Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_\_\_

ProStart 2 – Chapter 2

1. Why is it important for restaurant and food service employees to learn about nutrition? (80)

*It is important for employees to know about nutrition so they can plan menus and nutrition use principles of nutrition and meet customer’s needs for healthy tasty food. It also helps employees answer questions about menu items, and questions from customers about special diets such as diabetes, high blood pressure, heart disease and food allergies.*

2. What are nutrients and what happens after they are consumed? (80)

3. Who is responsible ultimately for what they eat? (81)

*Each individual is responsible for his/her own food choices. No one can be forced to eat healthy or unhealthy food.*

4. What is the function of fiber in the diet? (84)

Where is fiber found? (84)

5. What are phytochemicals? (84)

*Phytochemicals are chemicals that aid the body in fighting or preventing disease (the immune system). Phytochemicals can be identified by their color. Foods with deep rich colors like, blueberries, cranberries, cherries and carrots are rich in phytochemicals.*

How are they seen in food? (84)

*In their colors. Phytochemicals provide foods with their colors.*

6. Carbohydrates (84-85)

|  |  |
| --- | --- |
| **Function** | **Sources** |
|  |  |

7. What is the difference between simple carbohydrates and complex carbohydrates? 86-88)

|  |  |
| --- | --- |
| **Simple** | **Complex** |
| *Contain one or two sugars, are quickly digested and absorbed. That means they provide the body with quick energy.*  *Glucose is the simple sugar that the body turns all carbohydrates into for absorption into the bloodstream.* | *Long chains of molecules that contain many glucose molecules. These are found in plant foods, like grains, legumes (beans) and vegetables. These carbohydrates break down slower and are absorbed slower. They provide the body with longer-term energy.* |
| **Sources** | **Sources** |
| *Fruit, milk and processed sugars like white sugar, brown sugar, molasses and honey* | *Beans and peas*  *Potatoes and corn*  *Rice*  *Grits*  *Pasta (noodles)*  *Oatmeal*  *Cornmeal*  *Breads and cereals* |

8. Define the following words: (85-88)

|  |  |
| --- | --- |
| Kilocalorie |  |
| Glucose |  |
| Hormones |  |
| Insulin |  |
| Soluble Fiber |  |
| Insoluble Fiber |  |

9. Define lipid. (89)

*Lipid is another word for fat. Lipids include fats, oils, waxes and steroids. Fats provide the body with the most calories per gram. Fats give the body about 9 calories per gram.*

10. What is the difference between fats and oils. (89)

|  |  |
| --- | --- |
| Fats | Oils |
|  |  |

11. What are the functions of fat? (89)

1. *carry vitamins A, D, K and E through the body (these are fat-soluble vitamins).*

2. *cushion the body’s internal organs (provide padding like pillows)*

3. *protect the body from extreme temperatures (especially cold)*

4. *provide reserve energy that can be burned if needed (this is from stored fat)*

5. *provide nutrients called essential fatty acids (omega 3; omega 6)*

12. Define the following. (90)

|  |  |
| --- | --- |
| Essential fatty acid |  |
| Oxidation |  |
| Cholesterol |  |
| Trans fatty acids |  |
| Hydrogenation |  |

13. Sources of fats. (91)

|  |  |
| --- | --- |
| **Type of Fat** | **Food Sources** |
| Saturated fat | *Meat, poultry, fish, dairy (milk) products, lard, palm oil, palm kernel oil, coconut oil* |
| Monounsaturated fat | *Olive, canola, peanut, avocado, and nut oil (walnut, almond etc.)* |
| Polyunsaturated fat | *Safflower, sunflower, soybean, corn, cottonseed, sesame seeds and fish oils* |
| Cholesterol | *Egg yolk, liver and organ meats (like brains etc), whole milk and whole milk cheeses, ice cream, butter, fish and some shellfish* |

14. Define the following (92-93)

|  |  |
| --- | --- |
| Proteins |  |
| Amino acids |  |
| Complete proteins |  |
| Incomplete proteins |  |
| Complementary proteins |  |

15. What are vitamins? (94)

*Vitamins are chemicals found in food. Vitamins are essential for life. They help the body regulate metabolic processes (related to metabolism or how the body makes energy from food). Vitamins also help the body with digestion and absorption of nutrients. There are two types of vitamins – water soluble and fat soluble.*

16. List the water soluble and fat soluble vitamins and how they differ. (94)

|  |  |
| --- | --- |
| Water-soluble | Fat-soluble |
|  |  |

17. What are minerals? (95)

*Minerals are inorganic elements needed for life and balanced nutrition. Minerals are classified as major or trace. People need larger amounts of major minerals and only very small amount of trace minerals. Minerals are part of body structures (like calcium in bones). They also help the body regulate (control) its functions (like breathing, immune systems, blood flow, heartbeat etc).*

18. Function of some minerals. (95)

|  |  |
| --- | --- |
| Mineral | Function |
| Calcium & phosphorus |  |
| Potassium & sodium |  |

19. Do vitamins and minerals provide energy? If not what substances do? (95)

*Vitamins and minerals do not provide the body with any energy. But they are necessary for the body to work. Carbohydrates, proteins and fats provide the body with energy.*

20. Calories (or energy) per gram. (95)

Carbohydrates = \_\_\_\_\_

Protein = \_\_\_\_\_

Fat = \_\_\_\_\_

21. List the 4 roles of water. (96)

|  |
| --- |
| *1 help with digestion, absorption and transportation of nutrients* |
| *2 help with elimination of waste (urine and feces and exhaled breath) through the liver, lungs, kidneys and colon.* |
| *3 move heat throughout the body* |
| *4 lubricate (moisten) joints and cushion body tissues* |

22. What are food additives? (98)

23. What are the four functions of food additives? (99)

*1. improve flavor, color and texture of food*

*2. retain nutritional value in food*

*3. prevent spoilage (salt in ham or beef jerky, vinegar in pickles)*

*4. extend shelf life (preservatives in foods that are processed)*

24. What is RDA? (100)

25. Describe the 4 types of vegetarian diets. (100)

|  |  |
| --- | --- |
| Vegetarian | *Person who eats no meat, fish or poultry (bird) products* |
| Lacto-vegetarian | *Person who practices vegetarian diet and also eats dairy (milk) products* |
| Lacto-ovo-vegetarian | *Person who practices vegetarian diet and also eats dairy (milk) products and eggs* |
| Vegan | *Person who eats no animal meat or other products. These people eat fruits, vegetables, seeds, beans and nuts. The do not eat eggs, milk, cheese, honey and generally do not wear leather or other animal hide products.* |

26. Describe each disease and what causes it. (101-103)

|  |  |
| --- | --- |
| Obesity |  |
| Osteoporosis |  |
| Anemia |  |
| Dental Cavities |  |
| Cardiovascualr Disease |  |
| Diabetes |  |
| Cancer |  |

27. Describe the flow of food and how to preserve the nutrients as much as possible. (109-116)

|  |  |
| --- | --- |
| Purchasing and  Receiving |  |
| Storing  Dry, Refrigerated, Frozen |  |
| Prepping |  |
| Cooking Food  Grains, Meats, Fruits & Veg |  |
| Holding |  |

28. Define portion control. (117)

*Controlling the quantity (amount or how much) food is placed into a serving or a dish. Portion control means using appropriate servings. Appropriate portions are different for different foods. Portions of rich dishes full of fat and sugar and smaller than portions of foods like steamed vegetables.*

29. What are 3 modifications you can make in baking to reduce fat or sugar? (118)

1. *Use fruit purees (like applesauce) in place of butter or oil. This results in a moist tender crumb, but the product may be heavy.*

2. *Where possible, use egg substitute instead of whole eggs.*

3. *reduce sugar by using a sugar substitute (like Splenda or Stevia)*

30. Read the modifications for each of the following foods and give a brief summary (118-122)

|  |  |
| --- | --- |
| Soups & sauces |  |
| Meat |  |
| Seafood |  |
| Vegetables |  |
| Desserts |  |
| Garnishes |  |

31. Define the following: (126-127)

|  |  |
| --- | --- |
| Pesticides |  |
| Hormones |  |
| GMO |  |
| Conventional |  |
| Organic |  |
| Certified organic |  |

32. What are the benefits of a GMO? (128)

*1. better resistance to insects and diseases*

*2. improved nutritional value*

*3. able to withstand heat, drought or cold*

*4. resistant to herbicides or pesticides*

*5. better flavor*

Test Review Questions (137-138)

1. \_\_\_\_\_ 6. \_\_\_\_\_

2. \_\_\_\_\_ 7. \_\_\_\_\_

3. \_\_\_\_\_ 8. \_\_\_\_\_

4. \_\_\_\_\_ 9. \_\_\_\_\_

5. \_\_\_\_\_ 10. \_\_\_\_\_