

Chapter 2 – Planning a healthy diet

MULTIPLE CHOICE

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

ANS: B

DIF: Bloom's: Remember

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

2. The diet-planning principle geared at providing all the nutrients, fibre and energy in amounts sufficient to maintain health is called:
 - a. variety
 - b. adequacy
 - c. moderation
 - d. kcalorie control
 - e. nutrient density

ANS: B

DIF: Bloom's: Remember

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

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

ANS: D

DIF: Bloom's: Evaluate

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

4. Which food is the most calcium-dense?
 - a. Whole milk
 - b. Fat-free milk
 - c. Low-fat milk
 - d. Cheddar cheese
 - e. Cottage cheese

ANS: B

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

5. 'Nutrient dense' refers to foods that:
 - a. carry the FSANZ nutrition labelling
 - b. are higher in weight relative to volume
 - c. provide more nutrients relative to kilojoules
 - d. contain a mixture of carbohydrate, fat and protein
 - e. give the most protein for the consumer's food dollar

ANS: C

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

6. The concept of nutrient density is most helpful in achieving the principle of diet planning known as:
- variety
 - balance
 - moderation
 - kilojoule control
 - cost control

ANS: D

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

7. A food that provides 100 mg of magnesium and 100 kJ in a serving has a magnesium density (mg per kJ) of:
- 0.25
 - 0.4
 - 2.5
 - 1
 - 25

ANS: D

DIF: Bloom's: Apply

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

8. Ranking foods according to their overall nutrient composition is known as:
- biological value
 - nutrient profiling
 - the risk-reduction score
 - the healthy eating index
 - compositional profiling

ANS: B

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

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

ANS: C

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

10. Applying the principle of variety in food planning helps ensure the benefits of:
- moderation
 - vegetarianism
 - nutrient density
 - dilution of harmful contaminants
 - abundance

ANS: D

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

11. Which recommendation is part of the *Australian Dietary Guidelines*?
- Enjoy a wide variety of nutritious foods.
 - Limit intake of protein foods.

- c. Practise good foot hygiene.
- d. Reduce seafood consumption.
- e. Become vegetarians.

ANS: A DIF: Bloom's: Remember REF: Principles and guidelines
OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

12. What is an important feature of the food groups that make up the *Australian Guide to Healthy Eating*?
- a. Consuming a vegetable will provide only one major nutrient.
 - b. Consuming legumes supplies protein, but not fibre or vitamins.
 - c. Consuming a variety of foods from each group is important for a balanced diet.
 - d. Consuming broccoli every day for a week to meet the vegetables group intake is acceptable.
 - e. Consuming dairy products is no longer recommended.

ANS: C DIF: Bloom's: Understand REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

13. Jamie, a vegetarian, is trying to plan a healthy diet according to the *Australian Guide to Healthy Eating*. Which protein foods would be the best nutrient choices for one day?
- a. 2 pieces bacon, $\frac{1}{2}$ can tuna, 2 pieces bread
 - b. $\frac{1}{2}$ cup rice, 2 tbsp. low-sugar jam, 2 pieces bread
 - c. $\frac{1}{2}$ cup black beans, 30 g peanut butter, 1 cup lentils
 - d. 1 skinless chicken breast, 2 egg whites, meal replacement bar
 - e. 1 egg, one cup leaf lettuce, 60 g fatty fish

ANS: C DIF: Bloom's: Evaluate REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

14. What two major nutrients are supplied by the fruit group?
- a. Vitamins D and E
 - b. Vitamins A and C
 - c. Protein and calcium
 - d. B vitamins and iron
 - e. Vitamin K and magnesium

ANS: B DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

15. How much fruit juice (100%) is equivalent to one cup of fresh fruit?
- a. $\frac{1}{4}$ cup
 - b. $\frac{1}{2}$ cup
 - c. 1 cup
 - d. 1 $\frac{1}{2}$ cups
 - e. 2 cups

ANS: B DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

16. According to the *Australian Guide to Healthy Eating*, which protein food should be most limited?
- a. Prawns

- b. Red meat with visible fat
- c. Peanut butter
- d. Skinless chicken
- e. Eggs

ANS: B

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

17. Which food item is described as a healthier choice for protein in the *Australian Guide to Healthy Eating*?
- a. Nuts
 - b. Bacon
 - c. Luncheon meats
 - d. Sweet potatoes
 - e. Marbled meats

ANS: A

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

18. In which food group are legumes found?
- a. Milk, yoghurt, cheese and alternatives
 - b. Fruits
 - c. Grains
 - d. Lean meat, poultry and alternatives
 - e. Fats and oils

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

19. What amount of salad vegetables would an individual have to eat to equate to half a cup of vegetables?
- a. $\frac{1}{2}$ cup
 - b. 1 cup
 - c. 1 $\frac{1}{2}$ cups
 - d. 2 cups
 - e. A small bowl

ANS: B

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

20. Kilojoules from _____ would be considered part of one's discretionary kilojoule allowance.
- a. jam
 - b. watermelon
 - c. raw carrots
 - d. Brussels sprouts
 - e. green beans

ANS: A

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

21. Which food supplies only discretionary kilojoules?

- a. Bagel
- b. Raisins
- c. Strawberry jam
- d. Peanut butter
- e. 100% fruit juice

ANS: C

DIF: Bloom's: Evaluate

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

22. What assessment tool is designed to measure how well a diet meets the recommendations of the *Australian Dietary Guidelines*??

- a. The *Australian Guide to Healthy Eating*
- b. Nutrient Reference Values
- c. Dietitian's Comparative Effectiveness Plan
- d. Public Health Nutrient Assessment Barometer
- e. FSANZ Food safety Guidelines

ANS: B

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

23. In the *Australian Guide to Healthy Eating* 'plate' diagram, which food groups are shown as a separate food group?

- a. Fats; oils and dairy
- b. Dairy; fibre
- c. Carbohydrate; fats and oils
- d. Meat and alternatives
- e. Discretionary; fats and oils

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

24. What is a major criticism of the use of the *Australian Guide to Healthy Eating* as an educational tool?

- a. It allows for oversized portions.
- b. The dairy group excludes ice-cream.
- c. The five groups are not clearly identified.
- d. It treats all foods within a single group the same way.
- e. It cannot be adapted to vegetarian or vegan diets.

ANS: D

DIF: Bloom's: Evaluate

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

25. Which food group is typically consumed in amounts greater than recommended by the *Australian Guide to Healthy Eating*?

- a. Dairy
- b. Fruits
- c. Vegetables
- d. Protein foods
- e. Whole grains

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

26. Which food/s is/are not represented in the *Australian Guide to Healthy Eating* serve size guidance?
- Cooking oil
 - Jam
 - Cheese
 - Processed foods
 - Nut spreads

ANS: A

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

27. Which feature characterises the food serve sizes in the *Australian Guide to Healthy Eating*?
- Foods are grouped according to their source.
 - Adequate intakes of minerals and vitamins are virtually guaranteed.
 - A fat portion provides about twice the energy of a carbohydrate portion.
 - All foods are grouped according to similar kilojoule content.
 - Foods are sorted by their vitamin and mineral content.

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

28. In the *Australian Guide to Healthy Eating*, to which food group are olives assigned?
- Fats and oils
 - Meat and poultry
 - Grains
 - Meat alternatives
 - Fruit

ANS: A

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

29. Wholegrain flour contains all parts of the grain with the exception of the:
- bran
 - husk
 - germ
 - endosperm
 - heart

ANS: B

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

30. Refined grain products contain only the:
- bran
 - husk
 - germ
 - endosperm
 - chaff

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

31. The addition of calcium to some orange juice products by food manufacturers is known as nutrient:
- enrichment
 - restoration
 - fortification
 - mineralisation
 - adulteration

ANS: C

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

32. Australian flour millers are required to add _____ to all bread flours.
- calcium
 - magnesium
 - zinc
 - folic acid
 - iron

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

33. Which bread does *not* need to be fortified with folic acid under FSANZ legislation?
- White
 - Brown
 - Enriched
 - Whole grain
 - Organic

ANS: E

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

34. Which characteristic best describes enriched grain products?
- They contain all of the added nutrients listed on the label.
 - They contain the fibre restored from the refining procedure.
 - They contain virtually all the nutrients restored from refining procedure.
 - They contain only four vitamins and four minerals added by the food manufacturer.
 - They are typically low in calories.

ANS: A

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

35. What health risk created a need for mandatory fortification of bread?
- Anaemia
 - Rickets
 - Neural tube defects
 - Osteoporosis
 - Diabetes

ANS: C

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

36. Which product label always denotes a whole-grain product?

- a. Multi-grain
- b. 100% wheat
- c. Whole-wheat
- d. Stone-ground
- e. High fiber

ANS: C

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

37. Which of the following is *not* a typical grain enrichment nutrient?

- a. Iron
- b. Thiamin
- c. Riboflavin
- d. Niacin
- e. Calcium

ANS: E

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

38. In which country, state or territory is folate enrichment of bread *not* mandatory?

- a. New Zealand
- b. Australia
- c. Tasmania
- d. Northern Territory
- e. Western Australia

ANS: A

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

39. The most highly fortified foods on the market are:

- a. frozen dinners
- b. imitation foods
- c. enriched breads
- d. breakfast cereals
- e. canned fruits and vegetables

ANS: D

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

40. Which nutrient would be supplied in much greater amounts from whole-grain bread as opposed to from enriched bread?

- a. Zinc
- b. Folate
- c. Riboflavin
- d. Thiamin
- e. Sodium

ANS: A DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

41. Cooking 120 g of raw steak will reduce its weight to approximately ____ grams of cooked meat.
- a. 80
 - b. 90
 - c. 95
 - d. 100
 - e. 110

ANS: D DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

42. Textured vegetable protein is usually made from:
- a. soybeans
 - b. corn stalks
 - c. a mixture of legumes
 - d. cruciferous vegetables
 - e. dark-green, red and orange vegetables

ANS: A DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

43. Which of the following is *not* an example of an approximately 100-gram portion of meat?
- a. 1 lean pork chop
 - b. 2 lean pork chops
 - c. 1 steak the size of a deck of cards
 - d. ½ chicken breast
 - e. Palm-sized piece of meat

ANS: B DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

44. Which of the following is *not* a preferable choice of fruit serve?
- a. Piece of fresh fruit
 - b. Frozen berries
 - c. Dried sultanas
 - d. Tinned pineapple in own juice
 - e. Orange juice

ANS: E DIF: Bloom's: Understand REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

45. Which of the following is *not* a nutrition content claim?
- a. 'Low in fat'
 - b. 'Reduced fat'
 - c. 'Helps lower cholesterol'
 - d. 'Low sugar'
 - e. 'Reduced salt'

ANS: C DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

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

ANS: A DIF: Bloom's: Evaluate REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

47. According to nutrition labeling laws, what two minerals *must* be listed on the package label as a percentage of daily value?
- Calcium and iron
 - Zinc and phosphorus
 - Fluoride and chloride
 - Chromium and magnesium
 - Copper and potassium

ANS: A DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

48. A food label ingredient list reads in the following order: wheat flour, vegetable shortening, sugar, salt, cornstarch. What item would be found in the *smallest* amount in this food?
- Salt
 - Sugar
 - Cornstarch
 - Wheat flour
 - Vegetable shortening

ANS: C DIF: Bloom's: Understand REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

49. By law, FSANZ states that, in addition to stating a serving size on beverage food labels, ingredients must also be stated:
- per 50 mLs
 - per 100 mLs
 - per 150 mLs
 - per 200 mLs
 - per 1 litre

ANS: B DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

50. Which statement describes a characteristic of food serving sizes?

- a. Serving sizes for most foods have not yet been established by the FSANZ.
- b. The serving size for ice-cream is two cups, and the serving size for all beverages is per 100 mLs.
- c. The serving sizes on food labels are not always the same as those in the *Australian Guide to Healthy Eating*.
- d. Serving sizes must be listed in common household measures, such as cups, or in metric measures, such as milliliters, but not in both.
- e. Manufacturers are free to set their own serving sizes, as long as they specify what the serving size is.

ANS: C

DIF: Bloom's: Understand

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

51. According to nutrition labeling laws, if a food is claiming to be 'low-fat' it must contain no more than ___ fat per 100 g.
- a. 1 g
 - b. 1.5 g
 - c. 2 g
 - d. 2.5 g
 - e. 3 g

ANS: B

DIF: Bloom's: Remember

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

52. Food labels express the nutrient content in relation to a set of standard values known as the:
- a. Daily Values
 - b. FSNAZ Standards
 - c. Dietary Reference Intakes (DRI's)
 - d. Recommended Dietary Intakes (RDIs)
 - e. USDA Intake Standards

ANS: D

DIF: Bloom's: Remember

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

53. Women and men aged between 19–50 years have a daily need of _____ serves of grains.
- a. two
 - b. three
 - c. four
 - d. five
 - e. six

ANS: E

DIF: Bloom's: Remember

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

54. Which of the following foods does *not* need to carry a nutrition food label?
- a. Breakfast cereal
 - b. Tin of beans
 - c. Frozen fruit
 - d. Coffee
 - e. Milk

ANS: D DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

55. What is a feature of the 'Nutrition facts' panel on a food label?
- Listing *trans*-fat content is optional.
 - Saturated fat must be listed.
 - Naturally present sugars are excluded.
 - Soluble and insoluble fibre must be listed separately.
 - Unsaturated fats must be listed.

ANS: B DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

56. Which of the following allergens does *not* need to be listed for allergy sufferers on food labels?
- Peanuts
 - Tree nuts
 - Pollen
 - Soy
 - Gluten

ANS: C DIF: Bloom's: Understand REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

57. A food label that advertises the product as a 'rich source of fibre' is an example of a:
- nutrition content claim
 - health claim
 - weight reduction claim
 - structure-function claim
 - research-based claim

ANS: A DIF: Bloom's: Understand REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

58. According to FSANZ, a food label that reads 'keeps you regular' is an example of a:
- general level health claim
 - daily value claim
 - high level health claim
 - nutrition content claim
 - unsupported claim

ANS: A DIF: Bloom's: Understand REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

59. Greg is trying to decide which brand of cereal to buy, but he is somewhat confused by the health claims. Which statement represents the highest level of significant scientific agreement?
- 'This cereal promotes a healthy heart.'
 - 'This cereal supports heart health.'
 - 'This product contains whole grains, which have been proven to reduce the risk of heart disease and certain cancers.'
 - 'Very limited and preliminary scientific research suggests this product can reduce risk for

cancers; FSANZ concludes that there is little scientific evidence supporting this claim.'

- e. 'Anecdotal evidence demonstrates a clear relationship between consumption of this product and elimination of health risk factors.'

ANS: C

DIF: Bloom's: Evaluate

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

60. What is a characteristic of high-level health claims on food labels?

- a. They are allowed only for unprocessed food.
- b. They must be based on an approved FSANZ food–health relationship.
- c. They must not refer to a serious disease.
- d. They must not refer to a biomarker of a serious disease.
- e. They are only applicable to organic foods.

ANS: B

DIF: Bloom's: Understand

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

61. Which food items are consumed in the diet of a lactovegetarian?

- a. Plant foods only
- b. Eggs and plant foods only
- c. Meat, eggs and plant foods only
- d. Milk products and plant foods only
- e. Fish, eggs and dairy only

ANS: D

DIF: Bloom's: Evaluate

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.

62. Tempeh is made from:

- a. soybeans
- b. any legume
- c. fermented leafy vegetables
- d. fermented yellow vegetables
- e. wheat proteins

ANS: A

DIF: Bloom's: Remember

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.

63. Which ingredient on a food label would be a source of protein?

- a. BHT
- b. Tofu
- c. Corn starch
- d. Diglycerides
- e. High-fructose corn syrup

ANS: B

DIF: Bloom's: Evaluate

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.

64. Which feature is present in people who regularly eat meals based on vegetarian protein sources?

- a. They show less heart disease, but more colon cancer than omnivores.
- b. They show evidence of marginal protein intake compared with omnivores.
- c. They have lower blood-pressure levels than those eating meat.
- d. They have lower sodium intakes than, but similar blood pressure to, those eating red meat.
- e. They are virtually indistinguishable from meat-eaters in terms of disease occurrence.

ANS: C DIF: Bloom's: Evaluate
OBJ: Develop a well-balanced vegetarian meal plan.

REF: Vegetarian diets

65. In vegetarians, for which macronutrient is the RDI harder to achieve?
- Iron
 - Folate
 - Calcium
 - Vitamin A
 - Protein

ANS: A DIF: Bloom's: Remember
OBJ: Develop a well-balanced vegetarian meal plan.

REF: Vegetarian diets

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

ANS: A DIF: Bloom's: Evaluate
OBJ: Develop a well-balanced vegetarian meal plan.

REF: Vegetarian diets

67. Meat replacements consumed by vegans are often made of:
- soy
 - fish
 - eggs
 - dairy
 - poultry

ANS: A DIF: Bloom's: Remember
OBJ: Develop a well-balanced vegetarian meal plan.

REF: Vegetarian diets

68. What is typically a characteristic of a vegetarian diet?
- Fat intake is higher.
 - Fiber intake is lower.
 - Vitamin B₁₂ intake is lower.
 - Intakes of vitamins A and C are lower.
 - Iron intake is higher.

ANS: C DIF: Bloom's: Evaluate
OBJ: Develop a well-balanced vegetarian meal plan.

REF: Vegetarian diets

69. Which statement characterises vitamin B₁₂ nutrition in vegetarians and vegans?
- Vitamin B₁₂ in fortified cereals has low bioavailability.
 - Vegan mothers need only infrequent intake of vitamin B₁₂-fortified cereals.
 - The vitamin B₁₂ in fermented soy products may be present in an inactive form
 - Infants born to vegan mothers are resistant to the development of vitamin B₁₂ deficiency.
 - Vitamin B₁₂ is problematic in vegetarians, but not in vegans.

ANS: C DIF: Bloom's: Evaluate
OBJ: Develop a well-balanced vegetarian meal plan.

REF: Vegetarian diets

70. Which statement best characterises a macrobiotic diet?
- It excludes all hot and salty foods.

- b. It permits inclusion of many non-organic foods.
- c. It limits selection of grains and vegetables, making it poorly balanced.
- d. It emphasises abundant amounts of fish, fruits, nuts and seeds.
- e. It is based on seasonally available fruits, vegetables, grains, game meats and fish.

ANS: C

DIF: Bloom's: Evaluate

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.

COMPLETION

1. The concept of _____ refers to a diet that provides sufficient energy and enough of all the nutrients to meet the needs of healthy people.

ANS: adequacy

DIF: Bloom's: Remember

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

2. To calculate the nutrient density of a food item, divide the _____ by the _____.

ANS: milligrams; kilojoules

DIF: Bloom's: Remember

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

3. _____ refers to a measure of the nutrients a food provides relative to the energy it provides.

ANS: Nutrient; density

DIF: Bloom's: Remember

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

4. Diet-planning tools that sort foods into groups based on nutrient content, and then specify that people should eat certain amounts of foods from each group, are called _____ plans.

ANS: diet

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

5. _____ contribute the same key nutrients – notably, protein, iron and zinc – as meats, poultry and seafood.

ANS: Legumes

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

6. The kilojoules remaining in a person's energy allowance after consuming enough nutrient-dense foods to meet all nutrient needs for a day are called _____ kilojoules.

ANS: discretionary

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

7. An assessment tool called the _____ can be used to measure how well a diet meets the recommendations of the *Australian Dietary Guidelines*.

ANS: *Australian Guide to Healthy Eating*

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

8. Diet-planning tools that organise foods by their proportions of carbohydrate fat, and protein are called _____.

ANS: food; groups

DIF: Bloom's: Remember

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

9. The 'Nutrition facts' panel on a label must provide the _____, the _____, or both for important nutrients.

ANS:

nutrient amount; percent Daily Intake

percent RDI; nutrient amount;

DIF: Bloom's: Remember

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

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

ANS: germ

DIF: Bloom's: Remember

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

MATCHING

- a. 7
- b. 70
- c. 2
- d. $\frac{1}{2}$ cup

- k. Split peas
- l. Balance
- m. Vitamin B₁₂
- n. Calcium

- | | |
|------------------------------------|--|
| e. 1 cup | o. Endosperm |
| f. FSANZ | p. Nutrient density |
| g. Bran | q. Sodium and hypertension |
| h. Folate | r. Tomatoes and prostate cancer |
| i. Department of Health and Ageing | s. Margarine containing plant sterols |
| j. Soybeans | t. Orange juice containing added calcium |

1. The principle of consuming a number of foods in proportion to each other
2. The principle of recognising that a food has more iron than another food when expressed per kilojoule
3. Origin of the *Australian Guide to Healthy Eating* graphic
4. Number of major food groups
5. Mistaken as a vegetable belonging to the meat and alternatives food group
6. Part of grain richest in fibre
7. Part of grain containing most of the starch
8. Nutrient added in bread flour fortification process
9. Example of a fortified food
10. Commonly used to make textured vegetable protein
11. Example of a functional food
12. Nutrient commonly added in soy milk fortification process
13. Maximum number of serves of fruit recommended on a 8700-kilojoule diet based on the AGHE
14. Serving size (equivalent to 90 g) of rice in the Australian Guide to Healthy Eating
15. Serving size of rice on a food label
16. Agency that regulates food labeling
17. Grams of fat supplied by a 8700-kilojoule diet that is 30% fat
18. Associated in a reliable health claim allowed on food labels
19. Associated in a health claim *not* allowed on food labels without a disclaimer
20. Nutrient commonly required as a supplement in vegan diets

- | | | |
|--|------------------------|--------------------------------|
| 1. ANS: L | DIF: Bloom's: Remember | REF: Principles and guidelines |
| OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet. | | |
| 2. ANS: P | DIF: Bloom's: Remember | REF: Principles and guidelines |
| OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet. | | |
| 3. ANS: I | DIF: Bloom's: Remember | REF: Diet-planning guides |
| OBJ: Use the <i>Australian Guide to Healthy Eating</i> to develop a meal plan within a specified energy allowance. | | |
| 4. ANS: A | DIF: Bloom's: Remember | REF: Diet-planning guides |
| OBJ: Use the <i>Australian Guide to Healthy Eating</i> to develop a meal plan within a specified energy allowance. | | |
| 5. ANS: K | DIF: Bloom's: Remember | REF: Diet-planning guides |
| OBJ: Use the <i>Australian Guide to Healthy Eating</i> to develop a meal plan within a specified energy allowance. | | |
| 6. ANS: G | DIF: Bloom's: Remember | REF: Diet-planning guides |
| OBJ: Use the <i>Australian Guide to Healthy Eating</i> to develop a meal plan within a specified energy allowance. | | |
| 7. ANS: O | DIF: Bloom's: Remember | REF: Diet-planning guides |
| OBJ: Use the <i>Australian Guide to Healthy Eating</i> to develop a meal plan within a specified energy allowance. | | |
| 8. ANS: H | DIF: Bloom's: Remember | REF: Diet-planning guides |
| OBJ: Use the <i>Australian Guide to Healthy Eating</i> to develop a meal plan within a specified energy allowance. | | |
| 9. ANS: T | DIF: Bloom's: Remember | REF: Diet-planning guides |

- OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.
10. ANS: J DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.
11. ANS: S DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.
12. ANS: N DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.
13. ANS: C DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
14. ANS: D DIF: Bloom's: Remember REF: Diet-planning guides
OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.
15. ANS: E DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
16. ANS: F DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
17. ANS: B DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
18. ANS: Q DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
19. ANS: R DIF: Bloom's: Remember REF: Food labels
OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.
20. ANS: M DIF: Bloom's: Remember REF: Vegetarian diets
OBJ: Develop a well-balanced vegetarian meal plan.

ESSAY

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

ANS:

- Adequacy reflects a diet that provides sufficient energy and enough of all the nutrients to meet the needs of healthy people. Take the essential nutrient iron, for example. Because the body loses some iron each day, people have to replace it by eating foods that contain iron. A person whose diet fails to provide enough iron-rich foods may develop the symptoms of iron-deficiency anaemia: the person may feel weak, tired, and listless; have frequent headaches; and find that even the smallest amount of muscular work brings disabling fatigue. To prevent these deficiency symptoms, a person must include foods that supply adequate iron.
- Balance in the diet helps to ensure adequacy. The art of balancing the diet involves consuming enough – but not too much – of different types of foods in proportion to one another. In a balanced diet, foods that are rich in some nutrients do not crowd out foods that are rich in other nutrients.

- Kilojoule (energy) control. Designing an adequate diet within a reasonable kilojoule allowance requires careful planning. Once again, balance plays a key role. The amount of energy coming into the body from foods should balance with the amount of energy being used by the body to sustain its metabolic and physical activities. Upsetting this balance leads to gains or losses in body weight.
- Nutrient density promotes adequacy and kilojoule control. To eat well without overeating, select nutrient-dense foods – that is, foods that deliver the most nutrients for the least food energy.
- Moderation contributes to adequacy, balance and kilojoule control. Foods that are rich in fat and sugar often provide enjoyment and energy but relatively few nutrients; in addition, they promote weight gain when eaten in excess. A person practising moderation eats such foods only on occasion, and regularly selects foods low in solid fats and added sugars, a practice that automatically improves nutrient density.
- Variety improves nutrient adequacy. A diet may have all of the virtues just described and still lack variety, if a person eats the same foods day after day. People should select foods from each of the food groups daily and vary their choices within each food group from day to day, for a number of reasons. First, different foods within the same group contain different arrays of nutrients. Second, no food is guaranteed entirely to be free of substances that, in excess, could be harmful. Third, as the adage goes, variety is the spice of life.

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

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

ANS:

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

DIF: Bloom's: Evaluate

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

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

ANS:

Nutrient density promotes adequacy and kilojoule control. To eat well without overeating, select nutrient-dense foods – that is, foods that deliver the most nutrients for the least food energy. Consider foods containing calcium, for example. You can get about 300 milligrams of calcium from either 40 grams of cheddar cheese or 1 cup of fat-free milk, but the cheese delivers about twice as much food energy (kilojoules) as the milk. The fat-free milk, then, is twice as calcium-dense as the cheddar cheese; it offers the same amount of calcium for half the kilojoules. Both foods are excellent choices for adequacy's sake alone, but to achieve adequacy while controlling kilojoules, the fat-free milk is the better choice. (Alternatively, a person could select a low-fat cheddar cheese with kilojoules comparable to fat-free milk.)

Just as a financially responsible person pays for rent, food, clothes and study on a limited budget, healthy people obtain iron, calcium and all the other essential nutrients on a limited energy (kilojoule) allowance. Success depends on getting many nutrients for each kilojoule 'dollar'. A person who makes nutrient-dense choices can meet daily nutrient needs on a lower energy budget. Such choices support good health.

Foods that are notably low in nutrient density – such as potato chips, lollies and soft drinks – are called empty-kilojoule foods. The kilojoules these foods provide are called empty because they deliver a lot of energy (from added sugars, solid fats, or both) but little or no protein, vitamins or minerals.

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

Foods listed as examples will vary.

DIF: Bloom's: Understand

REF: Principles and guidelines

OBJ: Explain how each of the diet-planning principles can be used to plan a healthy diet.

4. List and describe the contributions of the seven food groups in the *Australian Guide to Healthy Eating*.

ANS:

Fruits contribute folate, vitamin A, vitamin C, potassium, and fibre.

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

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

Lean meat and alternatives contribute protein, essential fatty acids, niacin, thiamin, vitamin B₆, vitamin B₁₂, iron, magnesium, potassium, and zinc.

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

Oils are not a food group, but are featured here because they contribute vitamin E and essential fatty acids. They should only be used in small amounts.

'Extra' foods should be limited in intake, but small amounts can be included as part of a healthy diet.

DIF: Bloom's: Understand

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

5. Provide examples and discuss the importance of the five sub-groups of the vegetable food group.

ANS:

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

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

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

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

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

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

DIF: Bloom's: Understand

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

6. Define the term 'discretionary kilojoules', and give three examples of foods that provide them. Under what circumstances is the intake of discretionary kilojoules permitted?

ANS:

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

DIF: Bloom's: Apply

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

7. Discuss the meaning, significance, and utility of *Australian Guide to Healthy Eating* plate icon as an educational tool.

ANS:

The Department of Health and Ageing (DOHA) created an educational tool to illustrate the five food groups. The AGHE icon divides a plate into five sections, each representing a food group: fruits, vegetables, grains, dairy and protein foods. The sections vary in size, indicating the relative proportion each food group contributes to a healthy diet. Two additional sections next to the plate represent the fats and oils group and 'extras', or discretionary foods.

The AGHE icon does not stand alone as an educational tool. A wealth of information can be found at the website www.eatforhealth.gov.au. Consumers can choose the kinds and amounts of foods they need to eat each day based on their height, weight, age, gender, and activity level. Information is also available for children, pregnant and lactating women, and for vegetarians. In addition to creating a personal plan, consumers can find daily tips to help them improve their diet and increase physical activity. A key message of the website is to enjoy food, but eat less by avoiding oversized portions.

DIF: Bloom's: Evaluate

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

8. What is the *Australian Guide to Healthy Eating*, and how does it work?

ANS:

The *Australian Guide to Healthy Eating* is a resource that can be used to measure how well a diet meets the recommendations of the *Australian Dietary Guidelines*. The resource contains recommended serve sizes for the core food groups, as well as for fats and oils, and 'extras', and gives specific guidance on how many serves people should be aiming for per day based on gender, age and activity. The serves are derived from similar energy content for each different food, and therefore can be interchanged in the daily diet without exceeding similar kilojoule counts for the day, while also enjoying variety. The tool can be used as a checklist for what people are currently eating, as well as for meal planning for an improved diet.

DIF: Bloom's: Understand

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

9. Describe how an individual might use the *Australian Guide to Healthy Eating* as an eating plan?

ANS:

The *Australian Guide to Healthy Eating* (AGHE) can be used to first determine how many serves of the core food groups the individual should be aiming for based on their gender, age and activity levels.

This information could be tabulated numerically next to each food group, with the mealtimes also included in the table as horizontal headings. In the table or meal plan the individual could use the AGHE serve sizes to select real foods to include in the plan; e.g. for breakfast, the person might include:

- 1 cup cereal (= 1 grain serve)
- 1 medium banana (= 1 fruit serve)
- 1 cup fat-free milk (= 1 dairy serve).

By doing this for each meal and snack, all the core food groups can be accounted for, with any kilojoules left over able to be allocated to other core foods, or to 'extra' foods that have less nutritional value, but that may be included for enjoyment (e.g. a chocolate biscuit or a glass of wine).

DIF: Bloom's: Understand

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy

allowance.

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

ANS:

Processed foods: Foods that have been treated to change their physical, chemical, microbiological or sensory properties

Fortified: The addition to a food of nutrients that were either not originally present or present in insignificant amounts. Fortification can be used to correct or prevent a widespread nutrient deficiency or to balance the total nutrient profile of a food.

Refined: The process by which the coarse parts of a food are removed. When wheat is refined into flour, the bran, germ and husk are removed, leaving only the endosperm.

Enriched: The addition to a food of specific nutrients to replace losses that occur during processing so that the food will meet a specified standard.

Whole grain: A grain that maintains the same relative proportions of starchy endosperm, germ and bran as the original (all but the husk); not refined

DIF: Bloom's: Understand

REF: Diet-planning guides

OBJ: Use the *Australian Guide to Healthy Eating* to develop a meal plan within a specified energy allowance.

11. List the information that must be displayed on food labels.

ANS:

Serving sizes: Because labels present nutrient information based on one serving, they must identify the size of the serving. FSANZ has established specific serving sizes for various foods, and requires that all labels for a given product use the same serving size.

Nutrient quantities: In addition to the serving size and the servings per container, FSANZ requires that the 'Nutrition facts' panel on food labels present nutrient information in two ways: in quantities (such as grams), and as percentages of standards, called the RDIs. The 'Nutrition facts' panel must provide the nutrient amount, the percentage of RDI, or both. Information included on the nutrition panel generally includes:

- total food energy (kilojoules)
- total fat (grams)
- saturated fat (grams)
- trans fat (grams)
- cholesterol (milligrams)
- sodium (milligrams)
- total carbohydrate, including sugars and fibre (grams)
- dietary fibre (grams)
- sugars, which includes both those naturally present in and those added to the food (grams)
- protein (grams)

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

DIF: Bloom's: Remember

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

12. Discuss the regulations for nutrient claims and health claims on food labels.

ANS:

Nutrient claims: Have you noticed phrases such as 'good source of fibre' on a box of cereal, or 'rich in calcium' on a package of cheese? These and other nutrient claims may be used on labels, so long as they meet FSANZ definitions, which include the conditions under which each term can be used. For example, in addition to having less than 2 milligrams of cholesterol, a 'cholesterol-free' product may not contain more than 2 grams of saturated fat and trans fat combined per serving.

Where nutrients have been added to enriched or fortified products, they must appear in the ingredients list. Some descriptions imply that a food contains or does not contain a nutrient. Implied claims are prohibited unless they meet specified criteria. For example, a claim that a product 'contains no oil' implies that the food contains no fat. If the product is truly fat-free, then it may make the no-oil claim, but if it contains another source of fat, such as butter, it may not.

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

General health claims: Unlike health claims, which require food manufacturers to collect scientific evidence, general health claims can be made without any FSANZ approval. Product labels can claim to 'slow ageing', 'improve memory' and 'build strong bones' without any proof. The only criterion for a general health claim is that it must not mention a disease or symptom. Unfortunately, general health claims can be deceptively similar to high-level health claims, and most consumers do not distinguish between different types of claims.

DIF: Bloom's: Understand

REF: Food labels

OBJ: Compare and contrast the information on food labels to make selections that meet specific dietary and health goals.

13. Discuss the reasons why people become vegetarian.

ANS:

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

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

DIF: Bloom's: Remember

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.

14. List and discuss the health advantages of a vegetarian diet.

ANS:

Vegetarians tend to maintain a lower and healthier body weight than non-vegetarians. In general, those who eat meat have higher energy intakes and body weights. Vegetarians' lower body weights correlate with their high intakes of fibre and low intakes of fat.

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

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

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

Vegetarians have a lower overall cancer incidence than the general population. Their lower cancer rates may be due to their high intakes of fruits and vegetables. Some scientific findings indicate that vegetarian diets are associated not only with lower cancer mortality in general, but also with lower incidence of cancer at specific sites, most notably in colon cancer. People with colon cancer seem to eat more meat. Some cancer experts recommend limiting consumption of red meat to no more than 300 grams per week, with very little (if any) processed meat.

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

DIF: Bloom's: Understand

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.

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

ANS:

The protein RDI for vegetarians is the same as for others, although some have suggested that it should be higher because plant proteins are not digested as completely. Lacto-ovo vegetarian diets including animal-derived foods such as milk and eggs deliver high-quality proteins, and are likely to meet protein needs. Even vegetarians who adopt only plant-based diets are likely to meet their protein needs, provided that their energy intakes are adequate and the protein sources are varied. The proteins of whole grains, vegetables, legumes, and nuts and seeds can provide adequate amounts of all the amino acids. An advantage of many vegetarian sources of protein is that they are generally lower in saturated fat than meats, and are often higher in fibre and richer in some vitamins and minerals.

Vegetarians sometimes use meat replacements made of textured vegetable protein (soy protein). These foods are formulated to look and taste like meat, seafood or poultry. Many of these products are fortified to provide the vitamins and minerals found in animal sources of protein. Some may be high in salt, sugars and saturated fats. A wise vegetarian learns to read labels, and to use a variety of whole, unrefined foods often and commercially prepared foods less frequently. Vegetarians may also use soy products such as tofu to bolster their protein intake.

DIF: Bloom's: Understand

REF: Vegetarian diets

OBJ: Develop a well-balanced vegetarian meal plan.