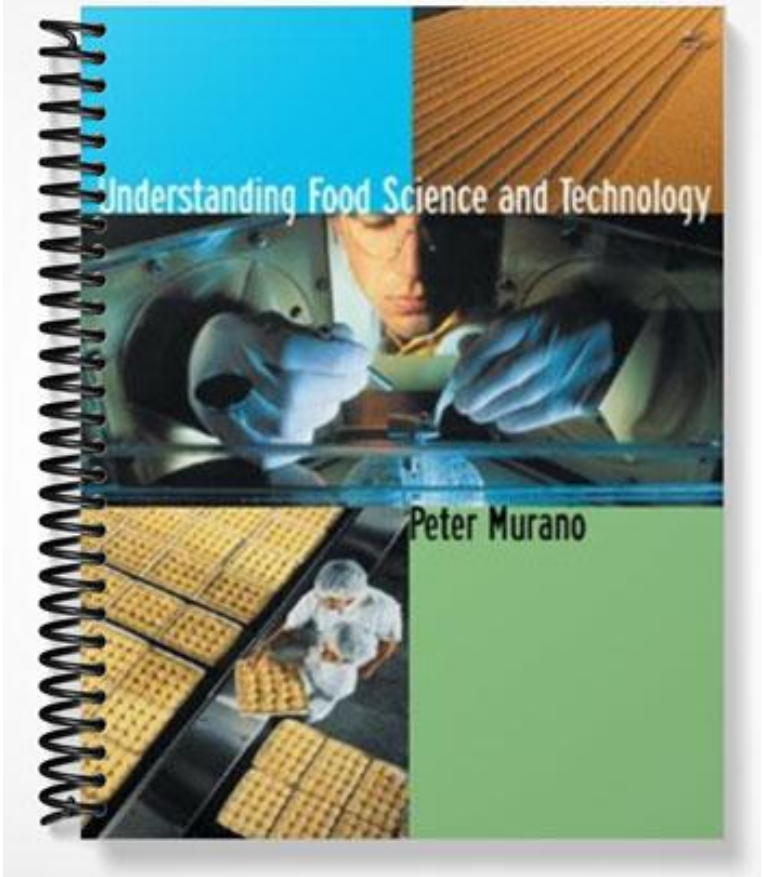
# TEST BANK



**Chapter 2 - Food Categories and Composition**

| *Ans* | *Page* | ***Comprehension Level Items*** |
|---|---|---|
| a | 22 | 1. Recall a correct distinction between raw and processed foods.<br>a. Raw foods may contain natural nutrients; processed foods may contain functional additives.<br>b. Raw foods are more nutritious than processed foods.<br>c. Raw foods require longer time for digestion and absorption.<br>d. Processed foods are not listed in tables of food composition. |
| b | 24 | 2. Which substances are *not* included in the Food Guide Pyramid?<br>a. fats<br>b. preservatives<br>c. sweets<br>d. spinach |
| c | 25 | 3. The beverage with the greatest potassium content per 1 cup serving is<br>a. club soda.<br>b. apple juice.<br>c. orange juice.<br>d. cola soda. |
| d | 26 | 4. CRITICAL THINKING: What would be true regarding a 50°Brix fructose-sweetened beverage and a 50°Brix sucrose-sweetened beverage?<br>a. they would be identical in sweetness<br>b. the concentration of sugars would not affect the °Brix<br>c. the sucrose beverage would be sweeter<br>d. each would contain 50 grams of sugar per 100 grams of sample |
| b | 26 | 5. A 30% sucrose-in-water solution is equivalent to _____ Brix on a weight/weight basis.<br>a. 50°<br>b. 30 degrees<br>c. 30 percent<br>d. 30 parts |
| d | 27 | 6. CRITICAL THINKING: Evaluate the following for accuracy: sucrose + water $\rightarrow$ glucose<br>a. The reaction shows the complete hydolysis of sucrose.<br>b. This reaction reduces the sweetness of a food.<br>c. One product of the reaction as shown is an acid.<br>d. One sugar product of the reaction is missing. |

b 28 7. CRITICAL THINKING: Interpret the following data:
Flour = 130 mg lysine /gram of nitrogen
Cornmeal = 210 mg methionine/gram of nitrogen
Egg = 430 mg methionine and 360 mg lysine per gram of N

a. Flour contains less lysine and methionine than cornmeal.
b. The egg data is incorrect.
c. Bioavailability of cornmeal protein is greater than that of flour.
d. The nitrogen content of each food is equivalent.

b 28 8. CRITICAL THINKING: Select the correct arrangement of the component parts of a wheat kernel from lowest concentration to highest.

a. husk, bran, germ
b. germ, bran, endosperm
c. germ, endosperm, bran
d. endosperm, bran, germ

d 31, 32 9. Select the factor(s) affecting a fruit's flavor:

a. fermentation
b. °Brix
c. pH
d. choices a, b, and c

d 33 10. What might one expect if a soy beverage was not properly heat processed?

a. decreased lipoxygenase activity
b. increased sweetness
c. decreased isoflavone content
d. off flavor development

a 33 11. A key difference between soybeans and peas with respect to nutrients

a. is the greater calcium content of soybeans.
b. is the greater vitamin C content of soybeans.
c. is the greater protein content of peas.
d. is the greater calcium content of peas.

c 35 12. Which statement regarding nuts is true?

a. Peanuts are an example of a tree nut.
b. One cup of pecans contains more fat than 1 cup of Macadamia nuts.
c. Peanuts belong to the pea and bean family.
d. Almonds, like most nuts, do not contain dietary fiber.

a 35 13. The fact that meat is a source of high quality protein

a. means that it is composed of all the essential amino acids.
b. means that it is composed of all the essential fatty acids.
c. means that it is a good source of all the known nutrients.
d. means that it is composed of all the known amino acids.

b 36 14. Collagen

a. is a type of connective tissue.
b. is a component of actinomyosin.
c. is composed of actin and myosin.
d. is composed of sheets of myofibrils.

c 37 15. Explain the role of fat in a meat emulsion (O/W).

a. Fat creates a gel in the emulsion.
b. Fat is the main component of the water soluble dispersed phase.
c. Fat comprises the dispersed phase of the emulsion.
d. Fat acts as a preservative.

d 38 16. Of the following terms, which does not belong with the others?

a. myofibrillar proteins
b. extractable proteins
c. actin and myosin
d. stabilized fat globules

c 39 17. All of the following describe TMAO except:

a. found in the fatty tissues of fish
b. in dead fish, it is converted to TMA
c. its presence indicates fish flesh deterioration
d. it is acted upon by bacterial enzymes

b 39 18. Omega fatty acids by definition do not contain C=C double bonds.

a. true
b. false

c 40 19. CRITICAL THINKING: Select the egg *lipid* that matches its correct category (found in egg yolk or egg white):

a. lipovitellin, egg yolk
b. ovalbumin, egg white
c. phosphatidyl choline, egg yolk
d. lipovitellin, egg yolk

a 41 20. Milk that has been treated with the enzyme _____ to

eliminate _____ percent of its lactose content can be labeled _____.

a. lactase, 99.9, lactose free
b. invertase, 99.9, reduced lactose
c. lactase, 70, lactose free
d. lactase, 99.9, reduced lactose

b 41 21. One cup of plain, low fat yogurt contains less protein and calcium than one cup of whole milk.

a. true
b. false

a 42 22. The milk Standard of Identity allows for 8.25% of this:

a. MSNF
b. UHT
c. NFDM
d. ADEK

b 42 23. Examine the following terms and select the one that does not indicate the effect of rennet on milk protein.

a. precipitation
b. inversion
c. coagulation
d. curd formation

b 43 24. All of the following are whey proteins that are not precipitated by acid: lactalbumin, conalbumin, lactoferrin, and calcium caseinate.

a. true
b. false

b 44 25. This specific substance in cream is ruptured by churning, and aids in the production of butter.

a. fat droplet
b. protein film
c. fat globule
d. sour cream

a 45 26. Why is the calcium content of cottage cheese derived from acid-precipitated skim milk lower than the milk it is made from?

a. calcium lactate is lost to the whey
b. whey and casein proteins selectively destroy calcium
c. the calcium forms an insoluble salt as calcium caseinate

d. calcium casaeinate is lost to the whey

d 46 27. At ph 6.6,

a. fresh milk proteins attract each other.
b. the isoelectric pH for casein is reached.
c. milk protein charges are neutralized.
d. fresh milk proteins repel each other.

c 47 28. In order to successfully manufacture jelly beans,

a. crystallization of fats is important.
b. Rapid cooling of syrup with agitation is required.
c. the goal is to prevent sucrose crystal formation.
d. the goal is to facilitate sucrose crystal formation.

b 51 29. Like phytochemicals, all nutraceutical substances are derived from plants.

a. true
b. false

a 54 30. The FDA permits companies to use safe ingredients to produce functional foods.

a. true

false