Chapter 02 - Planning a Healthy Diet

Multiple Choice

1. A person's customary intake of foods and beverages over time defines her or his ____.
   a. body weight
   b. eating pattern
   c. genetic predisposition
   d. risk for inherited diseases
   e. preference pattern

   **ANSWER:** b

   **DIFFICULTY:** Bloom's: Remember

   **REFERENCES:** 2.1 Principles and Guidelines

   **LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

2. The diet-planning principle that provides all the nutrients, fiber, and energy in amounts sufficient to maintain health is called ____.
   a. variety
   b. adequacy
   c. moderation
   d. kcalorie control
   e. nutrient density

   **ANSWER:** b

   **DIFFICULTY:** Bloom's: Remember

   **REFERENCES:** 2.1 Principles and Guidelines

   **LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

3. What are the principles of diet planning?
   a. abundance, B vitamins, kcalories, diet control, minerals, and variety
   b. abundance, balance, conservative, diversity, moderation, and vitamins
   c. adequacy, bone development, correction, vitamin density, master, and variety
   d. adequacy, balance, kcalorie control, nutrient density, moderation, and variety
   e. abundance, adequacy, nutrient density, aerobics, and kcalorie control

   **ANSWER:** d

   **DIFFICULTY:** Bloom's: Evaluate

   **REFERENCES:** 2.1 Principles and Guidelines

   **LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

4. Which food is the most calcium-dense?
   a. whole milk
   b. fat-free milk
   c. low-fat milk
   d. cheddar cheese
   e. cottage cheese
5. **Nutrient dense** refers to foods that ____.
   a. carry the USDA nutrition labeling
   b. are higher in weight relative to volume
   c. provide more nutrients relative to kcalories
   d. contain a mixture of carbohydrate, fat, and protein
   e. give the most protein for the consumer’s food dollar

   **ANSWER:** c

6. The concept of nutrient density is most helpful in achieving what principle of diet planning?
   a. Variety
   b. Balance
   c. Moderation
   d. kcalorie control
   e. cost control

   **ANSWER:** d

7. A food that provides 100 mg of magnesium and 25 kcal in a serving has a magnesium density (mg per kcal) of ____.
   a. 0.25
   b. 0.4
   c. 2.5
   d. 4
   e. 25

   **ANSWER:** d
c. the risk reduction score  
d. the healthy eating index  
e. compositional profiling  

**ANSWER:** b  

**DIFFICULTY:** Bloom's: Understand  
**REFERENCES:** 2.1 Principles and Guidelines  
**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.  

9. Providing enough, but not an excess, of a food is a diet-planning principle known as ____.
   a. safety  
   b. variety  
   c. moderation  
   d. undernutrition  
   e. conservatism  

**ANSWER:** c  

**DIFFICULTY:** Bloom's: Understand  
**REFERENCES:** 2.1 Principles and Guidelines  
**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.  

10. Applying the principle of variety in food planning helps ensure the benefits of ____.
   a. moderation  
   b. vegetarianism  
   c. nutrient density  
   d. dilution of harmful substances  
   e. abundance  

**ANSWER:** d  

**DIFFICULTY:** Bloom's: Understand  
**REFERENCES:** 2.1 Principles and Guidelines  
**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.  

11. Which recommendation is part of the *Dietary Guidelines for Americans*?
   b. Limit protein foods intake.  
   c. Practice good foot hygiene.  
   d. Reduce seafood consumption.  
   e. Become vegetarians.  

**ANSWER:** a  

**DIFFICULTY:** Bloom's: Remember  
**REFERENCES:** 2.1 Principles and Guidelines  
**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.
12. What is an important feature of the food group subgroupings?
   a. Consuming a vegetable will provide only one major nutrient
   b. Consuming legumes supplies protein but not fiber or vitamins
   c. Consuming every subgroup every day is not necessary
   d. Consuming broccoli every day for a week to meet the vegetables group intake is acceptable
   e. Consuming dairy products is no longer recommended
   
   ANSWER: c
   
   DIFFICULTY: Bloom's: Understand
   REFERENCES: 2.2 Diet-Planning Guides
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

13. Jamie, a vegetarian, is trying to plan a healthy diet according to the USDA Food Patterns. Which protein foods would be the best nutrient choices for one day?
   a. 2 pieces bacon, 1/2 can tuna, 2 pieces bread
   b. 1/2 cup black beans, 2 tbsp peanut butter, 1/4 cup tofu
   c. 1/2 cup black beans, 2 tbsp peanut butter, 1 c spinach
   d. 1 skinless chicken breast, 2 egg whites, meal replacement bar
   e. 1 egg, one cup leaf lettuce, 2 ounces fatty fish
   
   ANSWER: c
   
   DIFFICULTY: Bloom's: Evaluate
   REFERENCES: 2.2 Diet-Planning Guides
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

14. What two major nutrients are supplied by the fruit group?
   a. vitamins D and E
   b. vitamins A and C
   c. protein and calcium
   d. B vitamins and iron
   e. vitamin K and magnesium
   
   ANSWER: b
   
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet-Planning Guides
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

15. How much fruit juice (100%) is equivalent to 1 cup of fresh fruit?
   a. 1/4 cup
   b. 1/2 cup
   c. 1 cup
   d. 1 1/2 cups
   e. 2 cups
   
   ANSWER: c
16. According to the USDA Food Patterns, which protein food should be most limited?
   a. shrimp
   b. baked beans
   c. peanut butter
   d. skinless chicken
   e. eggs

   ANSWER: b

17. Which food item is a healthy choice for protein in the USDA Food Patterns?
   a. nuts
   b. bacon
   c. luncheon meats
   d. sweet potatoes
   e. marbled meats

   ANSWER: a

18. In which food group are legumes found?
   a. dairy
   b. fruits
   c. grains
   d. protein
   e. oils

   ANSWER: d

19. How many subgroups comprise the vegetable food group?
   a. two
   b. three
   c. five
Chapter 02 - Planning a Healthy Diet

d. six

e. seven

ANSWER: c

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

20. Kcalories from which food would be considered part of one's discretionary kcalorie allowance?
   a. jam
   b. watermelon
   c. raw carrots
   d. brussels sprouts
   e. green beans

ANSWER: a

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

21. Which food supplies only discretionary kcalories?
   a. bagel
   b. raisins
   c. grape jelly
   d. peanut butter
   e. 100% fruit juice

ANSWER: c

DIFFICULTY: Bloom's: Evaluate

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

22. What assessment tool is designed to measure how well a diet meets the recommendations of the Dietary Guidelines?
   a. Healthy Eating Index
   b. Supplemental Nutrition Assistance Program
   c. Dietitian's Comparative Effectiveness Plan
   d. U.S. Public Health Nutrient Assessment Barometer
   e. U.S. Preventive Services Task Forge Guide

ANSWER: a

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

23. In the MyPlate icon, which category is shown as a separate food group?
Chapter 02 - Planning a Healthy Diet

a. fat
b. dairy
c. carbohydrate
d. micronutrients
e. discretionary-calorie foods

**ANSWER:** b

**DIFFICULTY:** Bloom's: Remember

**REFERENCES:** 2.2 Diet-Planning Guides

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

24. What is a major criticism of the use of the MyPlate educational tool?
   a. It allows for oversized portions.
   b. The dairy group excludes ice cream.
   c. The five groups are not clearly identified.
   d. It treats all foods within a single group the same.
   e. It cannot be adapted to vegetarian or vegan diets.

**ANSWER:** d

**DIFFICULTY:** Bloom's: Evaluate

**REFERENCES:** 2.2 Diet-Planning Guides

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

25. Which food group is typically consumed in amounts greater than recommended by the USDA?
   a. dairy
   b. fruits
   c. vegetables
   d. protein foods
   e. whole grains

**ANSWER:** d

**DIFFICULTY:** Bloom's: Remember

**REFERENCES:** 2.2 Diet-Planning Guides

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

26. Food list (exchange) systems were originally developed for people with ____.
   a. diabetes
   b. cancer
   c. cardiovascular disease
   d. life-threatening obesity
   e. neurological impairments

**ANSWER:** a

**DIFFICULTY:** Bloom's: Remember

**REFERENCES:** 2.2 Diet-Planning Guides

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.
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specified energy allowance.

27. Which feature characterizes the food list system?
   a. Foods are grouped according to their source.
   b. Adequate intakes of minerals and vitamins are virtually guaranteed.
   c. Cheeses are grouped with milk and salt pork is grouped with other meats.
   d. All foods are grouped according to their content of carbohydrate, protein, and fats.
   e. Foods are sorted by their vitamin and mineral content.

   ANSWER: d
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet-Planning Guides
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

28. In food exchange lists, to what group are olives assigned?
   a. fat
   b. meat
   c. carbohydrate
   d. meat substitute
   e. fruit

   ANSWER: a
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet-Planning Guides
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

29. Whole-grain flour contains all parts of the grain with the exception of the ____.
   a. bran
   b. husk
   c. germ
   d. endosperm
   e. interior

   ANSWER: b
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet-Planning Guides
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

30. Refined grain products contain only the ____.
   a. bran
   b. husk
   c. germ
   d. endosperm
   e. chaff

   ANSWER: d
31. The addition of calcium to some orange juice products by food manufacturers is known as nutrient _____.
   a. enrichment  
   b. restoration  
   c. fortification  
   d. mineralization  
   e. adulteration

   ANSWER: c

32. The part of the grain that remains after being refined is the _____.
   a. bran  
   b. germ  
   c. husk  
   d. endosperm  
   e. chaff

   ANSWER: d

33. Which bread has the highest fiber content?
   a. white  
   b. refined  
   c. enriched  
   d. whole grain  
   e. super-fine

   ANSWER: d

34. Which characteristic best describes enriched grain products?
   a. They have all of the added nutrients listed on the label.  
   b. They have the fiber restored from the refining procedure.  
   c. They have virtually all the nutrients restored from refining procedure.
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d. They have only 4 vitamins and 4 minerals added by the food manufacturer.
e. They are typically low in calories.

ANSWER: a

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

35. What mineral is added to refined flours in the enrichment process?
   a. iron
   b. iodine
   c. calcium
   d. magnesium
   e. copper

ANSWER: a

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

36. Which product label always denotes a whole-grain product?
   a. multi-grain
   b. 100% wheat
   c. whole-wheat
   d. stone-ground
   e. high fiber

ANSWER: c

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

37. The enrichment of grain products in the United States was initiated in the ____.
   a. 1880s
   b. 1900s
   c. 1920s
   d. 1940s
   e. 1960s

ANSWER: d

DIFFICULTY: Bloom's: Remember

REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

38. Which nutrient is used to enrich grains?
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a. zinc  
b. folate  
c. protein  
d. calcium  
e. sodium

ANSWER: b

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

39. The most highly fortified foods on the market are ____.
   a. frozen dinners  
b. imitation foods  
c. enriched breads  
d. breakfast cereals  
e. canned fruits and vegetables

ANSWER: d

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

40. Which nutrient would be supplied in much greater amounts from whole-grain bread versus enriched bread?
   a. zinc  
b. folate  
c. riboflavin  
d. thiamin  
e. sodium

ANSWER: a

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

41. Cooking an 8-ounce raw steak will reduce the weight (ounces) to approximately ____ ounces.
   a. 3  
b. 4  
c. 5  
d. 6  
e. 7

ANSWER: d

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet-Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.
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specified energy allowance.

42. Textured vegetable protein is usually made from ____.
   a. soybeans  
   b. corn stalks  
   c. a mixture of legumes  
   d. cruciferous vegetables  
   e. dark green, red, and orange vegetables  
   ANSWER: a  
   DIFFICULTY: Bloom's: Remember  
   REFERENCES: 2.2 Diet-Planning Guides  
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

43. Which term is used to describe a cut of meat having a low fat content?  
   a. Grade AA  
   b. Select  
   c. Prime  
   d. Choice  
   e. Grade A  
   ANSWER: b  
   DIFFICULTY: Bloom's: Remember  
   REFERENCES: 2.2 Diet-Planning Guides  
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

44. A meat described as "prime cut" means that it ____.  
   a. has an extended shelf life  
   b. usually carries a high price  
   c. is served only in restaurants  
   d. is higher in fat than other cuts of meat  
   e. comes from animals raised organically  
   ANSWER: d  
   DIFFICULTY: Bloom's: Understand  
   REFERENCES: 2.2 Diet-Planning Guides  
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

45. What term describes a food that resembles and substitutes for another food but is nutritionally inferior to it?  
   a. faux food  
   b. pseudo food  
   c. imitation food  
   d. food substitute  
   e. fraudulent food  
   ANSWER: c
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DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

46. A food scientist is developing a new and improved cereal bar. She consults with you about the ordering of the ingredients on a food label. The ingredients are: Sugar: 30 g, Puffed wheat: 28 g, Dry milk powder: 5 g, Red food coloring: 35 mg, Salt: 2 g. What is the appropriate order in which to list these ingredients on the food label?
   a. sugar, puffed wheat, dry milk powder, salt, red food coloring
   b. red food coloring, salt, dry milk powder, puffed wheat, sugar
   c. dry milk powder, puffed wheat, red food coloring, salt, sugar
   d. puffed wheat, sugar, dry milk powder, salt, red food coloring
   e. sugar, salt, puffed wheat, dry milk powder, red food coloring

   ANSWER: a

DIFFICULTY: Bloom's: Evaluate
REFERENCES: 2.3 Food Labels
LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

47. According to nutrition labeling laws, what two minerals must be listed on the package label as a percent Daily Value?
   a. calcium and iron
   b. zinc and phosphorus
   c. fluoride and chloride
   d. chromium and magnesium
   e. copper and potassium

   ANSWER: a

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.3 Food Labels
LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

48. A food label ingredient list reads in the following order: wheat flour, vegetable shortening, sugar, salt, and cornstarch. What item would be found in the SMALLEST amount in this food?
   a. salt
   b. sugar
   c. cornstarch
   d. wheat flour
   e. vegetable shortening

   ANSWER: c

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.3 Food Labels
LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

49. An athlete has a daily energy allowance of 2500 kcalories. Calculate the personal daily value for fat based on this energy intake.
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50. Which statement describes a characteristic of food serving sizes?
   a. Serving sizes for most foods have not yet been established by the FDA
   b. The serving size for ice cream is 2 cups and the serving size for all beverages is 12 fluid ounces
   c. All labels for a given type of product, such as ice cream, use the same serving size.
   d. Serving sizes are listed in common household measures, such as cups, or metric measures, such as milliliters, but not both
   e. Manufacturers are free to set their own serving sizes as long as they specify what the serving size is.

   ANSWER: c
   DIFFICULTY: Bloom's: Understand
   REFERENCES: 2.3 Food Labels
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

51. According to nutrition labeling laws, the amounts of what two vitamins must currently be listed on the package label as a percent Daily Value, but will no longer be required once proposed label changes go into effect?
   a. vitamins D and E
   b. vitamins A and C
   c. thiamin and riboflavin
   d. vitamin B₆ and niacin
   e. vitamins E and K

   ANSWER: b
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.3 Food Labels
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

52. Food labels express the nutrient content in relation to a set of standard values known as the ____.
   a. Daily Values
   b. FDA Standards
   c. Dietary Reference Intakes
   d. Recommended Dietary Intakes
   e. USDA Intake Standards

   ANSWER: a
   DIFFICULTY: Bloom's: Remember
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REFERENCES: 2.3 Food Labels

LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

53. Population groups such as sedentary older men, sedentary younger women, and active older women have a daily energy need of approximately ____ kcalories.
   a. 1200
   b. 1500
   c. 1800
   d. 2000
   e. 2400
   ANSWER: d
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.3 Food Labels
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

54. On a food label, the "% Daily Value" table compares key nutrients per serving for a person consuming how many kcalories daily?
   a. 1200
   b. 1500
   c. 1800
   d. 2000
   e. 2400
   ANSWER: d
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.3 Food Labels
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

55. What is a feature of the Nutrition Facts panel on a food label?
   a. Trans fat content is optional.
   b. Saturated fat must be listed.
   c. Naturally present sugars are excluded.
   d. Soluble and insoluble fiber must be listed separately.
   e. Unsaturated fats must be listed.
   ANSWER: b
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.3 Food Labels
   LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

56. What is a feature of the Daily Values found on food labels?
   a. They are updated every two years as mandated by the USDA.
   b. They are expressed on a "per 1000-kcalorie intake" basis.
   c. They assist people in determining whether a food contains a little or a lot of a nutrient.
d. They define a food as an excellent source of a nutrient if it contributes at least 50% of the dietary recommended intake.
e. They assign grades of A, B, C, D, or F to foods.

ANSWER:  
c

DIFFICULTY:  
Bloom's: Understand

REFERENCES:  
2.3 Food Labels

LEARNING OBJECTIVES:  
UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

57. A food label that advertises the product as a "rich source of fiber" is an example of a ____.
  a. nutrient claim
  b. health claim
  c. weight reduction claim
  d. structure-function claim
  e. research-based claim

ANSWER:  
a

DIFFICULTY:  
Bloom's: Understand

REFERENCES:  
2.3 Food Labels

LEARNING OBJECTIVES:  
UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

58. According to the FDA, a food label that reads "improves memory" is an example of a ____.
  a. health claim
  b. Daily Value claim
  c. qualified health claim
  d. structure-function claim
  e. unsupported claim

ANSWER:  
d

DIFFICULTY:  
Bloom's: Understand

REFERENCES:  
2.3 Food Labels

LEARNING OBJECTIVES:  
UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

59. Greg is trying to decide which brand of cereal to buy, but he is a somewhat confused by the health claims. Which statement represents the highest level of significant scientific agreement?
  a. "This cereal promotes a healthy heart."
  b. "This cereal supports heart health."
  c. "This product contains whole grains, which have been proven to reduce the risk of heart disease and certain cancers."
  d. "Very limited and preliminary scientific research suggests this product can reduce risk for cancers; FDA concludes that there is little scientific evidence supporting this claim."
  e. "Anecdotal evidence demonstrates a clear relationship between consumption of this product and elimination of health risk factors."

ANSWER:  
c
Chapter 02 - Planning a Healthy Diet

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

60. What is a characteristic of structure-function claims on food labels?
   a. They are allowed only for unprocessed food.
   b. They can be made without any FDA approval.
   c. They must conform to guidelines of the "A" list of health claims.
   d. They must state the name of the disease or symptom for which a benefit is claimed.
   e. They can only be made based on peer-reviewed research.

**ANSWER:** b

**DIFFICULTY:** Bloom's: Understand

**REFERENCES:** 2.3 Food Labels

61. Which food items are consumed in the diet of a lactovegetarian?
   a. plant foods only
   b. eggs and plant foods only
   c. meat, eggs, and plant foods only
   d. milk products and plant foods only
   e. fish, eggs, and dairy only

**ANSWER:** d

**DIFFICULTY:** Bloom's: Evaluate

**REFERENCES:** H-2 Vegetarian Diets

**LEARNING OBJECTIVES:** UNUT.WHRO.16.H-2 - Develop a well-balanced vegetarian meal plan.

62. Tempeh is made from ____.
   a. soybeans
   b. any legume
   c. fermented leafy vegetables
   d. fermented yellow vegetables
   e. wheat proteins

**ANSWER:** a

**DIFFICULTY:** Bloom's: Remember

**REFERENCES:** H-2 Vegetarian Diets

63. Which ingredient on a food label would be a source of protein?
   a. BHT
   b. tofu
   c. corn starch
   d. diglycerides
   e. high fructose corn syrup

**ANSWER:** b

**DIFFICULTY:** Bloom's: Evaluate
Chapter 02 - Planning a Healthy Diet

REFERENCES: H-2 Vegetarian Diets


64. Which feature is present in vegetarians who regularly eat meals based on tofu, vegetables, and whole grains?
   a. They show less heart disease but more colon cancer than omnivores.
   b. They show evidence of marginal protein intake compared with omnivores.
   c. They have lower blood pressure levels than those eating meat.
   d. They have lower sodium intakes but blood pressure is similar to those eating red meat.
   e. They are virtually indistinguishable from meat eaters in terms of disease occurrence.

   ANSWER: c
   DIFFICULTY: Bloom's: Evaluate

REFERENCES: H-2 Vegetarian Diets


65. In vegetarians, the RDA is higher for ____.
   a. iron
   b. folate
   c. calcium
   d. vitamin A
   e. protein

   ANSWER: a
   DIFFICULTY: Bloom's: Remember

REFERENCES: H-2 Vegetarian Diets


66. Which statement describes a feature of iron nutrition in vegetarians?
   a. Vegetarians’ bodies adapt to absorb iron more efficiently.
   b. Iron utilization is inhibited by the high zinc content in grains
   c. The absorption of iron is low due to the high vitamin C intake.
   d. More iron deficiency is found in vegetarians than in people eating a mixed diet.
   e. There are no differences in iron intake or utilization in vegetarians.

   ANSWER: a
   DIFFICULTY: Bloom's: Evaluate

REFERENCES: H-2 Vegetarian Diets


67. Meat replacements consumed by vegans are often made of ____.
   a. soy
   b. fish
   c. eggs
   d. dairy
   e. poultry

   ANSWER: a
   DIFFICULTY: Bloom's: Remember
REFERENCES: H-2 Vegetarian Diets


68. What is typically a characteristic of a vegetarian diet?
   a. Fat intake is higher.
   b. Fiber intake is lower.
   c. Vitamin B<sub>12</sub> intake is lower.
   d. Intakes of vitamins A and C are lower.
   e. Iron intake is higher.

   ANSWER: c

   DIFFICULTY: Bloom's: Evaluate

REFERENCES: H-2 Vegetarian Diets


69. Which statement characterizes vitamin B<sub>12</sub> nutrition in vegetarians and vegans?
   a. Vitamin B<sub>12</sub> in fortified cereals has low bioavailability.
   b. Vegans should avoid vitamin B<sub>12</sub> supplements due to toxicity risks.
   c. The vitamin B<sub>12</sub> in fermented soy products may be present in an inactive form
   d. The health consequences of vitamin B<sub>12</sub> deficiency in vegetarians include joint pain, rickets, and fatigue.
   e. Vitamin B<sub>12</sub> is problematic in vegetarians but not vegans.

   ANSWER: c

   DIFFICULTY: Bloom's: Evaluate

REFERENCES: H-2 Vegetarian Diets


70. What best characterizes a macrobiotic diet?
   a. It excludes all hot and salty foods.
   b. It permits inclusion of many non-organic foods.
   c. It represents a way of life rather than just a way of eating.
   d. It emphasizes abundant amounts of fish, fruits, nuts, and seeds.
   e. It is based on seasonally-available fruits, vegetables, grains, and game meats and fish.

   ANSWER: c

   DIFFICULTY: Bloom's: Evaluate

REFERENCES: H-2 Vegetarian Diets


Matching

a. 5
b. 40
c. 65
d. 1/2 cup
Chapter 02 - Planning a Healthy Diet

e. 1 cup
f. FDA
g. Bran
h. Iron
i. USDA
j. Soybeans
k. Green peas
l. Balance
m. Vitamin B₁₂
n. Vitamin A
o. Endosperm
p. Nutrient density
q. Sodium and hypertension
r. Tomatoes and prostate cancer
s. Margarine containing plant sterols
t. Orange juice containing added calcium

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet Planning Guides
            2.1 Principles and Guidelines
            2.3 Food Labels
            H-2 Vegetarian Diets

LEARNING OBJECTIVES: UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.
                     UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.
                     UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

71. The principle of consuming a number of foods in proportion to each other
ANSWER: l

72. The principle of recognizing that a food has more iron than another food when expressed per kcalorie
ANSWER: p

73. Origin of the MyPlate graphic
ANSWER: i

74. Number of major food groups
ANSWER: a

75. Legume belonging to the starch category of the food lists
ANSWER: k

76. Part of grain richest in fiber
ANSWER: g
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77. Part of grain containing most of the starch
ANSWER: o

78. Nutrient added in grain enrichment process
ANSWER: h

79. Example of a fortified food
ANSWER: t

80. Commonly used to make textured vegetable protein
ANSWER: j

81. Example of a functional food
ANSWER: s

82. Nutrient commonly added in cow's milk fortification process
ANSWER: n

83. Maximum number of grams of fat recommended on a 2000-kcalorie diet based on the Daily Value
ANSWER: c

84. Serving size (equivalent to 1 oz) of rice in the USDA Food Patterns
ANSWER: d

85. Quantity of yogurt equivalent to 1 cup of milk in the USDA Food Patterns
ANSWER: e

86. Agency that regulates food labeling
ANSWER: f

87. Grams of fat supplied by a 1200-kcalorie diet that is 30% fat
ANSWER: b

88. Associated in a reliable health claim allowed on food labels
ANSWER: q

89. Associated in a health claim NOT allowed on food labels without a disclaimer
ANSWER: r

90. Nutrient commonly added in soy milk fortification process
ANSWER: m

Completion

91. _______________ reflects a diet that provides sufficient energy and enough of all the nutrients to meet the needs of healthy people.
ANSWER: Adequacy
DIFFICULTY: Bloom's: Remember
REFERENCES: 2.1 Principles and Guidelines
Chapter 02 - Planning a Healthy Diet

LEARNING OBJECTIVES: UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

92. To calculate the nutrient density of a food item for calcium, divide the ____________________ of calcium in a portion by the ____________________ in that portion.
   ANSWER: milligrams; kcalories
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.1 Principles and Guidelines

LEARNING OBJECTIVES: UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

93. ________________ refers to a measure of the nutrients a food provides relative to the energy it provides.
   ANSWER: Nutrient density
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.1 Principles and Guidelines

LEARNING OBJECTIVES: UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

94. Diet-planning tools that sort foods into groups based on nutrient content and then specify that people should eat certain amounts of foods from each group are called ________________ plans.
   ANSWER: food group
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

95. ________________ contribute the same key nutrients—notably, protein, iron, and zinc—as meats, poultry, and seafood.
   ANSWER: Legumes
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

96. The kcalories remaining in a person’s energy allowance after consuming enough nutrient- dense foods to meet all nutrient needs for a day are called ________________ kcalories.
   ANSWER: discretionary
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

97. An assessment tool called the ________________ can be used to measure how well a diet meets the recommendations of the Dietary Guidelines.
   ANSWER: Healthy Eating Index
   DIFFICULTY: Bloom's: Remember
   REFERENCES: 2.2 Diet Planning Guides
Chapter 02 - Planning a Healthy Diet

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

98. Diet-planning tools that organize foods by their proportions of carbohydrate, fat, and protein are called ________________.

ANSWER: exchange lists
food lists

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.2 Diet Planning Guides

LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

99. The Nutrition Facts panel must provide the nutrient ________________, the ________________, or both for important nutrients.

ANSWER: amount; percent Daily Value
percent Daily Value; amount;

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.3 Food Labels

LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

100. The ________________ is the seed that grows into a wheat plant, so it is especially rich in vitamins and minerals to support new life.

ANSWER: germ

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.3 Food Labels

LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

Essay

101. List and discuss the significance of six diet-planning principles.

ANSWER: Adequacy reflects a diet that provides sufficient energy and enough of all the nutrients to meet the needs of healthy people. Take the essential nutrient iron, for example. Because the body loses some iron each day, people have to replace it by eating foods that contain iron. A person whose diet fails to provide enough iron-rich foods may develop the symptoms of iron-deficiency anemia: the person may feel weak, tired, and listless; have frequent headaches; and find that even the smallest amount of muscular work brings disabling fatigue. To prevent these deficiency symptoms, a person must include foods that supply adequate iron.

Balance in the diet helps to ensure adequacy. The art of balancing the diet involves consuming enough—but not too much—of different types of foods in proportion to one another. In a balanced diet, foods rich in some nutrients do not crowd out foods that are rich in other nutrients.

kcalorie (energy) Control: Designing an adequate diet within a reasonable kcalorie allowance requires careful planning. Once again, balance plays a key role. The amount of energy coming into the body from foods should balance with the amount of energy being used by the body to sustain its metabolic and physical activities. Upsetting this balance leads to gains or
Nutrient density promotes adequacy and kcalorie control. To eat well without overeating, select nutrient-dense foods—that is, foods that deliver the most nutrients for the least food energy.

Moderation contributes to adequacy, balance, and kcalorie control. Foods rich in fat and sugar often provide enjoyment and energy but relatively few nutrients; in addition, they promote weight gain when eaten in excess. A person practicing moderation eats such foods only on occasion and regularly selects foods low in solid fats and added sugars, a practice that automatically improves nutrient density.

Variety improves nutrient adequacy. A diet may have all of the virtues just described and still lack variety, if a person eats the same foods day after day. People should select foods from each of the food groups daily and vary their choices within each food group from day to day for several reasons. First, different foods within the same group contain different arrays of nutrients. Second, no food is guaranteed entirely free of substances that, in excess, could be harmful. Third, as the adage goes, variety is the spice of life.

102. Why is it important to vary intake of foods within the same food group from day to day?

**ANSWER:** Variety improves nutrient adequacy. A diet may have all of the virtues just described and still lack variety, if a person eats the same foods day after day. People should select foods from each of the food groups daily and vary their choices within each food group from day to day for several reasons. First, different foods within the same group contain different arrays of nutrients. Among the fruits, for example, strawberries are especially rich in vitamin C while apricots are rich in vitamin A. Second, no food is guaranteed entirely free of substances that, in excess, could be harmful. The strawberries might contain trace amounts of one contaminant, the apricots another. By alternating fruit choices, a person will ingest very little of either contaminant. Third, as the adage goes, variety is the spice of life. A person who eats beans frequently can enjoy pinto beans in Mexican burritos today, garbanzo beans in a Greek salad tomorrow, and baked beans with barbecued chicken on the week-end. Eating nutritious meals need never be boring.

**DIFFICULTY:** Bloom's: Evaluate

**REFERENCES:** 2.1 Principles and Guidelines

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

103. What is meant by the term "nutrient-dense food"? Give three examples each of foods with high nutrient density and low nutrient density.

**ANSWER:** Nutrient density promotes adequacy and kcalorie control. To eat well without overeating, select nutrient-dense foods—that is, foods that deliver the most nutrients for the least food energy. Consider foods containing calcium, for example. You can get about 300 milligrams of calcium from either 1½ ounces of cheddar cheese or 1 cup of fat-free milk, but the cheese delivers about twice as much food energy (kcalories) as the milk. The fat-free milk, then, is twice as calcium dense as the cheddar cheese; it offers the same amount of calcium for half the kcalories. Both foods are excellent choices for adequacy’s sake alone, but to achieve adequacy while controlling kcalories, the fat-free milk is the better choice. (Alternatively, a person could select a low-fat cheddar cheese with its kcalories comparable to fat-free milk.)
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Just as a financially responsible person pays for rent, food, clothes, and tuition on a limited budget, healthy people obtain iron, calcium, and all the other essential nutrients on a limited energy (kcalorie) allowance. Success depends on getting many nutrients for each kcalorie “dollar.” A person who makes nutrient-dense choices can meet daily nutrient needs on a lower energy budget. Such choices support good health.

Foods that are notably low in nutrient density—such as potato chips, candy, and colas—are called empty-kcalorie foods. The kcalories these foods provide are called “empty” because they deliver a lot of energy (from added sugars, solid fats, or both) but little, or no, protein, vitamins, or minerals.

The concept of nutrient density is relatively simple when examining the contributions of one nutrient to a food or diet. With respect to calcium, milk ranks high and meats rank low. With respect to iron, meats rank high and milk ranks low. But it is a more complex task to answer the question, which food is more nutritious? To answer that question, we need to consider several nutrients—including both nutrients that may harm health as well as those that may be beneficial. Ranking foods based on their overall nutrient composition is known as nutrient profiling. Researchers have yet to agree on an ideal way to rate foods based on the nutrient profile, but when they do, nutrient profiling will be quite useful in helping consumers identify nutritious foods and plan healthy diets.

Foods listed as examples will vary.

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.1 Principles and Guidelines
LEARNING OBJECTIVES: UNUT.WHRO.16.2.1 - Explain how each of the diet-planning principles can be used to plan a healthy diet.

104. List and describe the contributions of the five food groups in the USDA Food Patterns.

ANSWER: Fruits contribute folate, vitamin A, vitamin C, potassium, and fiber.

Vegetables contribute folate, vitamin A, vitamin C, vitamin K, vitamin E, magnesium, potassium, and fiber.

Grains contribute folate, niacin, riboflavin, thiamin, iron, magnesium, selenium, and fiber.

Protein foods contribute protein, essential fatty acids, niacin, thiamin, vitamin B6, vitamin B12, iron, magnesium, potassium, and zinc.

Milk and milk products contribute protein, riboflavin, vitamin B12, calcium, potassium, and, when fortified, vitamin A and vitamin D.

Oils are not a food group, but are featured here because they contribute vitamin E and essential fatty acids.

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

105. Provide examples and discuss the importance of the five subgroups of the vegetables food group.

ANSWER: All vegetables provide an array of nutrients, but some vegetables are especially good sources of certain vitamins, minerals, and beneficial phytochemicals. For this reason, the vegetable group is sorted into five subgroups. The dark-green vegetables deliver the B vitamin folate; the red and orange vegetables provide vitamin A; legumes supply iron and protein; the
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starchy vegetables contribute carbohydrate energy; and the other vegetables fill in the gaps and add more of these same nutrients.

Dark-green vegetables: Broccoli and leafy greens such as arugula, beet greens, bok choy, collard greens, kale, mustard greens, romaine lettuce, spinach, turnip greens, watercress

Red and orange vegetables: Carrots, carrot juice, pumpkin, red bell peppers, sweet potatoes, tomatoes, tomato juice, vegetable juice, winter squash (acorn, butternut)

Legumes: Black beans, black-eyed peas, garbanzo beans (chickpeas), kidney beans, lentils, navy beans, pinto beans, soybeans and soy products such as tofu, split peas, white beans

Starchy vegetables: Cassava, corn, green peas, hominy, lima beans, potatoes

Other vegetables: Artichokes, asparagus, bamboo shoots, bean sprouts, beets, brussels sprouts, cabbages, cactus, cauliflower, celery, cucumbers, eggplant, green beans, green bell peppers, iceberg lettuce, mushrooms, okra, onions, seaweed, snow peas, zucchini

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

106. Define the term "discretionary kcalories" and give three examples of foods that provide them. Under what circumstances is the intake of discretionary kcalories permitted?

ANSWER: People who consistently choose nutrient-dense foods may be able to meet most of their nutrient needs without consuming their full allowance of kcalories. The difference between the kcalories needed to supply nutrients and those needed to maintain weight might be considered discretionary kcalories.

DIFFICULTY: Bloom's: Apply
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

107. Discuss the meaning, significance, and utility of MyPlate as an educational tool.

ANSWER: The USDA created an educational tool called MyPlate to illustrate the five food groups. The MyPlate icon divides a plate into four sections, each representing a food group—fruits, vegetables, grains, and protein foods. The sections vary in size, indicating relative proportion each food group contributes to a healthy diet. A circle next to the plate represents the milk group (dairy). The MyPlate icon does not stand alone as an educational tool.

A wealth of information can be found at the website (www.choosemyplate.gov). Consumers can choose the kinds and amounts of foods they need to eat each day based on their height, weight, age, gender, and activity level. Information is also available for children, pregnant and lactating women, and for vegetarians. In addition to creating a personal plan, consumers can find daily tips to help them improve their diet and increase physical activity. A key message of the website is to enjoy food, but eat less by avoiding oversized portions.

DIFFICULTY: Bloom's: Evaluate
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

108. What is the Healthy Eating Index and how does it work?
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ANSWER: An assessment tool, called the Healthy Eating Index, can be used to measure how well a diet meets the recommendations of the Dietary Guidelines. Various components of the diet are given scores that reflect the quantities consumed. For most components, higher intakes result in higher scores. For example, selecting at least 3 ounces of whole grains (per 2000 kcalories) gives a score of 10 points, whereas selecting no whole grains gives a score of 0 points. For a few components, lower intakes provide higher scores. For example, less than 2.2 grams of sodium (per 2000 kcalories) receives 10 points, but more than 4 grams gets 0 points. An assessment of recent nutrition surveys using the Healthy Eating Index reports that the American diet scores 54 out of a possible 100 points. To improve this score, the American diet needs to decrease kcalories from solid fats and added sugars by about 60 percent; increase fruits by 100 percent and vegetables and milk products by 70 percent; maintain the quantity of grains but shift the quality to four times as many whole grains; and reduce salt by more than half.

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

109. What is the origin of food lists (formerly known as exchange lists)? How are they best utilized?

ANSWER: Food group plans are particularly well suited to help a person achieve dietary adequacy, balance, and variety. Food lists provide additional help in achieving kcalorie control and moderation. Originally developed as a meal planning guide for people with diabetes, food lists have proved useful for general diet planning as well.

Unlike the USDA Food Patterns, which sort foods primarily by their vitamin and mineral contents, the food list system sorts foods according to their energy-nutrient contents. Consequently, foods do not always appear on the food list where you might first expect to find them. For example, cheeses are grouped with meats because, like meats, cheeses contribute energy from protein and fat but provide negligible carbohydrate. (In the USDA Food Patterns presented earlier, cheeses are grouped with milk because they are milk products with similar calcium contents.)

For similar reasons, starchy vegetables such as corn, green peas, and potatoes are listed with grains on the starch list in the food list system, rather than with the vegetables. Likewise, olives are not classed as a “fruit” as a botanist would claim; they are classified as a “fat” because their fat content makes them more similar to oil than to berries. Cream cheese, bacon, and nuts are also on the fat list to remind users of their high fat content. These groupings highlight the characteristics of foods that are significant to energy intake.

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

110. Discuss the meaning and significance of foods that are processed, refined, enriched, fortified, or whole-grain.

ANSWER: Processed foods: foods that have been treated to change their physical, chemical, microbiological, or sensory properties.
Fortified: the addition to a food of nutrients that were either not originally present or present in insignificant amounts. Fortification can be used to correct or prevent a widespread nutrient deficiency or to balance the total nutrient profile of a food.
Refined: the process by which the coarse parts of a food are removed. When wheat is refined into flour, the bran, germ, and husk are removed, leaving only the endosperm.
Enriched: the addition to a food of specific nutrients to replace losses that occur during
processing so that the food will meet a specified standard.
Whole grain: a grain that maintains the same relative proportions of starchy endosperm, germ, and bran as the original (all but the husk); not refined.

DIFFICULTY: Bloom's: Understand
REFERENCES: 2.2 Diet-Planning Guides
LEARNING OBJECTIVES: UNUT.WHRO.16.2.2 - Use the USDA Food Patterns to develop a meal plan within a specified energy allowance.

111. List the information that must be displayed on food labels.
ANSWER: Serving Sizes: Because labels present nutrient information based on one serving, they must identify the size of the serving. The Food and Drug Administration (FDA) has established specific serving sizes for various foods and requires that all labels for a given product use the same serving size.

Nutrient Quantities: In addition to the serving size and the servings per container, the FDA requires that the Nutrition Facts panel on food labels present nutrient information in two ways—in quantities (such as grams) and as percentages of standards called the Daily Values. The Nutrition Facts panel must provide the nutrient amount, percent Daily Value, or both for the following:
- Total food energy (kcalories)
- Total fat (grams and percent Daily Value)—note that the proposed revision does not include calories from fat
- Saturated fat (grams and percent Daily Value)
- Trans fat (grams)
- Cholesterol (milligrams and percent Daily Value)
- Sodium (milligrams and percent Daily Value)
- Total carbohydrate, which includes starch, sugar, and fiber (grams and percent Daily Value)
- Dietary fiber (grams and percent Daily Value)
- Sugars, which includes both those naturally present in and those added to the food (grams)
- Protein (grams)

The labels must also present nutrient content information as a percent Daily Value for the following vitamins and minerals:
- Vitamin D
- Potassium
- Iron
- Calcium

The Daily Values: Food labels list the amount of some nutrients in a product as a percentage of its Daily Value, which makes the numbers more meaningful to consumers. The Daily Values reflect dietary recommendations for nutrients and dietary components that have important relationships with health. The “% Daily Value” column on a label provides a ballpark estimate of how individual foods contribute to the total diet.

Front-of-Package Labels: Some consumers find the many numbers on Nutrition Facts panels overwhelming. They want an easier and quicker way to interpret information and select products. Food manufacturers responded by creating front-of-package labels that incorporate text, color, and icons to present key nutrient facts.

DIFFICULTY: Bloom's: Remember
REFERENCES: 2.3 Food Labels
LEARNING OBJECTIVES: UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
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112. Discuss the regulations for nutrient claims and health claims on food labels.

**ANSWER:**

**Nutrient Claims:** Have you noticed phrases such as “good source of fiber” on a box of cereal or “rich in calcium” on a package of cheese? These and other nutrient claims may be used on labels so long as they meet FDA definitions, which include the conditions under which each term can be used. For example, in addition to having less than 2 milligrams of cholesterol, a “cholesterol-free” product may not contain more than 2 grams of saturated fat and trans fat combined per serving. The accompanying glossary defines nutrient terms on food labels, including criteria for foods described as “low,” “reduced,” and “free.” When nutrients have been added to enriched or fortified products, they must appear in the ingredients list. Some descriptions imply that a food contains, or does not contain, a nutrient. Implied claims are prohibited unless they meet specified criteria. For example, a claim that a product “contains no oil” implies that the food contains no fat. If the product is truly fat-free, then it may make the no-oil claim, but if it contains another source of fat, such as butter, it may not.

**Health Claims:** Health claims describe a relationship between a food (or food component) and a disease or health-related condition. In some cases, the FDA authorizes health claims based on an extensive review of the scientific literature. For example, the health claim that “Diets low in sodium may reduce the risk of high blood pressure” is based on enough scientific evidence to establish a clear link between diet and health. In cases where there is emerging—but not established—evidence for a relationship between a food or food component and disease, the FDA allows the use of qualified health claims that must use specific language indicating that the evidence supporting the claim is limited. A qualified health claim might claim that “Very limited and preliminary research suggests that eating one-half to one cup of tomatoes and/or tomato sauce a week may reduce the risk of prostate cancer. The FDA concludes that there is little scientific evidence supporting the claim.”

**Structure-Function Claims:** Unlike health claims, which require food manufacturers to collect scientific evidence and petition the FDA, structure-function claims can be made without any FDA approval. Product labels can claim to “slow aging,” “improve memory,” and “build strong bones” without any proof. The only criterion for a structure-function claim is that it must not mention a disease or symptom. Unfortunately, structure-function claims can be deceptively similar to health claims, and most consumers do not distinguish between different types of claims.

**DIFFICULTY:** Bloom's: Understand

**REFERENCES:** 2.3 Food Labels

**LEARNING OBJECTIVES:** UNUT.WHRO.16.2.3 - Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

113. Discuss the reasons for why people become vegetarians.

**ANSWER:**

The health benefits of a primarily vegetarian diet seem to have encouraged many people to eat more plant-based meals. The popular press sometimes refers to individuals who eat small amounts of meat, seafood, or poultry from time to time as “flexitarians.”

People who choose to exclude meat and other animal-derived foods from their diets today do so for many of the same reasons the Greek philosopher Pythagoras cited in the sixth century B.C.: physical health, ecological responsibility, and philosophical concerns. They might also cite world hunger issues, economic reasons, ethical concerns, or religious beliefs as motivating factors.

**DIFFICULTY:** Bloom's: Remember

**REFERENCES:** H-2 Vegetarian Diets

**LEARNING OBJECTIVES:** UNUT.WHRO.16.H-2 - Develop a well-balanced vegetarian meal plan.
114. List and discuss the health advantages of a vegetarian diet.

**ANSWER:**

Vegetarians tend to maintain a lower and healthier body weight than nonvegetarians. In general, those who eat meat have higher energy intakes and body weights. Vegetarians’ lower body weights correlate with their high intakes of fiber and low intakes of fat. 

Obesity and weight gains are strong risk factors for diabetes, which partially explains why nonvegetarian diets are more often associated with diabetes than vegetarian diets. Even when body weight and life-style factors are taken into account, vegetarian eating patterns seem to protect against diabetes.

Vegetarians tend to have lower blood pressure and lower rates of hypertension than nonvegetarians. Appropriate body weight helps to maintain a healthy blood pressure, as does a diet low in saturated fat and cholesterol and high in fiber, fruits, vegetables, whole grains, low-fat milk products, and protein from plant sources.

Meat is associated with an increased risk of heart disease and stroke. The incidence of heart disease and related deaths and the concentrations of blood cholesterol are lower for vegetarians than for nonvegetarians, which can partly be explained by their avoidance of meat. The dietary factor most directly related to heart disease is saturated animal fat, and in general, vegetarian diets are lower in total fat, saturated fat, and cholesterol than typical meat-based diets. The fats common in plant-based diets—the monounsaturated fats of olives, seeds, and nuts and the polyunsaturated fats of vegetable oils—are associated with a decreased risk of heart disease. Furthermore, vegetarian diets are generally higher in dietary fiber, antioxidant vitamins, and phytochemicals—all factors that help control blood lipids and protect against heart disease. Many vegetarians include soy products such as tofu in their diets. Soy products—with their polyunsaturated fats, fibers, vitamins, and minerals, and little saturated fat—may help to protect against heart disease.

Vegetarians have a lower overall cancer incidence than the general population. Their low cancer rates may be due to their high intakes of fruits and vegetables. Some scientific findings indicate that vegetarian diets are associated not only with lower cancer mortality in general, but also with lower incidence of cancer at specific sites as well, most notably, colon cancer. People with colon cancer seem to eat more meat. Some cancer experts recommend limiting consumption of red meat to no more than 11 ounces a week, with very little (if any) processed meat.

In addition to obesity, diabetes, hypertension, heart disease, and some cancers, vegetarian diets may help prevent osteoporosis, diverticular disease, gallstones, cataracts, and rheumatoid arthritis.

**DIFFICULTY:** Bloom's: Understand

**REFERENCES:** H-2 Vegetarian Diets

**LEARNING OBJECTIVES:** UNUT.WHRO.16.H-2 - Develop a well-balanced vegetarian meal plan.

115. Discuss how vegetarians and vegans can ensure that they have adequate protein intake.

**ANSWER:**

The protein RDA for vegetarians is the same as for others, although some have suggested that it should be higher because plant proteins are not digested as completely. Lacto-ovo-vegetarian diets that include animal-derived foods such as milk and eggs, deliver high-quality proteins and are likely to meet protein needs. Even vegetarians who adopt only plant-based diets are likely to meet protein needs provided that their energy intakes are adequate and the protein sources varied. The proteins of whole grains, vegetables, legumes, and nuts and seeds can provide adequate amounts of all the amino acids. An advantage of many vegetarian sources of protein is that they are generally lower in saturated fat than meats and are often higher in fiber and richer in some vitamins and minerals.
Vegetarians sometimes use meat replacements made of textured vegetable protein (soy protein). These foods are formulated to look and taste like meat, seafood, or poultry. Many of these products are fortified to provide the vitamins and minerals found in animal sources of protein. Some may be high in salt, sugars, and saturated fats. A wise vegetarian learns to read labels and use a variety of whole, unrefined foods often and commercially prepared foods less frequently. Vegetarians may also use soy products such as tofu to bolster protein intake.

DIFFICULTY: Bloom's: Understand
REFERENCES: H-2 Vegetarian Diets