## Nutrition: A Functional Approach, Cdn. Ed. $3 e$ (Thompson/Manore/Sheeshka)

 Chapter 2: Designing a Healthful DietMultiple-Choice Questions

1) The four characteristics of a healthful diet are adequacy, balance, moderation, and
A) calories.
B) color.
C) value.
D) variety.

Answer: D
Page Ref: 40-41
Topic: What Is a Healthful Diet?
Skill: Factual
2) Which key characteristic of a nutritious diet prevents boredom and avoids us from getting into "food ruts"?
A) balance
B) moderation
C) variety
D) adequacy

Answer: C
Page Ref: 41
Topic: What Is a Healthful Diet?
Skill: Factual
3) Milk is a good source of calcium but a poor source of iron. Meat is a good source of iron but a poor source of calcium. Individuals who eat from both of these food groups are incorporating what characteristic of a healthy diet into their meal plan?
A) moderation
B) balance
C) variety
D) freshness

Answer: B
Page Ref: 40-41
Topic: What Is a Healthful Diet?
Skill: Applied
4) Which of the following foods is exempt from standard food labeling regulations?
A) eggs
B) bread
C) meat
D) yogurt

Answer: C
Page Ref: 41
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
5) Foods that are rich in nutrients relative to their energy content are called
A) empty calorie foods.
B) energy dense foods.
C) nutrient dense foods.
D) fat-free foods.

Answer: C
Page Ref: 58
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
6) The information provided on a food label that identifies how much a serving of food contributes to your intake of nutrients based on 2,000 Calories a day is called the
A) ounce-equivalent.
B) Percent Daily Values.
C) Daily Reference Values.
D) Reference Daily Intake.

Answer: B
Page Ref: 46-47
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
7) Which of the following is NOT required on a food label?
A) net contents of the package
B) statement of identity
C) name and address of the vendor
D) taste of the food

Answer: D
Page Ref: 42-45
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
8) Which of the following components on a food label is essential for people with food allergies?
A) Nutrition Facts table
B) nutrient content claims
C) ingredient list
D) health claims

Answer: C
Page Ref: 42
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
9) Which of the following is NOT one of the 13 "core" nutrients required on a food label?
A) sodium
B) vitamin E
C) dietary fibre
D) cholesterol

Answer: B
Page Ref: 43
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
10) The \% Daily Value (\%DV) values provided on a food label are based on a diet consisting of
A) 1800 kcalories.
B) 2000 kcalories.
C) 2400 kcalories.
D) 3000 kcalories.

Answer: A
Page Ref: 46
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
11) The core vitamins and minerals that are found on a Nutrition Facts table are
A) vitamin D, calcium, vitamin C, sodium.
B) vitamin A, vitamin C, calcium, iron.
C) sodium, potassium, vitamin A, vitamin C.
D) vitamin D, calcium, sodium, potassium.

Answer: B
Page Ref: 43
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
12) The Nutrition Facts Panel on a box of crackers indicates that one serving provides 140 Calories, with 55 Calories coming from fat. Calculate the percentage of Calories from fat in this product.
A) $39 \%$
B) $55 \%$
C) $85 \%$
D) $89 \%$

Answer: A
Page Ref: 49
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
13) Jack is a college athlete who requires 2,800 kilocalories a day to support his total energy needs. Even though Jack likes many different foods and makes it a point to try new things, he consumes only approximately 1,600 kilocalories a day. Which one of the characteristics of a healthy diet is Jack missing?
A) adequacy
B) balance
C) moderation
D) variety

Answer: A
Page Ref: 40
Topic: What Is a Healthful Diet?
Skill: Conceptual
14) Foods made specifically for children under the age of two years have a simplified version of the Nutrition Facts Table. Which one of the following does NOT have to be on the Nutrition Facts Table?
A) kcal
B) protein
C) trans fat
D) carbohydrate

Answer: C
Page Ref: 43
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
15) To label a product low in trans fat, the product must also be
A) low in saturated fat.
B) low in total fat.
C) fat free.
D) light.

Answer: A
Page Ref: 45
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
16) Suzie is a stay-at-home mom who generally prepares the majority of meals for her household. Even though she always prepares meals that offer enough Calories and nutrients for her family of four, she tends to make the same meals repeatedly. Which one of the characteristics of a healthy diet is Suzie not incorporating into her meal planning?
A) adequacy
B) balance
C) moderation
D) variety

Answer: D
Page Ref: 41
Topic: What Is a Healthful Diet?
Skill: Conceptual
17) Which one of the following is required to have standard food labelling?
A) coffee
B) spices
C) fresh fruit
D) milk

Answer: D
Page Ref: 42
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Recall
18) According to Eating Well with Canada's Food Guide, which of the following foods is NOT a food that is considered to be in the 'Other' category?
A) chocolate cake
B) energy drinks
C) fruit drinks
D) grapes

Answer: D
Page Ref: 55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
19) Which one of the following was never a Canadian nutrition document?
A) Canada's Food Rules
B) Canada's Official Food Rules
C) Canada's Food Guide
D) The Food Guide Pyramid

Answer: D
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
20) The outer arc of Eating Well with Canada's Food Guide contains
A) Meats and Alternatives.
B) Grain Products.
C) Milk and Alternatives.
D) Vegetables and Fruit.

Answer: D
Page Ref: 51
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
21) The Canadian government first issued nutrition advice to Canadians in 1942. The reason for this was
A) the opening of a new government office.
B) changes in policy legislation in Canada.
C) it was war-time, and some foods were rationed and hard to get.
D) there was a surplus of food and it needed to be divided among Canadians.

Answer: C
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
22) Which of the following is NOT considered a single serving size in Eating Well with Canada's Food Guide?
A) 125 mL ( $1 / 2$ cup) of juice
B) 1 pita
C) 250 mL ( 1 cup) milk
D) 2 eggs

Answer: B
Page Ref: 53
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
23) Which group of nutrients are common to the foods in the outermost arc of Eating Well with Canada's Food Guide?
A) fibre and vitamin C
B) protein and vitamin $\mathrm{B}_{12}$
C) calcium and iron
D) protein and fat

Answer: A
Page Ref: 54
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
24) The diet planning tool developed by Health Canada to help Canadians reduce their risk of developing chronic disease is
A) Eating Well with Canada's Food Guide.
B) the 5 to 10 a Day for Better Health diet plan.
C) the DASH diet.
D) MyPyramid.

Answer: A
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
25) Which of the following foods is a legume?
A) lentils
B) squash
C) sardines
D) barley

Answer: A
Page Ref: 53
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
26) Eating Well with Canada's Food Guide advises men and women over the age of 50 years to take a supplement of
A) calcium.
B) vitamin $D$.
C) iron.
D) vitamin C.

Answer: B
Page Ref: 55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
27) Health Canada has produced a unique issue of Eating Well with Canada's Food Guide to meet the nutritional needs of
A) French Canadians.
B) Chinese Canadians.
C) First Nations, Inuit, and Metis.
D) English Canadians.

Answer: C
Page Ref: 57-58
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
28) Which of the following is NOT required on a food label?
A) sodium (mg/serving)
B) folic acid ( $\mu \mathrm{g} /$ serving)
C) dietary fiber ( $\mathrm{g} /$ serving )
D) total cholesterol ( $\mathrm{mg} /$ serving)

Answer: B
Page Ref: 43
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
29) If Alexandra were to consume all of her protein from milk and cheese, she might develop which deficiencies over time?
A) calcium and phosphorus
B) protein and vitamin D
C) riboflavin and vitamin A
D) zinc and iron

Answer: D
Page Ref: 55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
30) To maintain a healthful weight, Eating Well with Canada's Food Guide recommends
A) increasing the level of physical activity and reducing sedentary activities.
B) 60 minutes of moderate activity most or all days of the week.
C) 60 minutes of intense activity 3 days a week.
D) 8 hours of moderate activity per week.

Answer: A
Page Ref: 55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
31) Excess sodium in the diet is linked to what disease in some individuals?
A) cancer
B) hyperactivity
C) obesity
D) hypertension

Answer: D
Page Ref: 46
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
32) Julie does not care for meat and poultry and restricts her intake of animal foods to only milk and yogurt sources. Which dietary guideline is Julie failing to practice?
A) adequacy
B) value
C) balance
D) moderation

Answer: C
Page Ref: 40-41
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
33) Why are there several ethnic variations of the 2007 Canada Food Guide?
A) to guide individuals when eating out in different types of restaurants
B) to account for variations in activity level
C) to allow for culturally and ethnically different foods choices
D) to account for individual variances in gender and age

Answer: C
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
34) Which statement BEST describes nutrient density?
A) Choose a number of different foods within any given food group.
B) Consume a variety of foods from the five major food groups every day.
C) Plan your entire day's diet so that you juggle nutrient sources.
D) Consume foods that have the most nutrients for their Calories.

Answer: D
Page Ref: 58
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
35) Which of the following foods has the greatest nutrient density?
A) 2 cups of strawberry Lifesavers ( 200 kcal )
B) 2 tablespoons of strawberry jelly ( 100 kcal )
C) 8 fluid ounces of strawberry soda ( 100 kcal )
D) 1 cup of fresh strawberries ( 100 kcal )

Answer: D
Page Ref: 60
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
36) Including fibre in your diet is beneficial to your GI tract, but consuming excess amounts of fibre can result in the loss of nutrients. This statement is an example of which of the factors to consider in planning diets?
A) adequacy
B) calorie control
C) variety
D) moderation

Answer: D
Page Ref: 40
Topic: What Is a Healthful Diet?
Skill: Applied
37) Which of the following statements does NOT describe the Mediterranean-style diet?
A) Meat is consumed monthly.
B) Fruits and vegetables are consumed daily.
C) The major fat used for cooking and flavor is olive oil.
D) The diet is lower in total fat than the Canadian dietary recommendations.

Answer: D
Page Ref: 61
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
38) What is represented at the base of the Mediterranean Diet and on the last panel of Eating Well with Canada's Food Guide?
A) daily physical activity
B) olive oil
C) beans, legumes, and nuts
D) yogurt

Answer: A
Page Ref: 56 \& 61
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
39) Which of the following is a limitation of Eating Well with Canada's Food Guide?
A) The serving sizes do not always represent standard amounts of food that people buy, prepare, and serve.
B) Low-fat and low-calorie foods are very clearly defined in each food category.
C) Eating Well with Canada's Food Guide goes too far in encouraging individuals to consume healthier foods.
D) Eating Well with Canada's Food Guide provides examples of meat alternatives and dairy alternatives.
Answer: A
Page Ref: 50-56
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
40) Which of the following would NOT be a good practice for eating out healthfully?
A) Share an entrée with a friend.
B) Order low-fat or nonfat salad dressing served on the side.
C) Order cream-based soups to increase your calcium intake.
D) Instead of a beef burger, order a chicken or veggie burger.

Answer: C
Page Ref: 63
Topic: Can Eating Out Be Part of a Healthful Diet?
Skill: Applied
41) The statement of identity on a food label indicates
A) the common and identifiable name of the food product.
B) the date, time, and location that the food product was produced.
C) the name and address of the food manufacturer.
D) the complete list of every ingredient contained in the food product.

Answer: A
Page Ref: 42
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
42) The label on a bag of potato chips indicates that one serving contains 250 Calories, with 150 Calories from fat. What percent of Calories comes from fat?
A) 25
B) 50
C) 60
D) 80

Answer: C
Page Ref: 49
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
43) The Reference Standard used to calculate \% Daily Value for daily cholesterol intake is
A) 0 mg .
B) 10 mg .
C) 300 mg .
D) 500 mg .

Answer: C
Page Ref: 48
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
44) There are many types of diet plans available today. The overall BEST diet plan is one that
A) provides adequate calories.
B) provides enough fibre and not too much cholesterol.
C) fits the lifestyle and needs of the individual.
D) suggests only unprocessed and natural foods.

Answer: C
Page Ref: 55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
45) If you ate a container of food that contains 80 kcalories per serving and there are 4 servings in the container, how many kcalories did you consume?
A) 80 kcalories
B) 160 kcalories
C) 320 kcalories
D) 400 kcalories

Answer: C
Page Ref: 45, 49
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
46) The Mediterranean diet protects against cardiovascular disease by
A) eliminating meat.
B) deriving $20 \%$ of total energy from fat.
C) incorporating a majority of its fat from plant oils.
D) eliminating high calorie foods, such as fats and sweets.

Answer: C
Page Ref: 60
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
47) Which of the following characteristics describes the majority of meals offered at fast-food restaurants?
A) high in calories
B) low in total fat
C) low in sodium
D) provide fresh fruits and vegetables

Answer: A
Page Ref: 61-62
Topic: Can Eating Out Be Part of a Healthful Diet?
Skill: Conceptual
48) A method for eating out healthfully is to
A) order several appetizers so that you will not eat your entire entrée when it arrives.
B) order any meat dish grilled or broiled and avoid fried or breaded meat dishes.
C) ask for only water as a beverage.
D) eat out only when you are not especially hungry.

Answer: B
Page Ref: 63
Topic: Can Eating Out Be Part of a Healthful Diet?
Skill: Applied
49) How many daily serving of grains does Eating Well with Canada's Food Guide recommend for an adult?
A) 1-2
B) 3-4
C) 5-6
D) 6-8

Answer: D
Page Ref: 52
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
50) Planning a meal that includes many different-colored foods is an example of which characteristic of a healthful diet?
A) adequacy
B) moderation
C) balance
D) variety

Answer: D
Page Ref: 41
Topic: What Is a Healthful Diet?
Skill: Conceptual
51) The "supersizing" phenomenon refers to the
A) increase in the protein content of beef.
B) substantial growth in serving sizes of purchased meals.
C) increase in the size and cholesterol content of grade A eggs.
D) proliferation of genetically modified produce.

Answer: B
Page Ref: 59
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
52) Eating the right amount of foods to maintain a healthy weight is called
A) adequacy.
B) moderation.
C) balance.
D) variety.

Answer: B
Page Ref: 40
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied

True/False Questions

1) Eating Well with Canada's Food Guide follows a standardized definition for a serving size of each food.
Answer: FALSE
Page Ref: 52-53
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
2) Moderation includes eating enough, but not too much, of the right amounts of food to optimize the body's function.
Answer: TRUE
Page Ref: 40
Topic: What Is a Healthful Diet?
Skill: Factual
3) The last item on an ingredient list is the predominant ingredient in that food product.

Answer: FALSE
Page Ref: 42
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
4) Since January 1st, 2003 Nutrition Facts Tables have been required on all fresh fruit and vegetables.
Answer: FALSE
Page Ref: 41
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
5) Percent Daily Values listed on food labels are based on an energy intake level of 2,000 Calories a day.
Answer: TRUE
Page Ref: 47
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
6) Canada was the first country to require the amount of trans fat to be listed on product labels.

Answer: TRUE
Page Ref: 43
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
7) Since 2007, food labels have been required on all fresh meat and poultry.

Answer: FALSE
Page Ref: 41
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
8) Food labeling regulations allow manufacturers to omit the footnote of the Nutrition Facts Panel on smaller products.
Answer: TRUE
Page Ref: 48
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
9) Eating Well with Canada's Food Guide has 5 food groups: Vegetables, Fruits, Grain Products, Milk and Alternative, and Meat and Alternatives.
Answer: FALSE
Page Ref: 50-51
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
10) One of the limitations of Eating Well with Canada's Food Guide is that it cannot be accessed on the Internet.
Answer: FALSE
Page Ref: 56
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
11) Eating Well with Canada's Food Guide recommends that all grain sources be whole-grain choices.
Answer: FALSE
Page Ref: 54
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
12) Ethnic foods can be incorporated into a healthful diet.

Answer: TRUE
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
13) There is no single dietary modification plan appropriate for all individuals.

Answer: TRUE
Page Ref: 58
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
14) Eating Well with Canada's Food Guide contains the recommended number of servings for each food group for six age and sex categories.
Answer: FALSE
Page Ref: 52
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
15) The serving sizes recommended in Eating Well with Canada's Food Guide are close to those sold in grocery stores.
Answer: FALSE
Page Ref: 53
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
16) Eating Well with Canada's Food Guide encourages healthier fats such as butter and lard.

Answer: FALSE
Page Ref: 53
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
17) Foods companies are prohibited from using nutrient or health claims in food labels that are not approved by the Canadian Food Inspection Agency (CFIA).
Answer: TRUE
Page Ref: 45
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
18) Most Canadians eat outside of the home at least once per week.

Answer: TRUE
Page Ref: 61
Topic: Can Eating Out Be Part of a Healthful Diet?
Skill: Factual
19) Nutrient density refers to the amount of nutrients compared with the amount of Calories contained in a food.
Answer: TRUE
Page Ref: 58
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
20) Provided on the Nutrition Facts Panel, the Percent Daily Values (\%DV) tells the consumer how much one serving contributes to the recommended overall daily intake of nutrients.
Answer: TRUE
Page Ref: 46
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual
21) A woman's fist is approximately the size of 1 cup ( 250 mL ) of pasta or vegetables.

Answer: TRUE
Page Ref: 54
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
22) Eating Well with Canada's Food Guide suggests eating at least 5 servings of fish each week. Answer: FALSE
Page Ref: 55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual
23) Eating Well with Canada's Food Guide recommends that pregnant women consume a multivitamin containing folic acid and iron.
Answer: TRUE
Page Ref: 56
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual

## Essay Questions

1) One cup of New England style clam chowder provides 101 kcal and 105 mg of potassium, 150 grams of firm silken tofu provides 93 kcal and 291 mg of potassium, and 125 mL ( $1 / 2 \mathrm{cup}$ ) of cooked Malabar spinach provides 5 kcal and 60 mg of potassium. Which food is the more nutrient dense source of potassium?
Answer: 105 mg potassium $/ 101 \mathrm{kcal}=1.04 \mathrm{mg}$ potassium per kcal (clam chowder)
291 mg potassium $/ 93 \mathrm{kcal}=3.13 \mathrm{mg}$ potassium per kcal (tofu)
60 mg potassium $/ 5 \mathrm{kcal}=12 \mathrm{mg}$ potassium per kcal (spinach)
Spinach provides the greatest amount of potassium per kcal, therefore it is the most nutrient dense source of potassium. The second most nutrient dense source is silken tofu, and the least nutrient dense source of potassium is the New England clam chowder.
Page Ref: 49
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
2) Describe the changes in labeling regulations that were announced in late 2002.

Answer: In late 2002, the Canadian government announced a new set of labeling regulations that became mandatory for all prepackaged goods on December 12, 2007. These new regulations specify which foods need a food label, provide detailed descriptions of the information that must be included on the food label, and outline the food products that are exempt from carrying nutrition information on their food labels.
Page Ref: 41
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
3) List 5 examples of foods that do not need Nutrition Facts tables.

Answer: Examples of foods exempt from carrying nutrition information:

- Foods such as spices and coffee, where the amounts of nutrients required on the label would be "0";
- Alcoholic drinks (with an alcohol content of more than 0.5\%);
- Fresh vegetables or fruits, with no added ingredients;
- Foods sold at roadside stands, craft shows, flea markets, fairs, or farmers' markets by the person who prepared and processed them;
- Individual servings of food sold for immediate consumption, such as salads and sandwiches, that have not been treated or packaged to extend their durable life;
- One-bite candies or desserts;
- Prepackaged individual portions of food intended to be served with meals or snacks by a restaurant or other commercial enterprise; and
- Some cow and goat milk products sold in refillable glass containers.

Page Ref: 41
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
4) Describe the three main purposes of Canada's food label.

Answer: Canada's food label has three main purposes:

- To give basic product information, including a list of ingredients, product weight or net quantity, best-before or expiry dates, grade or quality, country of origin, and the name and address of manufacturer, dealer or importer.
- To provide health, safety, and nutrition information. This includes nutrition information such as the amount and type of fats, proteins, carbohydrates, vitamins, and mineral present in a specified serving size (in the Nutrition Facts table). The label may also give instructions for safe storage and handling of the product.
- To provide a means for marketing or promoting the product by label claims such as "low fat," "cholesterol free," etc.
Page Ref: 42
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied

5) Describe the four main components of food labels.

Answer:
Ingredient List

- Ingredients must be listed in descending order by weight (ie. the first product listed in the ingredient list is the predominant ingredient, by weight (not volume amount), in that food.
- Has been mandatory on packaged foods for many years, and there are no changes in the new legislation.


## Nutrition Facts table:

- Replaces other Nutrition Information boxes on packaged foods and is required on all products (with some exceptions).
- The amount of energy and 13 "core" nutrients (fat, saturated fat, trans fat, cholesterol, sodium, carbohydrate, fibre, sugar, protein, vitamin A, vitamin C, calcium, and iron) in 1 serving of the food must be provided.
- Energy content is given as kcal and manufacturers have the option of adding the energy content in kilojoules (kJ) in parentheses.
- Manufacturers also have the option of stating the amounts of other nutrients in an expanded format
- For foods made specifically for children under the age of two years, a simplified version of the Nutrition Facts table is used. The amount of kcal and 10 nutrients are listed, but the saturated and trans fat and cholesterol content are not required.


## Nutrient Content claims:

- These are claims about the amount of a nutrient in a food; for example, "reduced in fat", "high in fibre", "cholesterol-free", and "source of iron".
- Have been revised so that they are based on standardized serving sizes for similar products.
- Before these terms can be used on a label or in an advertisement, the exact amount of a nutrient in 1 serving has to be determined and has to meet set criteria.
- Usually found on the front of food packages, where consumers can easily see them.
- Any of the following words may indicate a nutrient content claim: free; less; reduced; very high; source of; good source of; low; more; lower; light or lite; high source of; and excellent source of.


## Health claims:

- Defined by Health Canada as "statements that link a food or food component with reduced risk of disease or a condition (e.g., cancer or osteoporosis) in the context of a total diet."
- New to Canadian labels
- There are 5 permitted health claims in Canada.
- On a product package, the health claim is followed by a statement that the product is a good source of the food or food component.
Page Ref: 42-44
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied

6) Health Canada permits five health claims on packaging. List 3 of the 5 Canadian health claims.
Answer: Health Canada permits the following five health claims:

- A healthy diet low in sodium and high in potassium may reduce the risk of high blood pressure, a risk factor for stroke and heart disease.
- A healthy diet adequate in calcium and vitamin D , and regular physical activity, help to achieve strong bones and may reduce the risk of osteoporosis.
- A healthy diet low in saturated fat and trans fats may reduce the risk of heart disease.
- A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer.
- Foods very low in starch and fermentable sugars can make the following health claims: won't cause cavities; does not promote tooth decay; does not promote dental caries.
Page Ref: 46
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied

7) A product label on a food item in your lunch reads that the $\% \mathrm{DV}$ for calcium is $2 \%$. You recently learned that the for calcium is 1100 mg for your age. Determine the amount of calcium in one serving of this food item. Next, determine how much this food contributes to your calcium requirement as described by the DRI standards. For your age, the AI for calcium is 1000 mg . Answer:
Step 1: $2 \%=0.02 \quad 0.02 \times 1100 \mathrm{mg}=22 \mathrm{mg}$
There are 22 mg of calcium in this food item.
Step 2: $\quad 22 \mathrm{mg} / 1000 \mathrm{mg} \times 100=2.2 \%$ of your AI for calcium
This food item contributes $2.2 \%$ of your AI for calcium.
Page Ref: 46-49
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
8) What is the Health Checkтм program? What is the difference between this program and other Canadian logo programs on packaged foods?
Answer: Health Checkтм is a non-profit food information program launched by the Heart and Stroke Foundation of Canada to help Canadians quickly identify if a food product is a nutritious choice. The program logo, including the words Heart and Stroke Foundation, appears on almost 600 food products that have met specific nutrient content criteria.

There are other programs using logos to help consumers make healthier choices, but they use different nutritional criteria.
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
9) Discuss the dietary advice provided to Canadians from 1942 until 1992. What changed over the years and what stayed the same?
Answer: In 1942, the Canadian government first issued nutrition advice to Canadians. Due to war at that time, some foods were rationed and hard to get, and may people didn't have enough money to buy the food they needed. The government's guidance was meant to help guide people on what to eat to stay healthy in spite of food shortages. Canada's Official Food Rules (1942) listed the amounts of "health protective foods" to be eaten every day.

Over the years, as the Canadian food supply changed, people changed their eating habits. New scientific information became available and nutrition advice offered by the government changed. In 1944, Canada's Food Rules was released (later revised in 1949), followed by Canada's Food Guide in 1961 (with two subsequent revisions in 1977 and 1982) and finally, Canada's Food Guide for Healthy Eating in 1992.

The prevention of nutrition deficiencies as the original aim of nutrition advice in Canada no longer fits with the nutritional concerns of our society today. Many Canadians are now overweight or obese and at risk for diseases that are linked to diets containing too much energy or fat. Today's nutrition advice for Canadians has shifted towards helping people get all the nutrients they need for good health, and reducing the risk of chronic diseases such as heart disease, diabetes, and stroke.

Overall, the Canadian government still issues advice intended to help Canadians stay healthy through making appropriate dietary choices. However, due to changes in the food supply between 1942 and 1992, we have seen a shift away from dietary advice intended for times of food shortage towards guidance on healthier choices and chronic disease prevention during times of food abundance.
Page Ref: 50
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
10) Your friend is new to Canada and wants to know more about nutrition and Eating Well with Canada's Food Guide. Your friend asks for your help in determining where she fits within the recommended ranges. What advice do you give your friend regarding the food groups and the recommended ranges?
Answer: I would explain the following to my friend:

## Food Groups:

Eating Well with Canada's Food Guide (EWCFG) has four food groups: Vegetables and Fruit, Grain Products, Milk and Alternatives, and Meat and Alternatives.

The food groups are arranged in arches (like a rainbow) to illustrate the proportion of food that should be consumed from each food group. For example, the Vegetables and Fruit food group has the largest arch to signify that the largest proportion of food consumed in a day should come from this group. Likewise, the Meat and Alternatives food group has the smallest arc, which indicates that fewer selections should be made from this group over the day. For each food group, there are recommended servings.

## Recommended Servings:

For each of the four food groups, EWCFG has a recommended number of servings for different age and sex groups.

For example, the following is recommended for a 19-50 year old adult male:
Vegetables and Fruit: 8-10 servings per day
Grain Products: 8 servings per day
Milk and Alternatives: 2 servings per day
Meat and Alternatives: 3 servings per day
For a 19-50 year old adult female:
Vegetables and Fruit: $7-8$ servings per day
Grain Products: 6-7 servings per day
Milk and Alternatives: 2 servings per day
Meat and Alternatives: 2 servings per day
The actual amount of food you need every day from the four food groups will depend on your age, sex, physical activity level, and whether or not you are pregnant or breast-feeding.

To help my friend determine the number of servings that is appropriate for her from each of the four food groups, we consider her age, sex, body size and activity level.
Page Ref: 50-53
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
11) There are key messages accompanying the food groups in Eating Well with Canada's Food Guide. Name the four food groups and list at least 1 key message for each food group.
Answer:
Vegetables and Fruit

- Eat at least one dark green and one orange vegetable each day.
- Have vegetables and fruit more often than juice.
- Choose vegetables and fruit prepared with little or no added fat, sugar or salt.

Grain Products

- Make at least half of your grain products whole grain each day.
- Choose grain products that are lower in fat, sugar or salt.

Milk and Alternatives

- Drink skim, $1 \%$ or $2 \%$ milk each day.
- Select lower fat milk alternatives.

Meat and Alternatives

- Have meat alternatives such as beans, lentils and tofu often.
- Eat at least 2 Food Guide servings of fish every week.
- Select lean meat and alternatives prepared with little or no added fat or salt.

Page Ref: 54-55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
12) Name the four food groups and list three key nutrients found within foods from each food group.
Answer:
Vegetables and Fruit

- carbohydrate, dietary fibre, vitamin A, vitamin C, folate, potassium, and magnesium.

Grain Products

- complex carbohydrates, dietary fibre, riboflavin, thiamin, niacin, iron, folate, zinc, protein, and magnesium.

Milk and Alternatives

- calcium, phosphorous, riboflavin, protein, and vitamin B12, many of these foods are also fortified with vitamins D and A.

Meat and Alternatives

- protein, phosphorus, vitamin $\mathrm{B}_{6}$, vitamin $\mathrm{B}_{12}$, zinc, magnesium, iron, zinc, niacin, riboflavin, and thiamin.
Page Ref: 54-55
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied

13) What are the characteristics of a nutritious diet? How does the Eating Well with Canada's Food Guide illustrate these diet planning principles?
Answer: The characteristics of a nutritious diet are: adequacy, moderation, balance and variety.

## Adequacy

- A healthful diet is adequate (provides enough of the energy, nutrients, and fibre to maintain a person's health)
- EWCFG illustrates this diet planning principle by including a number of different kinds of food within each of the four food groups. For example, if an individual does not like to drink milk, he/she could choose yogurt or an ounce of cheese instead in order to meet his/her calcium requirements.


## Moderation

- Includes eating the right amounts of foods to maintain a healthy weight and to optimize the body's metabolic processes.
- EWCFG illustrates this diet planning principle by recommending certain numbers of servings for individuals to consume each day.


## Balance

- A diet that contains the combinations of foods that provide the proper proportions of nutrients
- EWCFG illustrates this diet planning principle in that it is designed to assist Canadians with planning a diet that provides the proper balance of nutrients by encouraging them to eat the appropriate number of servings from each food group.
- Designing a nutritious diet is a balancing act, requiring Canadians to eat enough (but not too much) of foods from each group. Each of the food groups plays a critical role in this balancing act, so no food group should be completely substituted for another.


## Variety

- Includes eating many different foods each day
- By following EWCFG, Canadians will naturally be eating a variety of foods
- It is also important to eat a variety of foods within each food group

Page Ref: 40-41
Topic: What Is a Healthful Diet?
Skill: Applied
14) Discuss appropriate and practical recommendations for eating out healthfully.

Answer: Some appropriate and practical recommendations for eating out healthfully include:

- Choose lower-fat menu items when possible in restaurants and fast food establishments
- To provide some vegetables for the day, add a side salad with low-fat or non-fat salad dressing
- Ask for a smaller portion, a sandwich made with whole-grain bread, grilled chicken or other lean meats, and a side salad as healthier fast-food choices
- In a restaurant, choose "light" or "lite" menu items such as grilled chicken and a variety of vegetables which are often healthier choices compared to the regular menu
- To eat out in moderation, try some of the following:
- Avoid whole-milk lattes and other coffee drinks with cream or whipping cream; select reduced-fat or skim milk added to your favourite coffee drink.
- Avoid eating appetizers that are breaded, fried, or filled with cheese or meat; or skip the appetizer completely. Alternatively, you may want to order a healthful appetizer as an entrée instead of a larger meal.
- Share an entrée with a friend.
- Order broth-based soups instead of cream-based soups.
- Order any meat dish grilled or broiled, and avoid fried or breaded meat dishes.
- If you order a meat dish, select lean cuts of meat, such as chicken or turkey breast, extra-lean ground beef, pork loin chop, or filet mignon.
- Order a meatless dish filled with vegetables and whole grains. Avoid dishes with cream sauces and a lot of cheese.
- Order a salad with low-fat or non-fat dressing served on the side (you will eat less by controlling how much you put on the salad).
- Order steamed vegetables on the side instead of potatoes or rice. If you order potatoes, make sure you get a baked potato.
- Order beverages with little or no kcal, such as water, tea, or diet drinks.
- Eat no more than half of what you are served, and take the rest home for another meal.
- Skip dessert or share one dessert with a lot of friends. Another alternative is to order fresh fruit for dessert.
Page Ref: 63
Topic: Can Eating Out Be Part of a Healthful Diet?
Skill: Applied

15) Outline the difficulties in determining Calorie content of food when eating out.

Answer: There are many difficulties associated with determining the Calorie content of food when eating away from home. This is the main reason why many people who are watching what they eat opt to stay in, instead.

- The first difficulty lies in the portion sizes. Until the food arrives at your table, you do not know what the serving size is going to be.
- Once the food is there, unless it is very plainly cooked you still do not know all of the ingredients and measurements for each ingredient.
- There are often hidden ingredients within foods. For example, many people do not realize that a traditional Caesar salad dressing contains anchovies.
- Foods in restaurants are prepared in ways that you may not prepare them at home, where you are aware of everything you put into them.
- Even if you set out to avoid eating the entire meal at once, at a restaurant you are more likely to eat mindlessly because you cannot get up and take the plate away when you are finished.
Page Ref: 61-63
Topic: Can Eating Out Be Part of a Healthful Diet?
Skill: Conceptual


## Nutrition Debate Questions

1) Which of the following conditions have probiotics been to shown assist with?
A) hypertension and cardiovascular disease
B) anxiety and depression
C) diarrhea and lactose intolerance
D) macular degeneration and cataracts

Answer: C
Page Ref: 64
Topic: Can Probiotics Improve Our Health?
Skill: Applied
2) Which of the following is a rich source of probiotics?
A) enriched eggs
B) yogurt
C) iodized salt
D) sauerkraut

Answer: B
Page Ref: 64
Topic: Can Probiotics Improve Our Health?
Skill: Conceptual
3) Because they can only survive in the body for short periods of time, probiotics should be consumed $\qquad$ .
A) hourly
B) daily
C) weekly
D) monthly

Answer: B
Page Ref: 64
Topic: Can Probiotics Improve Our Health?
Skill: Factual

## Questions from Chapter Boxes

1) Miguel's doctor has recommended that he include more fiber-rich foods in his diet and suggests he try to consume at least 25 grams a day. He looks at the label on his favorite cereal and notices that it has $8 \%$ of the Daily Value of fiber per $1 / 2$ cup serving. If Miguel eats 1 cup of this cereal how much fiber will he be consuming?
A) 2 grams
B) 4 grams
C) 8 grams
D) 12 grams

Answer: B
Page Ref: 57
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Applied
2) Describe the dietary pattern of the Mediterranean-style diet. What health benefits have been linked to this diet?
Answer: A reduction in the risk of cardiovascular disease has been linked to the dietary pattern of the Mediterranean-style diet. This dietary pattern differs from the one outlined in Eating Well with Canada's Food Guide in that:

- red meat is eaten monthly while poultry, fish, eggs and sweets are eaten daily to weekly
- while the recommended fat content is around $40 \%$ of Calories, it consists primarily of monounsaturated and polyunsaturated oils
- foods eaten daily include: whole grains, fruits, vegetables, dairy, legumes and nuts. The combination of the above produces a cardio-protective diet that is high in fibre, vitamins, minerals and unsaturated fats.
Page Ref: 60
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Conceptual

3) Mark weighs 254 pounds and would like to lose weight. He starts a walking program that expends $1.2 \mathrm{kcal} /$ pound $/$ hour. If he walks 45 minutes a day for one week, how many Calories will he burn in one week?
A) 800 kcal
B) $1,200 \mathrm{kcal}$
C) $1,600 \mathrm{kcal}$
D) $1,800 \mathrm{kcal}$

Answer: C
Page Ref: 59
Topic: What Tools Can Help Me Design a Healthful Diet?
Skill: Factual

