# https://selldocx.com/products/test-bank-nutrition-science-and-applications-3e-smolin

Package Title: Test Bank Course Title: Smolin3e Chapter Number: 1

Question Type: Multiple Choice

- 1) Which of the following is NOT considered a macronutrient?
- a) Carbohydrate
- b) Fat
- c) Protein
- d) Vitamins

Answer: d

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 2) Physiologic processes take place in the body to keep body temperature, heart rate, and blood sugar relatively constant. This stable state is called:
- a) anabolism.
- b) catabolism.
- c) homeostasis.
- d) metabolism.

Answer: c

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 3) A processed food is defined as:
- a) having more than five ingredients.
- b) requiring heating or cooking before it can be eaten.
- c) a food which has had preservatives added.
- d) any food that has been changed from its natural state.

Answer: d

Difficulty: Medium

Learning Objective: LO 1.1 Compare Americans' intake of milk, vegetables, and fruit to recommendations for a healthy diet.

Section Reference: Section 1.1 Nutrition and Our Diet

- 4) Which of the following statements about the typical American diet is true?
- a) Intake of whole grains is above the recommended level and less energy is consumed than expended.
- b) Intake of whole grains is low and more energy is consumed than expended.
- c) Intake of fiber is adequate and intake of fruits and vegetables is less than recommended.
- d) Intake of fiber is low and fruit and vegetable intake is above recommended levels.

Answer: b

Difficulty: Medium

Learning Objective: LO 1.1 Compare Americans' intake of milk, vegetables, and fruit to

recommendations for a healthy diet.

Section Reference: Section 1.1 Nutrition and Our Diet

- 5) Where do most people in the U.S. get their nutrition information?
- a) Dietitians
- b) Mass media, i.e., television, magazines and newspapers
- c) Physicians
- d) Talk radio

Answer: b

Difficulty: Medium

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

- 6) The correct sequence of events in the scientific method is:
- a) conduct the experiment, develop a hypothesis, form a theory, and make an observation.
- b) develop a hypothesis, conduct the experiment, make an observation, and form a theory.
- c) form a theory, conduct the experiment, develop a hypothesis, and make an observation.
- d) make an observation, develop a hypothesis, conduct the experiment, and form a theory.

Answer: d

Difficulty: Hard

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 7) When subjects do not know which treatment they are receiving in a clinical trial, but the researchers do, the study is called:
- a) anecdotal.
- b) collaboration.
- c) double blind.
- d) single blind.

Answer: d

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 8) Approximately 1000 college students were asked to keep a record of what supplemental vitamins they took and how many colds they had over the course of a year. The amount of vitamin C consumed was compared with the students' incidences of colds. This is an example of a(an):
- a) clinical trial.
- b) epidemiological study.
- c) intervention study.
- d) laboratory study.

Answer: b

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 9) Which of the following is the BEST reason to include a placebo in the experimental design of a human intervention trial?
- a) The researchers do not know who is receiving an intervention and who is not.
- b) Placebos reduce the cost of the study.
- c) It helps prevent the expectations of the subjects from biasing the research.

d) It makes it possible to include a larger number of subjects in the experiment.

Answer: c

Difficulty: Hard

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

- 10) One group of individuals is asked to eat a diet high in fruits, vegetables and dairy foods while a second group of individuals is asked to eat a diet with lower amounts of fruits, vegetables and dairy foods. The two groups' blood pressure readings are monitored and compared. This is an example of a(an):
- a) case-control study.
- b) epidemiological study.
- c) intervention study.
- d) laboratory study.

Answer: c

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 11) Comparison of the amount of a particular nutrient consumed with the amount of the nutrient excreted is characteristic of a(an):
- a) balance study.
- b) collection study.
- c) depletion-repletion study.
- d) epidemiological study.

Answer: a

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

12) Which is NOT a true statement about nutritional studies using animals?

- a) Animal studies can be more easily controlled than human studies.
- b) The digestive system of some animals is quite different from humans, making these animals inappropriate choices for some studies.
- c) The choice of the animal studied may influence the outcome of the study.
- d) Results from animal studies can always be readily extrapolated to humans.

Difficulty: Hard

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 13) Which of the following describes a hypothesis?
- a) A conclusion based on many studies with similar outcomes.
- b) An idea based upon no observable phenomena.
- c) A fact stated in a textbook.
- d) An educated guess made to explain an observation.

Answer: d

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 14) When evaluating a nutritional study, which is the least important factor?
- a) The design of the study
- b) How many researchers were involved in the study
- c) How the study was funded
- d) Where the study was published

Answer: b

Difficulty: Medium

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

15)	protects human subjects	in a study and l	imits the types of
procedures that can be perforn	ned on them.		

- a) Peer review
- b) Double blind design
- c) Prior authorization
- d) Informed consent

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 16) Which of the following is a common source of anecdotal evidence?
- a) Peer-reviewed scientific literature
- b) Federal government web sites
- c) Registered dieticians
- d) Testimony of individuals

Answer: d

Difficulty: Medium

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

- 17) One important principle of a healthy diet is to eat a variety of foods. In this context, "variety" refers to:
- a) choosing at least one food from each food group on the Food Pyramid daily.
- b) including low calorie food choices to balance high calorie foods at each meal.
- c) choosing a variety of foods from within food groups as well as among food groups.
- d) making sure portion sizes are matched to energy needs.

Answer: c

Difficulty: Medium

Learning Objective: LO 1.1 Compare Americans' intake of milk, vegetables, and fruit to

recommendations for a healthy diet.

Section Reference: Section 1.1 Nutrition and Our Diet

- 18) Which of the following would be the LEAST reliable source of information about herbal supplements?
- a) A government publication
- b) A dietitian
- c) A pamphlet published by the health food store
- d) A peer-reviewed article available on the Internet

Answer: c

Difficulty: Easy

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

- 19) A substance found in plants which cannot be made by the body and is not necessary to sustain life, but has healthful benefits, is:
- a) an herbal supplement.
- b) a phytochemical.
- c) an enzyme.
- d) a zoochemical.

Answer: b

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 20) Which of the following yields energy but is not considered a nutrient?
- a) Alcohol
- b) Carbohydrate
- c) Fat
- d) Protein

Answer: a

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

21) The energy provided by foods is measured in:

- a) BTUs.
- b) kilocalories.
- c) thermal equivalents.
- d) watts.

Answer: b

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 22) Which of the following conditions does NOT represent a state of malnutrition?
- a) Weight loss as a result of increasing physical activity.
- b) Vitamin A toxicity as a result of excessive intake of vitamin supplements.
- c) Osteoporosis as a result of long-term inadequate intake of calcium and vitamin D.
- d) Overweight status as a result of regular ingestion of large portions of energy-dense foods.

Answer: a

Difficulty: Hard

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 23) What is true regarding the differences between a hypothesis and a theory?
- a) A hypothesis is an educated guess and a theory is based on scientific study and reasoning.
- b) Hypotheses are not tested; theories are tested.
- c) Theories are the foundations of hypotheses.
- d) A hypothesis is tested using quantifiable data; theories are tested using subjective data.

Answer: a

Difficulty: Hard

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

24) Which of the following is likely to limit the availability of food?

- a) Socioeconomic status
- b) Health status
- c) Where a person lives
- d) All of these statements are true

Difficulty: Medium

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet

- 25) Continued acceptance of a scientific theory depends on:
- a) the ability of other scientists to duplicate the original research and results.
- b) increased funding for the research.
- c) the number of years since the theory was developed.
- d) how the hypothesis was formed.

Answer: a

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 26) A measure of the nutrient content of a food compared to its energy content is referred to as
- a) Healthy Food Index.
- b) nutrient score.
- c) dietary reference intake.
- d) nutrient density.

Answer: d

Difficulty: Medium

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet

27) Researchers are interested in whether caffeine has any effect on short-term memory. A study is designed in which two groups of subjects are given capsules that look

identical. Group A receives capsules containing caffeine and Group B receives capsules containing powdered sugar. Group B is being given a:

- a) catalyst.
- b) placebo.
- c) stimulant.
- d) simulation factor.

Answer: b

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 28) In a controlled study, if neither the subjects nor the investigators know which subjects are receiving treatment, the study is called a(n)
- a) double blind study.
- b) single blind study.
- c) variable study.
- d) undirected study.

Answer: a

Difficulty: Easy

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

- 29) The discipline which explores the relationship between genetic variation and nutrition is called:
- a) nutrigenomics.
- b) genetic nutritional variation.
- c) nutritional genomic analysis.
- d) nutrient gene factor identification.

Answer: a

Difficulty: Medium

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 30) Which of the following nutrients are NOT organic molecules?
- a) Carbohydrates
- b) Lipids
- c) Proteins
- d) Minerals

Difficulty: Medium

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 31) Which of the following is LEAST likely to affect food choices?
- a) Cultural and family background
- b) Personal preference
- c) Weather
- d) Psychological and emotional factors

Answer: c

Difficulty: Easy

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet

- 32) Which is an example of anecdotal information?
- a) Blood glucose levels in runners after they have run in a competition.
- b) A famous runner reports having more energy after eating a certain type of power bar.
- c) Runners are timed before and after eating one power bar a day for a month.
- d) People take a written test before and after eating power bars for a month; the results are scored.

Answer: b

Difficulty: Medium

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

- 33) Eating turkey on Thanksgiving is an example of making a food choice based on:
- a) cultural and family background.
- b) personal preference.
- c) availability.
- d) psychological and emotional factors.

Answer: a

Difficulty: Easy

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet

- 34) Consuming nutrient-dense foods helps to ensure a proper diet. One effective strategy is:
- a) eating foods that have been minimally processed.
- b) consuming foods with a high nutrient content compared to the kcalories provided.
- c) limiting added fats and sugars.
- d) All of these are effective strategies

Answer: d

Difficulty: Medium

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet

- 35) Processed foods and convenience foods tend to \_\_\_\_\_ compared to freshly prepared foods.
- a) provide more kcalories
- b) contain fewer nutrients
- c) be higher in fat, sugar, or salt
- d) All of these statements are true

Answer: d

Difficulty: Easy

Learning Objective: LO 1.1 Compare Americans' intake of milk, vegetables, and fruit to

recommendations for a healthy diet.

Section Reference: Section 1.1 Nutrition and Our Diet

- 36) Which of the following functions is performed by members of all six classes of nutrients?
- a) Provide energy
- b) Form structures
- c) Regulate body processes
- d) All of these functions are performed by each of the six classes of nutrients

Answer: c

Difficulty: Hard

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 37) Under-nutrition does not include:
- a) starvation reflecting a deficiency of energy.
- b) eating too much saturated fat.
- c) the deficient intake of single nutrients.
- d) the inability to absorb a particular nutrient.

Answer: b

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

- 38) An adverse or toxic reaction is most likely to occur if:
- a) an individual overuses vitamin and/or mineral supplements.
- b) the individual cannot absorb nutrients efficiently.
- c) the individual's diet is not varied enough.
- d) the individual overeats a particular food.

Answer: a

Difficulty: Medium

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

39) The recommendation to eat everything in "moderation" refers to:

- a) including each food group in the diet.
- b) including a variety of foods from within each food group.
- c) selecting appropriate portion sizes.
- d) varying the foods eaten from day to day, week to week and season to season.

Answer: c

Difficulty: Medium

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet

Question Type: Essay

40) Nutrients are classified according to their chemical properties. What are the six classes of nutrients? Which are macronutrients? Which are micronutrients?

# Answer:

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

Solution:

MacronutrientsMicronutrientsWaterVitaminsCarbohydratesMinerals

Proteins Fats

41) A serving of hot chocolate provides 5 grams of fat, 2 grams of protein and 28 grams of carbohydrate. How many kcalories are in the serving of hot chocolate?

# Answer:

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

Solution: 5 X 9= 45 2 X 4= 8 28 X 4=112 165 kCalories 42) Americans are replacing more and more home cooked meals with meals from fast food restaurants. a) What are the nutritional impacts of this trend? b) How does this trend influence disease risk?

#### Answer:

Difficulty: Easy

Learning Objective: LO 1.1 Compare Americans' intake of milk, vegetables, and fruit to

recommendations for a healthy diet.

Section Reference: Section 1.1 Nutrition and Our Diet

Solution:

- a) Larger portions increase energy intake beyond needs; tend to be higher in fat, sodium, and sugar.
- b) Along with lack of physical activity, increases risk of chronic diseases such as diabetes, obesity, heart disease, and cancer.
- 43) Describe the three general functions of nutrients.

### Answer:

Difficulty: Easy

Learning Objective: LO 1.2 Describe the classes and functions of nutrients.

Section Reference: Section 1.2 Food Provides Nutrients

Solution: Provide energy: Carbohydrate, protein and lipids undergo biochemical reactions

that provide energy for synthesis, basic body functions and physical activity Forming structures: bones, muscles, cells are formed from protein, fats, minerals

Regulating Body Processes: all 6 classes of nutrients regulate various body processes and

function to maintain homeostasis

44) Describe the typical American diet and explain how it could be improved. Is there anything you would like to change about the way you eat? Why or why not?

# Answer:

Difficulty: Easy

Learning Objective: LO 1.1 Compare Americans' intake of milk, vegetables, and fruit to recommendations for a healthy diet.

Section Reference: Section 1.1 Nutrition and Our Diet

Solution: Americans are consuming more food and calories than 30 years ago because portion sizes have increased and 32% of calories are from meals away from home. These meals tend to be higher in energy, fat, sugar and salt. Americans do not eat enough whole grains, legumes, fruits, dairy foods, and dark green or yellow vegetables. Salt and sugar intake are higher than recommended.

45) Name some reliable sources of nutrition information.

#### Answer:

Difficulty: Easy

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help

better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

Solution: Dietitians, Physicians, government recommendations, non-profit educational

organizations, and universities.

46) Describe the steps involved in conducting a valid experiment using the scientific method.

## Answer:

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution:

1. Make an observation and ask questions.

- 2. Propose a hypothesis-a possible explanation of the observations.
- 3. Design an experiment to test the hypothesis that provides objective data.
- 4. Establish a theory based on experimental data from multiple studies.
- 47) Describe what is meant by the term *control group* and explain why a well designed experiment includes a control group.

#### Answer:

Difficulty: Easy

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution: A group of participants in a study who are treated the same as subjects in an experimental group, except that no experimental treatment is implemented. They would receive a placebo to control bias. A control group is used as a basis of comparison.

48) What is the difference between a depletion-repletion study and a balance study? How is each used in the field of nutrition?

#### Answer:

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution: Depletion-repletion: used to study the function and/or requirements of a nutrient. Subjects are fed a diet without the nutrient until symptoms appear, then the nutrient is added back until symptoms disappear.

A balance study also looks at functions and requirements but compares the amount of a nutrient that enters the body with what is excreted. When the amount consumed equals the amount excreted, the body is in balance. This technique measures the minimum amount of nutrient needed to replace losses.

49) What is the difference between a single-blind and a double-blind study? Why are double-blind techniques used?

#### Answer:

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution: Single – the subject or researcher does not know who is receiving the intervention.

Double – neither the participants nor the researcher know who is in experimental group and who is in the control group. The double-blind technique is used so that neither the subjects' nor the researchers' expectations bias the results of the experiment.

50) What are two advantages of using animals instead of humans in nutrition experiments? What are two disadvantages?

## Answer:

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution: Advantages: may be less costly, easy to control food intake and measure

excretions, changes appear quickly

Disadvantages: the best models are expensive and have long life span, most readily accessible animal models have short life spans so observed changes may not be identical to humans in how they develop

51) People's food choices are affected by many factors other than the nutritional value of the food. Select two of the factors that affect food choices and explain how you would use this factor to help reinforce a dietary change an individual is trying to make for nutritional reasons.

# Answer:

Difficulty: Hard

Learning Objective: LO 1.3 Describe the factors other than nutrition that affect food

choices and the three principles of a healthy diet.

Section Reference: Section 1.3 Food Choices for a Healthy Diet Solution: The factors to choose from are: (actual answer will vary)

Availability

Cultural and Family Background

Personal Preference

Psychological and Emotional Factors

Health Concerns

- 52) Recently, Trevor received an e-mail forwarded to him by a friend. The e-mail warns all recipients of the dangers of an FDA approved artificial sweetener, which, according to the original author, is responsible for several types of cancer, mental illness, and several other serious ailments. The author uses several anecdotal stories as the basis for her assertions. Curious, Trevor does a search on the Internet for the author but cannot find any information about her.
- a) What do you think of unsolicited e-mail as a source of nutrition advice?
- b) How likely is it this one FDA approved product causes several different diseases?
- c) What else makes you wonder about the validity of the information?
- d) How might you use the Internet to get more information about the artificial sweetener in question?
- e) How can you tell if nutrition information in a letter, in an article, or on television is accurate?

## Answer:

Difficulty: Medium

Learning Objective: LO 1.5 Describe how nutrition research studies are used to help better understand the relationships among people and their nutrient intake.

Section Reference: Section 1.5 Evaluating Nutrition Information

Solution:

- a) It is an unreliable source
- b) Unlikely an artificial sweetener would have to undergo extensive testing to demonstrate safety before being marketed.
- c) As above, the product would have to undergo extensive testing. It is unlikely that a product available for use would cause such a variety of problems.

- d) Go to the FDA website to search for the product testing history; do a search in a data base that references peer-reviewed published research; look for websites that have .gov, or .edu for information about the product.
- e) References and resources that provide an objective evidence base are provided. The person speaking has the education and experience to speak with authority.
- 53) Mrs. Sandoz' fourth grade class spent several class periods learning about nutrition. They learned about MyPyramid and how eating a healthy diet could benefit them. Mr. Danner's fourth grade class, in the same building, did not have a unit on nutrition. After the nutrition unit was finished in Mrs. Sandoz' class, researchers looked at the selections students made in the cafeteria and how much food was consumed and thrown away by each class to see if the nutrition education had an effect on the students' eating habits.

  a) What type of study was this? b) Which classroom was the control classroom? c) Which classroom was the experimental group? d) What other factors affect students' choice of food, besides what they know about health and food?

# Answer:

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of

experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution:

- a) Case control/Clinical Trial
- b) Mr. Danner's
- c) Mrs. Sandoz's
- d) Availability, Cultural and Family Background, Social Acceptability, Personal Preference, Psychological and Emotional Factors
- 54) What is epidemiology? Compare the type of information obtained from epidemiological studies to that obtained from human intervention studies.

## Answer:

Difficulty: Medium

Learning Objective: LO 1.4 Explain the steps of the scientific method and the types of experiment controls.

Section Reference: Section 1.4 The Science Behind Nutrition

Solution: Epidemiology observes the relationships between diet and health among population groups and identifies patterns or correlations among patterns and disease. Human intervention studies test hypotheses that arise from epidemiological studies. Intervention studies use experiments to intervene in individual lives and test a hypothesis so that a theory may be developed.