

MULTIPLE CHOICE

1. Which of the following conditions is the most responsive to nutrition?
- diabetes
 - iron deficiency anemia
 - sickle cell disease
 - heart disease

ANS: B PTS: 1 REF: Page 4 BLM: Remember

2. What is the name for the study of environmental influences on genetic expression?
- epigenetics
 - genetic counselling
 - nutritional nucleic acid pool
 - genetic metabolomics

ANS: A PTS: 1 REF: Page 4 BLM: Remember

3. The integration of nutrition, genomic science, and molecular biology has launched a new area of study. What is this area of study called?
- nutrition genetics
 - nutritional genomics
 - nutritional molecular science
 - nutritional science

ANS: B PTS: 1 REF: Page 4 BLM: Remember

4. How many classes of nutrients are there?
- 2
 - 4
 - 6
 - 8

ANS: C PTS: 1 REF: Page 5 BLM: Remember

5. Which of the following nutrients is considered organic?
- minerals
 - carbohydrate
 - water
 - alcohol

ANS: B PTS: 1 REF: Page 5 BLM: Remember

6. Which of the following nutrients yields energy and also provides materials that form structures and working parts of body tissues?
- carbohydrates
 - vitamins
 - fats
 - proteins

ANS: D PTS: 1 REF: Page 6 BLM: Higher order

7. Which of the following nutrients is energy yielding?
- a. protein
 - b. vitamins
 - c. water
 - d. minerals

ANS: A PTS: 1 REF: Page 6 BLM: Remember

8. Which of the following statements best defines an “essential” nutrient?
- a. It is necessary for good health and proper functioning of the body.
 - b. It can be obtained only from the diet.
 - c. It can be manufactured by the body from raw materials.
 - d. It can be manufactured by the body itself.

ANS: B PTS: 1 REF: Page 6 BLM: Remember

9. Which of the following nutrients is the most energy rich?
- a. fat
 - b. protein
 - c. water
 - d. carbohydrate

ANS: A PTS: 1 REF: Page 7 BLM: Remember

10. Which of the following units do food scientists use to measure food energy?
- a. units of weight
 - b. kilocalories
 - c. kilograms
 - d. grams

ANS: B PTS: 1 REF: Page 7 BLM: Remember

11. Which of the following characteristics applies to alcohol?
- a. It contributes no Calories.
 - b. It interferes with repair of body tissues.
 - c. It is a nutrient.
 - d. It is non-toxic to the body.

ANS: B PTS: 1 REF: Page 7 BLM: Remember

12. How many Calories are there in 1 gram of carbohydrate or protein?
- a. 2
 - b. 4
 - c. 7
 - d. 9

ANS: B PTS: 1 REF: Page 7 BLM: Remember

13. How many Calories does 1 gram of alcohol provide?
- a. 2
 - b. 4
 - c. 7
 - d. 9

ANS: C PTS: 1 REF: Page 7 BLM: Remember

14. How many Calories are there in a food that contains 20 grams of carbohydrate, 8 grams protein, and 5 grams of fat?
- a. 132 Calories
 - b. 157 Calories
 - c. 231 Calories
 - d. 297 Calories

ANS: B PTS: 1 REF: Page 7 BLM: Higher order

15. When given to severely ill people unable to eat ordinary food, what are elemental diets designed to do?
- a. support life
 - b. enable people to thrive
 - c. support optimal growth
 - d. enhance digestive tract health

ANS: A PTS: 1 REF: Page 7 BLM: Higher order

16. What class of compound gives hot peppers their burning taste?
- a. nonnutrient
 - b. nutrient
 - c. supplement
 - d. toxin

ANS: A PTS: 1 REF: Page 8 BLM: Higher order

17. There is a compound in cranberries that may help prevent urinary tract infections by preventing certain bacteria from clinging to the urinary tract. What is the general term for this type of compound?
- a. functional food
 - b. phytochemical
 - c. natural food
 - d. nutraceutical

ANS: B PTS: 1 REF: Page 8 BLM: Higher order

18. On any given day, almost half of the Canadian population does NOT consume enough of which food category?
- a. dairy products
 - b. vegetables and fruit
 - c. meat and alternatives
 - d. grain products

ANS: B PTS: 1 REF: Page 8 BLM: Remember

19. Which of the following statements best defines “enriched” as it is applied to a food product?
- The product is low in Calories and high in nutrients.
 - The product is more expensive to purchase.
 - The product is superior to similar products.
 - The product could be either nutritious or not nutritious.

ANS: D

PTS: 1

REF: Page 9

BLM: Higher order

20. Which of the following terms is used to describe a product that has been isolated from food, is often sold in pill form, and is believed to have medicinal effects?
- nutraceutical
 - nonnutrient
 - partitioned
 - phytochemical

ANS: A

PTS: 1

REF: Page 9

BLM: Higher order

21. Which of the following terms is used as a name for foods that might lend protection against chronic diseases by way of the nutrients or nonnutrients they contain?
- organic foods
 - natural foods
 - basic foods
 - functional foods

ANS: D

PTS: 1

REF: Page 9

BLM: Higher order

22. Sugar, butter, and corn oil provide few nutrients with many Calories. What is the name for these types of foods?
- partitioned
 - enriched
 - processed
 - natural

ANS: A

PTS: 1

REF: Page 9

BLM: Higher order

23. What is the name for foods that have been subjected to modification, such as the addition of additives, milling, or cooking?
- enriched
 - partitioned
 - processed
 - natural

ANS: C

PTS: 1

REF: Page 9

BLM: Higher order

24. In Southeast Asia, rice is an example of what kind of food?
- fortified
 - processed
 - natural
 - staple

ANS: D

PTS: 1

REF: Page 9

BLM: Remember

25. A nutritious diet should provide enough of each essential nutrient, enough fibre, and enough energy. What is the name for this principle of diet planning?
- a. moderation
 - b. adequacy
 - c. variety
 - d. balance

ANS: B

PTS: 1

REF: Page 9

BLM: Higher order

26. A certain amount of fibre in foods contributes to the health of the digestive tract, but too much fibre leads to nutrient losses. What is the term for the characteristic of diet planning that takes this fact into account?
- a. adequacy
 - b. Calorie control
 - c. moderation
 - d. balance

ANS: C

PTS: 1

REF: Page 10

BLM: Higher order

27. What is the term given to the characteristic that suggests a monotonous diet may deliver large amounts of toxins or contaminants to the body?
- a. adequacy
 - b. variety
 - c. moderation
 - d. balance

ANS: B

PTS: 1

REF: Page 10

BLM: Higher order

28. For healthy Canadian adults, what is the recommended maximum percentage of total Calories from fats?
- a. 5%
 - b. 15%
 - c. 25%
 - d. 35%

ANS: D

PTS: 1

REF: Page 10

BLM: Remember

29. What is the most accurate term used to describe a person who is strict about only including foods from plant sources in his or her diet?
- a. vegetarian
 - b. carnivore
 - c. omnivore
 - d. vegan

ANS: D

PTS: 1

REF: Page 11

BLM: Higher order

30. Which one of the following factors primarily drives food choices?
- a. genetics
 - b. convenience
 - c. nutritional value
 - d. climate of the country

ANS: B

PTS: 1

REF: Page 11

BLM: Remember

31. What factor is driving food choice when an individual selects a food because the item is consumed by someone they admire?
- a. values or beliefs
 - b. positive associations
 - c. social pressure
 - d. advertising

ANS: B

PTS: 1

REF: Page 12

BLM: Higher order

32. What is the name given to a study in which the investigators do not manipulate the study variables of interest but instead monitor them over time?
- a. cohort study
 - b. case-control study
 - c. epidemiological study
 - d. community health survey

ANS: A

PTS: 1

REF: Page 14

BLM: Higher order

33. Which of the following types of nutrition research designs shows the effects of treatments?
- a. randomized controlled trials
 - b. epidemiological studies
 - c. blind experiments
 - d. case studies

ANS: A

PTS: 1

REF: Page 14

BLM: Higher order

34. What is the name given to research that looks for correlations between dietary habits and disease incidence in a population?
- a. epidemiological study
 - b. intervention study
 - c. case study
 - d. laboratory study

ANS: A

PTS: 1

REF: Page 15

BLM: Higher order

35. What anthropometric information may be obtained as part of an individual's nutritional assessment?
- a. glucose level
 - b. food intake
 - c. body height
 - d. health history

ANS: C

PTS: 1

REF: Page 15

BLM: Higher order

36. What daily nutrition supplement does the Canadian food guide recommend for men and women over the age of 50 years?
- a. folic acid
 - b. vitamin D
 - c. calcium
 - d. iron

ANS: B

PTS: 1

REF: Page 17

BLM: Remember

37. Approximately how many Canadians are physically inactive?
- a. 23%
 - b. 47%
 - c. 52%
 - d. 71%

ANS: C PTS: 1 REF: Page 17 BLM: Remember

38. You see a new finding about nutrition reported in your local newspaper. What is your most prudent response to information from this source?
- a. You decide that the information is factual.
 - b. You wait until there are confirmed results to apply the finding.
 - c. You feel confident about changing your diet accordingly.
 - d. You attribute it to media sensationalism.

ANS: B PTS: 1 REF: Page 18 BLM: Higher order

39. Which of the following media is the most credible source of nutrition information?
- a. newspaper articles
 - b. health magazines
 - c. scientific journals
 - d. TV programs

ANS: C PTS: 1 REF: Page 18 BLM: Remember

40. Which of the following is an effect of physical activity on the body?
- a. increased lean body tissue
 - b. increased risk of cardiovascular diseases
 - c. decreased bone density
 - d. slower wound healing

ANS: A PTS: 1 REF: Page 19 BLM: Remember

41. Which of the following foods offers the most nutrients per Calorie?
- a. diced carrot
 - b. mashed potato
 - c. pork sausage
 - d. black coffee

ANS: A PTS: 1 REF: Page 20 BLM: Higher order

42. Three ounces of beef stew offers about the same amount of iron as three ounces of water-packed tuna, but the beef contains over 300 Calories while the tuna contains about 100 Calories. What is the term for this difference?
- a. balance
 - b. moderation
 - c. dietary variety
 - d. nutrient density

ANS: D PTS: 1 REF: Page 20 BLM: Higher order

43. What is the name commonly given to an Internet story that gains strength of conviction solely on the basis of repetition?
- a. advertorial
 - b. anecdotal evidence
 - c. urban legend
 - d. infomercial

ANS: C PTS: 1 REF: Page 21 BLM: Higher order

44. Which of the following organizations accredits university and dietetic internship programs that qualify dietitians to practice?
- a. International Academy of Nutritional Consultants
 - b. Canadian Society for Clinical Nutrition
 - c. Canadian Association of Nutrition and Dietary Consultants
 - d. Dietitians of Canada

ANS: D PTS: 1 REF: Page 25 BLM: Remember

45. Which of the following functions is the responsibility of provincial dietetic regulatory bodies?
- a. accrediting correspondence schools in dietetics
 - b. protecting the public from unsafe dietetic practice
 - c. randomly monitoring the competence of members
 - d. referring complaints about dietetic members to Dietitians of Canada

ANS: B PTS: 1 REF: Page 25 BLM: Remember

46. Which of the following characteristics of a claim about nutrition would lead you to doubt its validity?
- a. It appears in a peer-reviewed scientific journal.
 - b. It is being made by a registered dietitian.
 - c. The evidence supporting the claim is in the form of laboratory tests.
 - d. It is written by a dietist.

ANS: D PTS: 1 REF: Page 25 BLM: Higher order

47. Which of the following characteristics defines a legitimate and qualified nutrition expert?
- a. completion of an approved internship or the equivalent
 - b. graduation from a college after completing a program of dietetics
 - c. using the term nutritionist after the individual's name
 - d. graduation from a correspondence program with an internship

ANS: A PTS: 1 REF: Page 26 BLM: Remember

TRUE/FALSE

1. Malnutrition includes deficiencies, imbalances, and excesses of nutrients. Any of these factors can be harmful over time.

ANS: T PTS: 1 REF: Page 3

2. A good diet alone will prevent an individual from getting heart disease.

ANS: F PTS: 1 REF: Page 3

3. All humans share 99.9% of the human genome.

ANS: T PTS: 1 REF: Page 4

4. Alcohol is a nutrient that yields energy for the body.

ANS: F PTS: 1 REF: Page 7

5. When a hospital client has to be fed through a vein, the duration should be as short as possible, and real food should be reintroduced as early as possible.

ANS: T PTS: 1 REF: Page 7

6. A basic premise of dietary guidelines is that food should provide nutrients over supplements whenever possible.

ANS: T PTS: 1 REF: Page 7

7. Enriched and fortified foods are not necessarily more nutritious than whole basic foods.

ANS: T PTS: 1 REF: Page 9

8. Cultural traditions regarding food are static and inflexible.

ANS: F PTS: 1 REF: Page 11

9. Once a new finding is published in a scientific journal, it is considered preliminary.

ANS: T PTS: 1 REF: Page 13

10. Canada's guidelines for healthy eating include information on diet and physical activity.

ANS: T PTS: 1 REF: Page 17

SHORT ANSWER

1. Provide specific examples of how vitamins and minerals serve as regulators in the body.

ANS:

Vitamins and minerals assist the body in all processes: digesting food; moving muscles; disposing of wastes; growing new tissues; healing wounds; obtaining energy from carbohydrate, fat, and protein; and participating in every other process necessary to maintain life.

PTS: 1 REF: Page 6

2. What is meant by the term “essential nutrient?”

ANS:

The body cannot make these nutrients for itself. You must consume these nutrients in your diet or you will develop deficiencies. Essential nutrients are found in all six classes of nutrients.

PTS: 1 REF: Page 6

3. What are the functions of food, besides providing nutrients?

ANS:

Food conveys emotional satisfaction, and hormonal and digestive tract stimuli that contribute to health. Food also contains nonnutrients, such as phytochemicals that give them their tastes, aromas, colours, and other characteristics.

PTS: 1

REF: Page 7-8

4. Why does the variety of foods available to us today make it more difficult, rather than easier, to plan nutritious diets?

ANS:

The number of foods supplied by the food industry today is astounding. Many foods are processed mixtures of basic foods, and this abundance of products makes it more difficult to plan a nutritious diet. To select well among foods, you need to know more than the product names, you need to know the foods' inner qualities and how to combine foods into a nutritious diet.

PTS: 1

REF: Page 8

5. Identify and briefly describe the five characteristics of a nutritious diet.

ANS:

1. Adequacy: the dietary characteristic of providing all of the essential nutrients, fibre, and energy in amounts sufficient to maintain health and body weight.
2. Balance: the dietary characteristic of providing foods of a number of types in proportion to each other such that foods rich in some nutrients do not replace foods that are rich in other nutrients. Also called proportionality.
3. Calorie control: control of energy intake; a feature of a sound diet plan.
4. Moderation: the dietary characteristic of providing constituents within set limits, not to excess.
5. Variety: the dietary characteristic of providing a wide selection of foods — the opposite of monotony.

PTS: 1

REF: Page 10

6. Identify and explain factors that drive food choices.

ANS:

Factors include: advertising; availability of food; economy; emotional comfort; habit; personal preference and genetic inheritance; positive associations; region of the country; social pressure; values or beliefs; weight; nutritional value.

PTS: 1

REF: Page 11-12

7. Describe why people should not make changes in their diets based on the results of a single research study.

ANS:

Nutrition is a relatively new science, and because it is constantly changing, scientific findings are often inclusive, contradictory, or subject to conflicting interpretations. Most research projects result in new questions and not final answers.

PTS: 1

REF: Page 12-13

8. Describe the potential benefits of physical activity.

ANS:

Reduced risk of cardiovascular disease; increased cardiovascular endurance; increased muscle strength and endurance; increased flexibility; reduced risk of type 2 diabetes; reduced risk of some types of cancer (especially colon and breast); improved mental outlook and lessened likelihood of depression; improved mental functioning; feeling of vigour; feeling of belonging – the companionship of sports; strong self-image and belief in one's abilities; reduced body fatness, increased lean tissue; a more youthful appearance, healthy skin, and improved muscle tone; greater bone density and lessened risk of adult bone loss in later life; increased independence in the elderly; sound, beneficial sleep; faster wound healing; lessening or elimination of menstrual pain; improved resistance to infection.

PTS: 1

REF: Page 19

9. Explain the concept of nutrient density and give an example.

ANS:

Nutrient density is a measure of nutrients provided per Calorie of food. In other words, a food that is rich in nutrients, relative to its energy contents is considered nutrient dense. For example, milk is more nutrient dense than ice cream.

PTS: 1

REF: Page 20

10. Describe how you would determine whether an Internet site offers reliable nutrition information.

ANS:

A person should ask him or herself the following questions:

1. Who is responsible for the site?
2. Do the names and credentials of information providers appear? Is an editorial board identified?
3. Are links with other reliable information sites provided?
4. Is the site updated regularly?
5. Is the site selling a product or service?
6. Does the site charge a fee to gain access to it?

PTS: 1

REF: Page 23-24