs, fish, lean meat, nuts, skinless poultry, and seeds. You should also include 3 tablespoons of vegetable oils to your diet over the course of the day.

REF: 43

4. Using two food labels from different brands for similar foods (such as ice cream), compare the foods and discuss why one is superior to the other.

ANS: Students should compare calories per serving, grams of fat, carbohydrates, and protein per serving.

When looking at fat, saturated versus unsaturated should be noted. When looking at carbohydrates, students should comment on starch, sugar, and fiber content. Lastly, students should compare the vitamin and mineral content listed.

REF: 51

5. What is a functional food? Describe how both naturally-occurring and packaged functional foods can be part of a healthy, well-balanced diet.

ANS: A functional food is a food that has a positive effect on health beyond providing basic nutrients.

Naturally occurring phytochemicals and zoochemicals are found in whole grains, fruits, vegetables, fish, dairy products, and healthy vegetable oils. These foods can be part of a healthy diet based on the MyPyramid pattern. Packaged functional foods can be consumed with attention to avoiding overconsumption of one compound. A registered dietitian (RD) can provide advice on the benefits of functional foods in the diet and how to balance them with food intake.

REF: 59