Chapter 2 - Nutritional Assessment and Dietary Planning

1. Undernutrition and overnutrition both are examples of
   A. malnutrition.
   B. nutritional deficiency.
   C. nutritional toxicity.
   D. overconsumption.
   E. underconsumption.

2. Overconsumption of a nutrient resulting in dangerous effects is termed:
   A. overload.
   B. obesity.
   C. nutritional excess.
   D. nutritional toxicity.

3. If a person had an iron deficiency because of an inadequate intake of iron-rich foods, which type of malnutrition could this be classified as?
   A. Combination-state malnutrition
   B. Primary malnutrition
   C. Secondary malnutrition
   D. Protein malnutrition

4. Mrs. Jones is recovering from gastric bypass surgery, and as a result has become deficient in a number of nutrients. Which type of malnutrition is Mrs. Jones experiencing?
   A. Primary
   B. Secondary
   C. Post-surgical
   D. Multiple state

5. Nutritional status assessment includes:
   A. dietary assessment.
   B. clinical assessment.
   C. biochemical assessment.
   D. anthropometric assessment.
   E. All of the above

6. Estimates of physical aspects of the body such as body composition are categorized as _____ measurements.
   A. anthropometric
   B. biochemical
   C. clinical
   D. dietary
7. The assessment of bone mineral content and bone mineral density using the dual-energy x-ray absorptiometer (DEXA or DXA) would be considered a(n) _____ measure.

A. anthropometric  
B. biochemical  
C. clinical  
D. dietary

8. Height and weight are examples of which type of measurements?

A. Anthropometric  
B. Biochemical  
C. Clinical  
D. Dietary

9. An estimate of your _____, the proportions of lean tissue, body fat, water, and mineral (bone) mass, can help determine your nutritional status.

A. body weight  
B. body height  
C. body composition  
D. body mass index

10. Which of the following measures body fatness?

A. Head circumference  
B. Waist and hip circumferences  
C. Mid-arm muscle circumference  
D. Frame size

11. A blood glucose level is an example of which of the following measures?

A. Anthropometric  
B. Biochemical  
C. Clinical  
D. Dietary

12. "Skin and bone appearance" would reflect which of the following forms of nutritional status assessment?

A. Anthropometric  
B. Biochemical  
C. Clinical  
D. Dietary

13. A physical examination during nutritional assessment is considered a(n)

A. anthropometric measurement.  
B. biochemical assessment.  
C. clinical assessment.  
D. dietary assessment.

14. Of the following, which would be considered a symptom?

A. Loss of appetite  
B. Swollen ankles  
C. Skin rash  
D. Difficulty breathing
15. Clinical assessment to determine a person's nutritional status would include which of the following?
   A. Height and weight
   B. Blood and/or urine sample
   C. Diet history
   D. Medical history

16. A _____ is a retrospective dietary assessment method which asks a person to quantify how often and in what amounts they eat or drink a specific food over a period of time.
   A. 7-day diet record
   B. 24-hour recall
   C. diet history
   D. food frequency questionnaire

17. An example of a prospective method of dietary assessment would be a:
   A. 24-hour recall.
   B. food frequency questionnaire.
   C. diet history.
   D. 3-day diet record.

18. Which method of assessing dietary intake is the "gold standard" or most accurate method?
   A. 7-day diet record
   B. 24-hour recall
   C. diet history
   D. food frequency questionnaire

19. As a registered dietitian, you want to better understand the typical eating patterns of your client. Therefore, you plan to administer a:
   A. 24-hour recall.
   B. food frequency questionnaire.
   C. dietary record.
   D. physical exam.

20. What method is considered easy-to-use should you wish to determine the micronutrient, macronutrient, and energy (calorie) content of your diet?
   A. Food composition tables
   B. Computerized nutrient databases
   C. Dietary Reference Intakes
   D. Nutrition Fact labels

21. Which agency established the Dietary Reference Intakes (DRIs) for macronutrients?
   A. United States Department of Agriculture (USDA)
   B. Institute of Medicine (IOM)
   C. Food and Drug Administration (FDA)
   D. Health and Human Services Organization (HHSO)

22. The RDAs were originally designed primarily to:
   A. prevent nutrient deficiencies.
   B. reduce risk of chronic disease.
   C. correct nutrient deficiencies.
   D. prevent overnutrition.
23. "_____", an umbrella term used to describe a set of four groups of values: EARs, RDAs, AIs, and ULs.
   A. Daily Reference Intakes (DRIs)
   B. Dietary Reference Intakes (DRIs)
   C. Reference Daily Intakes (RDIs)
   D. Reference Dietary Intakes (RDIs)

24. What were the first dietary standards published in 1943 by the National Academy of Sciences called?
   A. Reference Daily Intakes (RDIs)
   B. Reference Dietary Intakes (RDIs)
   C. Recommended Dietary Allowances (RDAs)
   D. Recommended Daily Allowances (RDAs)

25. A nutritional _____ is the amount of a nutrient that must be consumed to prevent deficiencies; it is determined by a person's nutritional needs based on a host of factors such as sex, age, physical activity, and genetics.
   A. status
   B. requirement
   C. adequacy
   D. intake

26. The _____ for a particular nutrient is the intake value thought to meet the requirement of half the healthy individuals of the same gender who are in a particular stage of life.
   A. Estimated Average Requirement (EAR)
   B. Recommended Dietary Allowance (RDA)
   C. Recommended Daily Allowance (RDA)
   D. Adequate Intake Level (AI)

27. The EARs are very useful in research settings for evaluation of whether a group of people is likely to be consuming adequate amounts of a nutrient. Therefore, it is _____ to use the EAR values as recommended goals for dietary intake of an individual.
   A. appropriate
   B. inappropriate
   C. recommended
   D. required

28. Only 50% of healthy individuals will have their physiological needs met at which level of intake?
   A. EAR
   B. RDA
   C. AI
   D. UL

29. A 25-year-old woman has recently visited a registered dietitian as part of a routine health exam. She is consuming less than the EAR for nutrient x. Her intake for that nutrient is:
   A. probably inadequate.
   B. possibly inadequate.
   C. probably adequate.
   D. more than adequate.
   E. None of the above
30. The _____ for a particular nutrient is the daily dietary intake level considered sufficient to meet the nutrient requirements of nearly all healthy individuals (about 97%) of the same gender who are in a particular stage of life.

A. Estimated Average Requirement (EAR)
B. Tolerable Upper Intake Level (UL)
C. Adequate Intake (AI)
D. Recommended Dietary Allowance (RDA)

31. A 25-year-old woman has recently visited a registered dietitian as part of a routine health exam. She is consuming less than the RDA for nutrient x. Her intake for that nutrient is:

A. probably inadequate.
B. possibly inadequate.
C. probably adequate.
D. more than adequate.
E. None of the above

32. A 25-year-old woman has recently visited a registered dietitian as part of a routine health exam. She is consuming more than the RDA, yet less than the UL, for nutrient x. Her intake for that nutrient is:

A. probably inadequate.
B. possibly inadequate.
C. probably adequate.
D. more than adequate.
E. None of the above

33. When scientific evidence was insufficient to establish an EAR and thus accurately set an RDA, the DRI committee derived a(n) _____ instead.

A. Estimated Average Requirement (EAR)
B. Tolerable Upper Intake Level (UL)
C. Adequate Intake (AI)
D. Recommended Dietary Allowance (RDA)

34. _____ are meant to be used as nutrient intake goals for individuals, because they were based on experimentally documented intake levels of a nutrient that seemed to maintain adequate nutritional status in healthy people.

A. Estimated Average Requirements (EARs)
B. Recommended Dietary Allowances (RDAs)
C. Adequate Intakes (AIs)
D. Estimated Energy Requirements (EERs)

35. An example of a nutrient with an AI instead of an RDA is:

A. calcium.
B. vitamin A.
C. folate.
D. iron.

36. The _____ provide limits for those who take supplements or consume large amounts of fortified foods.

A. Estimated Average Requirements (EARs)
B. Tolerable Upper Intake Levels (ULs)
C. Adequate Intakes (AIs)
D. Recommended Dietary Allowances (RDAs)
37. If intake of a nutrient is between the EAR and the RDA, then it:
   A. could be reduced.
   B. should probably be increased.
   C. is adequate.
   D. is more than adequate.

38. If intake of a nutrient in the diet falls below the AI, then:
   A. more information is needed to determine the adequacy of diet.
   B. the diet is inadequate.
   C. the diet is poor.
   D. the diet is probably adequate.

39. You are a sophomore in college and are calculating your EER. Your activity level has decreased significantly since your freshman year. You would expect your current EER to be _____ when compared to your freshman year.
   A. higher
   B. lower
   C. no different

40. Which of the following physical activity factors would be appropriate to use when calculating the EER for a sedentary man and/or woman?
   A. 1.0
   B. 1.11
   C. 1.25
   D. 1.48

41. A female college student who weighs 110 lbs would weigh _____ kilograms.
   A. 43
   B. 45
   C. 50
   D. 55

42. Energy requirements for individuals are influenced by
   A. age and gender.
   B. weight and height.
   C. level of physical activity.
   D. a and b
   E. all of the above

43. What is the Acceptable Macronutrient Distribution Range (AMDR) for carbohydrates, as a percentage of total energy?
   A. 40%–60%
   B. 45%–60%
   C. 45%–65%
   D. 50%–65%

44. When did the USDA begin publishing nutritional recommendations for Americans?
   A. 1849
   B. 1894
   C. 1943
   D. 1961
45. Which organization publishes both the Dietary Guidelines for Americans and the MyPyramid website?
   A. United States Department of Agriculture (USDA)
   B. Food and Drug Administration (FDA)
   C. World Health Organization (WHO)
   D. American Dietetic Association (ADA)

46. The 2005 Dietary Guidelines for Americans emphasize four important concepts: variety, balance, moderation, and _____.
   A. nutrient density
   B. proportionality
   C. kcalorie restriction
   D. consistency

47. Which diet planning concept emphasizes not consuming too much of a particular food?
   A. Balance
   B. Moderation
   C. Variety
   D. Nutrient density

48. Jane loves to try many different types of foods. Her diet would reflect:
   A. variety.
   B. balance.
   C. moderation.
   D. a and c
   E. All of the above

49. The relative amount of kcalories obtained from each of the food groups refers to proportionality or _____.
   A. balance
   B. variety
   C. moderation
   D. nutrient density

50. Which one of the following food items is the most nutrient dense?
   A. Skim milk
   B. 1% milk
   C. 2% milk
   D. Whole milk

51. Which one of the following food items would have the highest nutrient density for vitamin A?
   A. Apple
   B. Orange
   C. Lettuce
   D. Carrot

52. Which one of the following food items would have the highest nutrient density for calcium?
   A. Ice cream
   B. Sherbet
   C. Frozen yogurt
   D. Slushy
53. You want to choose the most nutrient-dense food to improve your vitamin C intake. You are deciding between \( \frac{3}{4} \) cup of fresh orange juice (84 kcal, 93 mg vitamin C), 1 cup of fresh pink grapefruit juice (96 kcal, 94 mg of vitamin C), and 1 cup canned apple juice (117 kcal, 2 mg vitamin C). Which is the best choice?

A. Orange juice
B. Grapefruit juice
C. Apple juice
D. All are equal

54. Moderate alcohol consumption is:

A. 1-2 drinks each day.
B. 2-3 drinks each day.
C. 3-4 drinks each day.
D. weekend drinking only.

55. Which one of the following foods is the best source of iron?

A. Lean meat
B. Milk
C. Bread
D. Fruit

56. Which one of the following foods is the best source of fiber?

A. Pear
B. Iceberg lettuce
C. Hamburger
D. Dinner roll

57. Based on MyPyramid recommendations, how many cups of fruit should you consume per day?

A. 1-1 \( \frac{1}{2} \) cups per day
B. 1-2 cups per day
C. 1-2 \( \frac{1}{2} \) cups per day
D. 1-3 cups per day

58. If the results of a nutritional analysis revealed an inadequate intake of calcium, vitamin D, and protein, increased intakes of which one of the following food groups, by itself, could help correct this situation?

A. Grains
B. Meat and beans
C. Dairy
D. Vegetables

59. Based on the recommendations of the USDA's MyPyramid food guidance system, what amount of dairy products in cups should be consumed per day?

A. 1-2
B. 2-3
C. 3-4
D. 4-5
60. What is the slogan of the MyPyramid food guidance system?
   A. "Step Up to Good Nutrition."
   B. "Steps Up to Eating Right."
   C. "Step Up to Health."
   D. "Steps to a Healthier You."

61. What color band appearing in the MyPyramid graphic represents dairy products?
   A. Red
   B. Blue
   C. Yellow
   D. Green

62. The MyPyramid guide recommends that we choose food in approximate proportion to the base widths of
   the bands. Which one of the following food groups should we consume the least from?
   A. Dairy
   B. Meat and beans
   C. Fruits
   D. Oils

63. The U.S. Department of Health and Human Services developed a set of overall health objectives for the
   nation. What is this document called?
   A. Dietary Guidelines for Americans 2005
   B. Healthy People 2010
   C. Healthy Nation 2010
   D. Surgeon General's Report 2005

64. The regulation of nutrition labeling for foods was established by in 1973 by the _____.
   A. USDA
   B. FDA
   C. HHS
   D. WHO

65. On a food label, the product's ingredient contents are listed:
   A. in alphabetical order.
   B. with the most important nutrient sources first.
   C. from most abundant to least abundant ingredient by weight.
   D. from least abundant to most abundant ingredient by volume.

66. Suppose you are a registered dietitian working for a food manufacturer. By law the label that you are
   working on for a new product must include the:
   A. product picture.
   B. product name and place of business.
   C. product net weight and ingredient content.
   D. a and b
   E. b and c
67. Which of the following is not a kosher standard?
   A. Food made from pigs or rabbits can never be kosher.
   B. Only people who are trained and qualified are allowed to slaughter kosher animals.
   C. To be considered kosher, meat and dairy products cannot be prepared or served together on the same plate.
   D. Whereas some shellfish can be kosher, fish are not.

68. Which of the following nutrients is not required on the Nutrition Facts panel?
   A. Total fat
   B. Saturated fat
   C. Sodium
   D. Potassium

69. If you drank a 20-ounce bottle of soda and the serving size is 8 ounces, how many servings would you have consumed?
   A. 2
   B. 2.5
   C. 3
   D. 3.5

70. A 20-ounce bottle of soda would contain how many grams of carbohydrate based on the following information: 30 grams sugar per 8 oz. serving?
   A. 30 grams
   B. 45 grams
   C. 60 grams
   D. 75 grams

71. You want to select a cereal that has less than 150 kcal per serving and at least 5 grams of dietary fiber. Therefore, you refer to the:
   A. product ingredient list.
   B. product code.
   C. Nutrition Facts panel.
   D. Dietary Reference Intakes.

72. What reference values were created specifically for the Nutrition Facts label to give consumers a benchmark with which to compare nutrients?
   A. Reference Values (RV)
   B. Recommended Values (RV)
   C. Daily Values (DV)
   D. Dietary Values (DV)

73. If one serving of cereal provides 67% of an "average" person's DV for vitamin C, how much vitamin C does one serving of cereal contain?
   A. 20 mg
   B. 30 mg
   C. 40 mg
   D. 50 mg
74. Which of the following represent recommended intakes of nutrients based specifically on a 2,000- and a 2,500-kcalorie diet?

A. RDI  
B. DRI  
C. DV  
D. RDA

75. Based on a reference diet of 2,000 Calories, what percentage of the daily value (%DV) for carbohydrate is provided by a 1-cup serving of macaroni and cheese that contains 60 grams of carbohydrate per serving?

A. 12  
B. 15  
C. 17  
D. 20

76. You are comparing two varieties of fudge-striped cookies. The regular cookies provide 150 kcal per serving. In order for the "light" cookies to be labeled with the claim "reduced calorie," they must contain _____ or fewer calories per serving.

A. 113  
B. 75  
C. 37  
D. 25

77. The FDA-approved nutrient content claim "calorie free" means that a food product contains _____ kcalories (Calories) per serving.

A. 0  
B. < 5  
C. < 10  
D. < 25

78. A food product that claims to be "low in fat" must contain _____ gram(s) of fat or less per serving.

A. 1  
B. 3  
C. 5  
D. 7

79. A claim that can legally be included on a food's packaging to describe a specific, scientifically supported health benefit is called a _____ claim.

A. nutrient content  
B. health benefit  
C. regular health  
D. qualified health

80. _____ are statements concerning less well-established health benefits that have been ascribed to a particular food or food component.

A. regular health claims  
B. qualified health claims  
C. Nutrient content claims  
D. Nutritional benefit claims
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, how many Calories did you consume from the cereal (not including the milk)?

A. 190 Calories  
B. 270 Calories  
C. 285 Calories  
D. 380 Calories
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, how many grams of fiber did you consume from the cereal?

A. 4 grams  
B. 8 grams  
C. 12 grams  
D. 16 grams
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, what % of the daily value (%DV) of fiber is being provided based on a 2000-kcal diet?

A. 12  
B. 32  
C. 48  
D. 64
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, what % of the Daily Value (DV) for iron would this amount provide, based on a 2000-kcal diet?

A. 30  
B. 60  
C. 90  
D. 120
How many cups of the Bran Flakes with Raisin Cereal would you need to consume in a day to meet your % DV for vitamin A based on a 2000-kcal diet?

A. Between 3 and 4 cups  
B. Between 4 and 5 cups  
C. Between 5 and 6 cups  
D. Between 6 and 7 cups
If there are 4 grams of carbohydrates in a teaspoon of sugar, how many teaspoons of sugar are there in 2 cups of Bran Flakes with Raisin Cereal?

A. 4.5 teaspoons  
B. 6 teaspoons  
C. 9.5 teaspoons  
D. 11 teaspoons
If you ate 2 servings of the Bran Flakes with Raisin Cereal, what % of the Daily Value for sodium would this provide, based on a 2000-kcal diet?

A. 9  
B. 45  
C. 15  
D. 24
If you consumed 2 cups of cereal daily at breakfast, when would you have to purchase a box of Bran Flakes with Raisin Cereal again?

A. On the 5th day  
B. On the 7th day  
C. On the 10th day  
D. On the 14th day
If you ate a one (1) serving of the Bran Flakes with Raisin Cereal, what % of the Daily Value for vitamin A would this provide, based on a 2000-kcal diet?

A. 0  
B. 2  
C. 15  
D. 60
According to the Nutrition Facts panel, Bran Flakes with Raisin Cereal is an excellent source of which nutrient?

A. Vitamin A  
B. Calcium  
C. Protein  
D. Iron  

91. Jodi’s nutritional intake for one day revealed the following: 2010 kcalories, 90 g of fat, 80 g protein, and 220 g of carbohydrate. Jodi’s fat intake is:

A. 30% of total kcalories.  
B. 35% of total kcalories.  
C. 40% of total kcalories.  
D. 45% of total kcalories.
92. The results of Jodi's dietary analysis indicate that her fiber, iron, and B\textsubscript{12} intakes are low. Which choice below would help provide Jodi with these missing nutrients?

A. Fortified cereal with 1% milk  
B. Apple with creamy peanut butter  
C. Low-fat fruited yogurt  
D. Cheese and crackers

93. Taking megasupplements of essential vitamins is vital for maintaining health and adequate nutritional status.

True  False

94. Body composition is the proportions of fat, water, lean tissue and mineral mass that make up your tissues.

True  False

95. The Recommended Dietary Allowance is an umbrella term of dietary intake standards for the U.S. and Canada.

True  False

96. The EAR and UL are used to examine the likelihood of dietary excess and adequacy, respectively.

True  False

97. The RDAs are derived from AIs.

True  False

98. Dietary intake goals for a nutrient with an RDA and UL should be set at the RDA, but less than the UL.

True  False

99. Tolerable Upper Intake Levels were developed to decrease risk of adverse health effects from inadequate intakes of a nutrient.

True  False

100. The 2005 Dietary Guidelines for Americans forbid consumption of alcohol.

True  False

101. According to the Dietary Guidelines for Americans, fruit, vegetable, and whole grain intakes should be increased, while intake of nonfat or low-fat milk and milk products should be decreased.

True  False

102. Regarding calcium, ice cream is less nutrient dense than skim milk.

True  False


True  False
104. Grains are the foundation of MyPyramid.
   True  False

105. Dairy products are significant sources of calcium, potassium, vitamins, and protein.
   True  False

106. The MyPyramid website allows visitors to access personalized dietary recommendations.
   True  False

107. Healthy People 2010, a set of overall health objectives for the U.S., is designed to increase quality and years of healthy life and to eliminate health disparities among different segments of the population.
   True  False

108. The Nutrition Facts panel was developed by the USDA.
   True  False

109. A company name and address is mandatory for all food labels.
   True  False

110. Raw meat products need to include handling instructions on labels.
    True  False

111. Serving sizes are included on the Nutrition Facts panel so that nutrient contents of similar foods can be compared.
    True  False

112. The FDA has approved wording for specific nutrient claims, including "light," "sugar free," and "low fat."
    True  False

113. How does nutritional adequacy impact a person's nutritional status?
114. Why are biochemical measurements particularly powerful when diagnosing nutrient deficiencies or excesses as compared to anthropometric measurements?

115. What basic techniques and tips would you include in the directions for compiling a diet record to ensure that the returned diet record was accurate and complete and adequately represented the food and beverages consumed?

116. You've just completed a 3-day nutrient intake analysis utilizing a nutritional analysis software program. Your analysis shows that you meet >90% of the requirement for most nutrients. What reference values were used to determine the percentage of nutrients consumed, and how were these reference values determined?
117. Discuss the nine key recommendations outlined in the 2005 Dietary Guidelines for Americans and explain how this version differs from previous versions.

118. What specific strategies would you suggest to someone who wanted to incorporate fruits and vegetables into his or her diet to replace high-fat, high-sugar snack choices?

119. What does the term "discretionary calorie allowance" mean, and how does it apply when consuming a healthful diet based on the MyPyramid food guidance system?

120. Describe in detail how to use the MyPyramid plan released by the USDA.
121. What are the key elements of MyPyramid?

122. For most packaged foods with more than one ingredient, what does FDA require be included on a food label?

123. How can the Daily Values (DV) that appear on the Nutrition Facts panel be used as reference values?

124. What is Percent Daily Value (%DV), and how is it used on the Nutrition Facts panel?
125. Calculate your kcalorie needs based on the Estimated Energy Requirement (EER) equation provided below.
• Adult man: EER = 662 - [9.53 x age (y)] + PA x [15.91 x wt (kg) + 539.6 x ht (m)]
• Adult woman: EER = 354 - [6.91 x age (y)] + PA x [9.36 x wt (kg) + 726 x ht (m)]
• PA factors: 1.00 for sedentary adults; 1.11 for low active, 1.25 for active, and 1.48 for very active for men; 1.12 for low active, 1.27 for active, and 1.45 for very active for women

126. What tools would you recommend to consumers to help them choose foods to meet their nutritional needs?

127. How could you determine if you were consuming enough, but not too much, of all the required nutrients?

128. Nearly all (97%) healthy pregnant women who consume their _________________ of vitamin B₆ each day will obtain enough of this nutrient for themselves and their fetuses.

129. If 1000 healthy 40-year-old men eat a daily diet supplying their _________________ of iron, then 500 of them, on average, will need to take supplemental iron to meet their physiological requirements.
130. The recommendation concerning the percentage range of energy one should obtain from fat is called the ________________.

________________________________________

131. If Jesse chronically consumes more than his ________________ for vitamin A, there is a strong possibility that this will be detrimental to his health.

________________________________________

132. Intake levels of calcium that appear to support adequate nutritional status in healthy populations, known as the ________________ for calcium, have been established.

________________________________________

133. The ________________ is the lowest intake level of a nutrient that supports basic physiological functions.

________________________________________

134. The ________________ are a set of four types of nutrient intake reference standards used to assess and plan dietary intake.

________________________________________

135. You would need to know a healthy individual's sex, age, physical activity level, weight, and height in order to determine his or her ________________.

________________________________________
Which DRI value is represented by #1 in the figure?
137. Which DRI value is represented by #2 in the figure?
Which DRI value is represented by #3 in the figure?
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   B. Blood and/or urine sample
   C. Diet history
   D. Medical history

16. A _____ is a retrospective dietary assessment method which asks a person to quantify how often and in what amounts they eat or drink a specific food over a period of time.
   A. 7-day diet record
   B. 24-hour recall
   C. diet history
   D. food frequency questionnaire

17. An example of a prospective method of dietary assessment would be a:
   A. 24-hour recall.
   B. food frequency questionnaire.
   C. diet history.
   D. 3-day diet record.

18. Which method of assessing dietary intake is the "gold standard" or most accurate method?
   A. 7-day diet record
   B. 24-hour recall
   C. diet history
   D. food frequency questionnaire

19. As a registered dietitian, you want to better understand the typical eating patterns of your client. Therefore, you plan to administer a:
   A. 24-hour recall.
   B. food frequency questionnaire.
   C. dietary record.
   D. physical exam.

20. What method is considered easy-to-use should you wish to determine the micronutrient, macronutrient, and energy (calorie) content of your diet?
   A. Food composition tables
   B. Computerized nutrient databases
   C. Dietary Reference Intakes
   D. Nutrition Fact labels

21. Which agency established the Dietary Reference Intakes (DRIs) for macronutrients?
   A. United States Department of Agriculture (USDA)
   B. Institute of Medicine (IOM)
   C. Food and Drug Administration (FDA)
   D. Health and Human Services Organization (HHSO)

22. The RDAs were originally designed primarily to:
   A. prevent nutrient deficiencies.
   B. reduce risk of chronic disease.
   C. correct nutrient deficiencies.
   D. prevent overnutrition.
23. "______" is an umbrella term used to describe a set of four groups of values: EARs, RDAs, AIs, and ULs.
   A. Daily Reference Intakes (DRIs)
   B. Dietary Reference Intakes (DRIs)
   C. Reference Daily Intakes (RDIs)
   D. Reference Dietary Intakes (RDIs)

24. What were the first dietary standards published in 1943 by the National Academy of Sciences called?
   A. Reference Daily Intakes (RDIs)
   B. Reference Dietary Intakes (RDIs)
   C. Recommended Dietary Allowances (RDAs)
   D. Recommended Daily Allowances (RDAs)

25. A nutritional _____ is the amount of a nutrient that must be consumed to prevent deficiencies; it is determined by a person's nutritional needs based on a host of factors such as sex, age, physical activity, and genetics.
   A. status
   B. requirement
   C. adequacy
   D. intake

26. The _____ for a particular nutrient is the intake value thought to meet the requirement of half the healthy individuals of the same gender who are in a particular stage of life.
   A. Estimated Average Requirement (EAR)
   B. Recommended Dietary Allowance (RDA)
   C. Recommended Daily Allowance (RDA)
   D. Adequate Intake Level (AI)

27. The EARs are very useful in research settings for evaluation of whether a group of people is likely to be consuming adequate amounts of a nutrient. Therefore, it is _____ to use the EAR values as recommended goals for dietary intake of an individual.
   A. appropriate
   B. inappropriate
   C. recommended
   D. required

28. Only 50% of healthy individuals will have their physiological needs met at which level of intake?
   A. EAR
   B. RDA
   C. AI
   D. UL

29. A 25-year-old woman has recently visited a registered dietitian as part of a routine health exam. She is consuming less than the EAR for nutrient x. Her intake for that nutrient is:
   A. probably inadequate.
   B. possibly inadequate.
   C. probably adequate.
   D. more than adequate.
   E. None of the above
30. The _____ for a particular nutrient is the daily dietary intake level considered sufficient to meet the nutrient requirements of nearly all healthy individuals (about 97%) of the same gender who are in a particular stage of life.

A. Estimated Average Requirement (EAR)
B. Tolerable Upper Intake Level (UL)
C. Adequate Intake (AI)
D. Recommended Dietary Allowance (RDA)

31. A 25-year-old woman has recently visited a registered dietitian as part of a routine health exam. She is consuming less than the RDA for nutrient x. Her intake for that nutrient is:

A. probably inadequate.
B. possibly inadequate.
C. probably adequate.
D. more than adequate.
E. None of the above

32. A 25-year-old woman has recently visited a registered dietitian as part of a routine health exam. She is consuming more than the RDA, yet less than the UL, for nutrient x. Her intake for that nutrient is:

A. probably inadequate.
B. possibly inadequate.
C. probably adequate.
D. more than adequate.
E. None of the above

33. When scientific evidence was insufficient to establish an EAR and thus accurately set an RDA, the DRI committee derived a(n) _____ instead.

A. Estimated Average Requirement (EAR)
B. Tolerable Upper Intake Level (UL)
C. Adequate Intake (AI)
D. Recommended Dietary Allowance (RDA)

34. _____ are meant to be used as nutrient intake goals for individuals, because they were based on experimentally documented intake levels of a nutrient that seemed to maintain adequate nutritional status in healthy people.

A. Estimated Average Requirements (EARs)
B. Recommended Dietary Allowances (RDAs)
C. Adequate Intakes (AIs)
D. Estimated Energy Requirements (EERs)

35. An example of a nutrient with an AI instead of an RDA is:

A. calcium.
B. vitamin A.
C. folate.
D. iron.

36. The _____ provide limits for those who take supplements or consume large amounts of fortified foods.

A. Estimated Average Requirements (EARs)
B. Tolerable Upper Intake Levels (ULs)
C. Adequate Intakes (AIs)
D. Recommended Dietary Allowances (RDAs)
37. If intake of a nutrient is between the EAR and the RDA, then it:
   A. could be reduced.
   B. should probably be increased.
   C. is adequate.
   D. is more than adequate.

38. If intake of a nutrient in the diet falls below the AI, then:
   A. more information is needed to determine the adequacy of diet.
   B. the diet is inadequate.
   C. the diet is poor.
   D. the diet is probably adequate.

39. You are a sophomore in college and are calculating your EER. Your activity level has decreased significantly since your freshman year. You would expect your current EER to be _____ when compared to your freshman year.
   A. higher
   B. lower
   C. no different

40. Which of the following physical activity factors would be appropriate to use when calculating the EER for a sedentary man and/or woman?
   A. 1.0
   B. 1.11
   C. 1.25
   D. 1.48

41. A female college student who weighs 110 lbs would weigh _____ kilograms.
   A. 43
   B. 45
   C. 50
   D. 55

42. Energy requirements for individuals are influenced by
   A. age and gender.
   B. weight and height.
   C. level of physical activity.
   D. a and b
   E. all of the above

43. What is the Acceptable Macronutrient Distribution Range (AMDR) for carbohydrates, as a percentage of total energy?
   A. 40%-60%
   B. 45%-60%
   C. 45%-65%
   D. 50%-65%

44. When did the USDA begin publishing nutritional recommendations for Americans?
   A. 1849
   B. 1894
   C. 1943
   D. 1961
45. Which organization publishes both the Dietary Guidelines for Americans and the MyPyramid website?

A. United States Department of Agriculture (USDA)
B. Food and Drug Administration (FDA)
C. World Health Organization (WHO)
D. American Dietetic Association (ADA)

46. The 2005 Dietary Guidelines for Americans emphasize four important concepts: variety, balance, moderation, and _____.

A. nutrient density
B. proportionality
C. kcalorie restriction
D. consistency

47. Which diet planning concept emphasizes not consuming too much of a particular food?

A. Balance
B. Moderation
C. Variety
D. Nutrient density

48. Jane loves to try many different types of foods. Her diet would reflect:

A. variety.
B. balance.
C. moderation.
D. a and c
E. All of the above

49. The relative amount of kcalories obtained from each of the food groups refers to proportionality or _____.

A. balance
B. variety
C. moderation
D. nutrient density

50. Which one of the following food items is the most nutrient dense?

A. Skim milk
B. 1% milk
C. 2% milk
D. Whole milk

51. Which one of the following food items would have the highest nutrient density for vitamin A?

A. Apple
B. Orange
C. Lettuce
D. Carrot

52. Which one of the following food items would have the highest nutrient density for calcium?

A. Ice cream
B. Sherbet
C. Frozen yogurt
D. Slushy
53. You want to choose the most nutrient-dense food to improve your vitamin C intake. You are deciding between \[\frac{3}{4}\] cup of fresh orange juice (84 kcal, 93 mg vitamin C), 1 cup of fresh pink grapefruit juice (96 kcal, 94 mg of vitamin C), and 1 cup canned apple juice (117 kcal, 2 mg vitamin C). Which is the best choice?

A. Orange juice  
B. Grapefruit juice  
C. Apple juice  
D. All are equal

54. Moderate alcohol consumption is:

A. 1-2 drinks each day.  
B. 2-3 drinks each day.  
C. 3-4 drinks each day.  
D. weekend drinking only.

55. Which one of the following foods is the best source of iron?

A. Lean meat  
B. Milk  
C. Bread  
D. Fruit

56. Which one of the following foods is the best source of fiber?

A. Pear  
B. Iceberg lettuce  
C. Hamburger  
D. Dinner roll

57. Based on MyPyramid recommendations, how many cups of fruit should you consume per day?

A. 1-1 \(\frac{1}{2}\) cups per day  
B. 1-2 cups per day  
C. 1-2 \(\frac{1}{2}\) cups per day  
D. 1-3 cups per day

58. If the results of a nutritional analysis revealed an inadequate intake of calcium, vitamin D, and protein, increased intakes of which one of the following food groups, by itself, could help correct this situation?

A. Grains  
B. Meat and beans  
C. Dairy  
D. Vegetables

59. Based on the recommendations of the USDA's MyPyramid food guidance system, what amount of dairy products in cups should be consumed per day?

A. 1-2  
B. 2-3  
C. 3-4  
D. 4-5
60. What is the slogan of the MyPyramid food guidance system?

A. "Step Up to Good Nutrition."
B. "Steps Up to Eating Right."
C. "Step Up to Health."
D. "Steps to a Healthier You."

61. What color band appearing in the MyPyramid graphic represents dairy products?

A. Red
B. Blue
C. Yellow
D. Green

62. The MyPyramid guide recommends that we choose food in approximate proportion to the base widths of the bands. Which one of the following food groups should we consume the least from?

A. Dairy
B. Meat and beans
C. Fruits
D. Oils

63. The U.S. Department of Health and Human Services developed a set of overall health objectives for the nation. What is this document called?

A. Dietary Guidelines for Americans 2005
B. Healthy People 2010
C. Healthy Nation 2010
D. Surgeon General's Report 2005

64. The regulation of nutrition labeling for foods was established by in 1973 by the _____.

A. USDA
B. FDA
C. HHS
D. WHO

65. On a food label, the product's ingredient contents are listed:

A. in alphabetical order.
B. with the most important nutrient sources first.
C. from most abundant to least abundant ingredient by weight.
D. from least abundant to most abundant ingredient by volume.

66. Suppose you are a registered dietitian working for a food manufacturer. By law the label that you are working on for a new product must include the:

A. product picture.
B. product name and place of business.
C. product net weight and ingredient content.
D. a and b
E. b and c
67. Which of the following is not a kosher standard?
   A. Food made from pigs or rabbits can never be kosher.
   B. Only people who are trained and qualified are allowed to slaughter kosher animals.
   C. To be considered kosher, meat and dairy products cannot be prepared or served together on the same plate.
   D. Whereas some shellfish can be kosher, fish are not.

68. Which of the following nutrients is not required on the Nutrition Facts panel?
   A. Total fat
   B. Saturated fat
   C. Sodium
   D. Potassium

69. If you drank a 20-ounce bottle of soda and the serving size is 8 ounces, how many servings would you have consumed?
   A. 2
   B. 2.5
   C. 3
   D. 3.5

70. A 20-ounce bottle of soda would contain how many grams of carbohydrate based on the following information: 30 grams sugar per 8 oz. serving?
   A. 30 grams
   B. 45 grams
   C. 60 grams
   D. 75 grams

71. You want to select a cereal that has less than 150 kcal per serving and at least 5 grams of dietary fiber. Therefore, you refer to the:
   A. product ingredient list.
   B. product code.
   C. Nutrition Facts panel.
   D. Dietary Reference Intakes.

72. What reference values were created specifically for the Nutrition Facts label to give consumers a benchmark with which to compare nutrients?
   A. Reference Values (RV)
   B. Recommended Values (RV)
   C. Daily Values (DV)
   D. Dietary Values (DV)

73. If one serving of cereal provides 67% of an "average" person's DV for vitamin C, how much vitamin C does one serving of cereal contain?
   A. 20 mg
   B. 30 mg
   C. 40 mg
   D. 50 mg
74. Which of the following represent recommended intakes of nutrients based specifically on a 2,000- and a 2,500-kcalorie diet?

A. RDI
B. DRI
C. DV
D. RDA

75. Based on a reference diet of 2,000 Calories, what percentage of the daily value (%DV) for carbohydrate is provided by a 1-cup serving of macaroni and cheese that contains 60 grams of carbohydrate per serving?

A. 12
B. 15
C. 17
D. 20

76. You are comparing two varieties of fudge-striped cookies. The regular cookies provide 150 kcal per serving. In order for the "light" cookies to be labeled with the claim "reduced calorie," they must contain _____ or fewer calories per serving.

A. 113
B. 75
C. 37
D. 25

77. The FDA-approved nutrient content claim "calorie free" means that a food product contains _____ kcallories (Calories) per serving.

A. 0
B. < 5
C. < 10
D. < 25

78. A food product that claims to be "low in fat" must contain _____ gram(s) of fat or less per serving.

A. 1
B. 3
C. 5
D. 7

79. A claim that can legally be included on a food's packaging to describe a specific, scientifically supported health benefit is called a _____ claim.

A. nutrient content
B. health benefit
C. regular health
D. qualified health

80. _____ are statements concerning less well-established health benefits that have been ascribed to a particular food or food component.

A. regular health claims
B. qualified health claims
C. Nutrient content claims
D. Nutritional benefit claims
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, how many Calories did you consume from the cereal (not including the milk)?

A. 190 Calories  
B. 270 Calories  
C. 285 Calories  
D. 380 Calories
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, how many grams of fiber did you consume from the cereal?

A. 4 grams  
B. 8 grams  
C. 12 grams  
D. 16 grams
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, what % of the daily value (%DV) of fiber is being provided based on a 2000-kcal diet?

A. 12  
B. 32  
C. 48  
D. 64
If you ate a large bowl (~1.5 cups) of the Bran Flakes with Raisin Cereal, what % of the Daily Value (DV) for iron would this amount provide, based on a 2000-kcal diet?

A. 30
B. 60
C. 90
D. 120
### Nutrition Facts

Serving Size 1 cup (50g)
Serving Per Container 10

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories from Fat 10</th>
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<tr>
<td>Calories 190</td>
<td>% Daily Value*</td>
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<tr>
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</tr>
<tr>
<td>Protein 4g</td>
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<tr>
<td>Vitamin A 15%</td>
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<tr>
<td>Vitamin C 0%</td>
<td></td>
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<tr>
<td>Calcium 2%</td>
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<tr>
<td>Iron 60%</td>
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</tr>
</tbody>
</table>

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

<table>
<thead>
<tr>
<th>Calories</th>
<th>Less than 55g</th>
<th>2,000</th>
<th>2,600</th>
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<tbody>
<tr>
<td>Total Fat</td>
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<td>65g</td>
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<tr>
<td>Saturated Fat</td>
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<td>Cholesterol</td>
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<tr>
<td>Dietary Fiber</td>
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<td>25g</td>
<td>30g</td>
</tr>
</tbody>
</table>

How many cups of the Bran Flakes with Raisin Cereal would you need to consume in a day to meet your % DV for vitamin A based on a 2000-kcal diet?

A. Between 3 and 4 cups  
B. Between 4 and 5 cups  
C. Between 5 and 6 cups  
D. Between 6 and 7 cups
If there are 4 grams of carbohydrates in a teaspoon of sugar, how many teaspoons of sugar are there in 2 cups of Bran Flakes with Raisin Cereal?

A. 4.5 teaspoons  
B. 6 teaspoons  
C. 9.5 teaspoons  
D. 11 teaspoons
If you ate 2 servings of the Bran Flakes with Raisin Cereal, what % of the Daily Value for sodium would this provide, based on a 2000-kcal diet?

A. 9
B. 45
C. 15
D. 24
If you consumed 2 cups of cereal daily at breakfast, when would you have to purchase a box of Bran Flakes with Raisin Cereal again?

A. On the 5th day
B. On the 7th day
C. On the 10th day
D. On the 14th day
If you ate a one (1) serving of the Bran Flakes with Raisin Cereal, what % of the Daily Value for vitamin A would this provide, based on a 2000-kcal diet?

A. 0  
B. 2  
C. 15  
D. 60
According to the Nutrition Facts panel, Bran Flakes with Raisin Cereal is an excellent source of which nutrient?

A. Vitamin A  
B. Calcium  
C. Protein  
D. Iron

Jodi’s nutritional intake for one day revealed the following: 2010 kcalories, 90 g of fat, 80 g protein, and 220 g of carbohydrate. Jodi’s fat intake is:

A. 30% of total kcalories.  
B. 35% of total kcalories.  
C. 40% of total kcalories.  
D. 45% of total kcalories.
92. The results of Jodi’s dietary analysis indicate that her fiber, iron, and B₁₂ intakes are low. Which choice below would help provide Jodi with these missing nutrients?

A. Fortified cereal with 1% milk
B. Apple with creamy peanut butter
C. Low-fat fruited yogurt
D. Cheese and crackers

93. Taking megasupplements of essential vitamins is vital for maintaining health and adequate nutritional status.

FALSE

94. Body composition is the proportions of fat, water, lean tissue and mineral mass that make up your tissues.

TRUE

95. The Recommended Dietary Allowance is an umbrella term of dietary intake standards for the U.S. and Canada.

FALSE

96. The EAR and UL are used to examine the likelihood of dietary excess and adequacy, respectively.

FALSE

97. The RDAs are derived from AIs.

FALSE

98. Dietary intake goals for a nutrient with an RDA and UL should be set at the RDA, but less than the UL.

TRUE

99. Tolerable Upper Intake Levels were developed to decrease risk of adverse health effects from inadequate intakes of a nutrient.

FALSE

100. The 2005 Dietary Guidelines for Americans forbid consumption of alcohol.

FALSE

101. According to the Dietary Guidelines for Americans, fruit, vegetable, and whole grain intakes should be increased, while intake of nonfat or low-fat milk and milk products should be decreased.

FALSE

102. Regarding calcium, ice cream is less nutrient dense than skim milk.

TRUE

103. MyPyramid translates into practice the USDA’s 2005 Dietary Guidelines for Americans.

TRUE
104. Grains are the foundation of MyPyramid.  
   **FALSE**

105. Dairy products are significant sources of calcium, potassium, vitamins, and protein.  
   **TRUE**

106. The MyPyramid website allows visitors to access personalized dietary recommendations.  
   **TRUE**

107. Healthy People 2010, a set of overall health objectives for the U.S., is designed to increase quality and years of healthy life and to eliminate health disparities among different segments of the population.  
   **TRUE**

108. The Nutrition Facts panel was developed by the USDA.  
   **FALSE**

109. A company name and address is mandatory for all food labels.  
   **TRUE**

110. Raw meat products need to include handling instructions on labels.  
   **TRUE**

111. Serving sizes are included on the Nutrition Facts panel so that nutrient contents of similar foods can be compared.  
   **TRUE**

112. The FDA has approved wording for specific nutrient claims, including "light," "sugar free," and "low fat."  
   **TRUE**

113. How does nutritional adequacy impact a person's nutritional status?  

   A person's nutritional status depends on whether sufficient amounts of nutrients are available to support optimal physiological function. Nutritional adequacy supports optimal physiological function, whereas under- and overnutrition do not.
114. Why are biochemical measurements particularly powerful when diagnosing nutrient deficiencies or excesses as compared to anthropometric measurements?

Biochemical measurements can help diagnose a specific nutrient deficiency or excess. This is not true of anthropometric measurements, which are only general indicators of overall nutritional status such as chronic under- or overnutrition. The disadvantage of biochemical markers is that they require technical expertise and are usually costly, and thus are most often measured when malnutrition is already suspected.

115. What basic techniques and tips would you include in the directions for compiling a diet record to ensure that the returned diet record was accurate and complete and adequately represented the food and beverages consumed?

Ideally, keep a food record for 3 days—one of which should be a weekend day. Detail is important. Include brand names, preparation methods, recipes for homemade items, and portion sizes. Estimate or measure serving sizes accurately. Choose representative, "normal" days. Do not change your normal eating patterns.

116. You've just completed a 3-day nutrient intake analysis utilizing a nutritional analysis software program. Your analysis shows that you meet >90% of the requirement for most nutrients. What reference values were used to determine the percentage of nutrients consumed, and how were these reference values determined?

The DRIs are the reference values used to determine percentage of nutrients consumed. Establishing benchmarks for nutrient intake required the input and analysis of researchers organized by the Institute of Medicine, a division of the National Academy of Sciences. The Dietary Reference Intakes (DRIs) comprise four main sets of reference values for nutrient consumption: EARs, RDAs, AIs, and ULs.

117. Discuss the nine key recommendations outlined in the 2005 Dietary Guidelines for Americans and explain how this version differs from previous versions.

Four major concepts are intertwined in the recommendations put forth in the Dietary Guidelines for Americans: variety, balance, moderation, and nutrient density. Variety refers to consuming different foods within each food group to help ensure you get adequate amounts of all required nutrients. Balance (also referred to as proportionality) represents the relative amount of calories obtained from each of the food groups. Moderation or not consuming too much of a particular food is important in controlling calorie intake. Nutrient density refers to the amount of nutrients in a food relative to its energy content. This is an important concept in identifying foods higher in micronutrients. Variety, moderation, and balance are key concepts that have been included in previous versions; however, the concept of nutrient density is new to this version.
118. What specific strategies would you suggest to someone who wanted to incorporate fruits and vegetables into his or her diet to replace high-fat, high-sugar snack choices?

Buy fruits and vegetables that are easy to prepare. Buy precut packages of fruit. Consider frozen juice bars. Make a Waldorf salad. Keep a package of dried fruit in your desk or bag. As a snack, spread peanut butter on apple slices or top frozen yogurt with berries or slices of kiwi fruit. Shred some carrots or zucchini into meatloaf, casseroles, quick breads, and muffins. Include chopped vegetables in pasta sauce or lasagna. Keep a bowl of cut-up vegetables in a see-through container in the refrigerator.

119. What does the term "discretionary calorie allowance" mean, and how does it apply when consuming a healthful diet based on the MyPyramid food guidance system?

Consuming a diet of high nutrient density results in what is called a discretionary calorie allowance. A discretionary calorie allowance is the "extra" calories you can consume without gaining weight because you have met your need for the essential nutrients before meeting your energy needs.

120. Describe in detail how to use the MyPyramid plan released by the USDA.

Log onto the MyPyramid website (http://mypyramid.gov) and provide your personal information (age, sex, and physical activity level) under the section "My Pyramid Plan." The website will generate a "personal pyramid" with specific recommendations on food patterns, serving sizes, and menu selection. In total, there are 12 different sets of recommended dietary patterns for the general population, which correspond to the 12 different energy intake levels listed in the USDA Food Guide on which MyPyramid was based.

121. What are the key elements of MyPyramid?

1) **Balance energy intake with energy expenditure – "Steps to a Healthier You":** Includes a physical activity component to help consumers choose the right amount and kinds of food to balance their daily physical activity to assist with balancing energy intake with energy expenditure. 2) **Proportionality or balance among food groups:** The grouping of foods with grains forming the base and the inclusion of serving recommendations in the previous version has been replaced with colored bands representing the food groups. The different widths correspond to the idea of proportionality or balance among the food groups. 3) **Nutrient density:** The widening of each stripe at the bottom of the pyramid is meant to encourage the consumption of more nutrient-dense foods, while the narrowing at the top represents the need to limit intake of solid fats and added sugars.
For most packaged foods with more than one ingredient, what does FDA require be included on a food label?

Required components of a food label include the following information: 1) Product name and place of business, 2) Product net weight, 3) Product ingredient content (from most abundant to least abundant ingredient), 4) Company name and address, 5) Country of origin, 6) Product code (UPC bar code), 7) Product dating if applicable, 8) Religious symbols such as kosher, if applicable, 9) Safe handling instructions if applicable (such as for raw meats), 10) Special warning instructions if applicable (such as for aspartame and peanuts), and 11) Nutrition Facts panel outlining specified nutrient information.

How can the Daily Values (DV) that appear on the Nutrition Facts panel be used as reference values?

The first type of DV represent recommended intake goals or reference points for vitamins and minerals for people who require approximately 2000 kcal/d. The other type of DV represent "upper limits" and are daily amounts that you should try not to exceed such as total fat, saturated fat, trans fat, cholesterol, sodium, and total carbohydrates.

What is Percent Daily Value (%DV), and how is it used on the Nutrition Facts panel?

The Percent Daily Value (% DV) is the percentage of the recommended intake (DV) of a nutrient provided by a single serving of a food. For example, if the DV for vitamin C is 60 mg/d and 1 serving of cereal provides 30 mg of vitamin C, the serving of cereal would have a % DV of 50%.

Calculate your calorie needs based on the Estimated Energy Requirement (EER) equation provided below.

- Adult man: 
  \[ EER = 662 - [9.53 \times \text{age (y)}] + \text{PA} \times [15.91 \times \text{wt (kg)} + 539.6 \times \text{ht (m)}] \]
- Adult woman: 
  \[ EER = 354 - [6.91 \times \text{age (y)}] + \text{PA} \times [9.36 \times \text{wt (kg)} + 726 \times \text{ht (m)}] \]
- PA factors: 1.00 for sedentary adults; 1.11 for low active, 1.25 for active, and 1.48 for very active for men; 1.12 for low active, 1.27 for active, and 1.45 for very active for women

Answers will vary based on students' characteristics. Here is an example of a correct calculation: Kyung-Soon, 38-year-old woman who weighs 115 pounds (52.3 kg), is 5 feet 4 inches (1.6 m) tall, and has a low activity level (PA = 1.12) (p. 22)

\[ EER = 354 - [6.91 \times 38] + 1.12 \times (9.36 \times 52.3 + 726 \times 1.6) \]
\[ EER = 354 - 262.6 + 1.12 \times (489.5 + 1161.6) \]
\[ EER = 91.4 + 1.12 \times 1651.1 \]
\[ EER = 1941 \text{ kcal} \]
A reference individual requiring 2000 kcal would need 3% more calories per day than Kyung-Soon.
A reference individual requiring 2500 kcal would need ~29% more calories per day than Kyung-Soon.
What tools would you recommend to consumers to help them choose foods to meet their nutritional needs?

2005 Dietary Guidelines, USDA Food Guide, and MyPyramid (especially the website)

How could you determine if you were consuming enough, but not too much, of all the required nutrients?

You could do a self-assessment of your own dietary intake using the MyPyramid Tracker option accessed from the MyPyramid website (http://www.mypyramid.gov). The MyPyramid Tracker assesses whether you have met the recommendations of the USDA Food Guide as well as those put forth in the DRIs.

Nearly all (97%) healthy pregnant women who consume their \[ \text{RDA or Recommended Dietary Allowance} \] of vitamin B\textsubscript{6} each day will obtain enough of this nutrient for themselves and their fetuses.

If 1000 healthy 40-year-old men eat a daily diet supplying their \[ \text{EAR or Estimated Average Requirement} \] of iron, then 500 of them, on average, will need to take supplemental iron to meet their physiological requirements.

The recommendation concerning the percentage range of energy one should obtain from fat is called the \[ \text{AMDR or Acceptable Macronutrient Distribution Range} \].

If Jesse chronically consumes more than his \[ \text{UL or Tolerable Upper Intake Level} \] for vitamin A, there is a strong possibility that this will be detrimental to his health.

Intake levels of calcium that appear to support adequate nutritional status in healthy populations, known as the \[ \text{AIs or Adequate Intakes} \] for calcium, have been established.

The \[ \text{nutrient requirement} \] is the lowest intake level of a nutrient that supports basic physiological functions.
134. The ____________________ are a set of four types of nutrient intake reference standards used to assess and plan dietary intake.

**DRIs or Dietary Reference Intakes**

135. You would need to know a healthy individual's sex, age, physical activity level, weight, and height in order to determine his or her ____________________.

**EER or Estimated Energy Requirement**

136. Which DRI value is represented by #1 in the figure?

EAR
137. Which DRI value is represented by #2 in the figure?

RDA

138. Which DRI value is represented by #3 in the figure?

UL