Test #1  100 points

1. Effects of physical activity on the body include all of the following except:  
   a. decreased bone density.
   b. reduced risk of cardiovascular diseases.
   c. faster wound healing.
   d. increased lean body tissue.  

2. The energy-yielding nutrients include:  
   a. protein.
   b. fat.
   c. vitamins.
   d. a and b
   e. a and c

3. Food scientists measure food energy in:  
   a. calories.
   b. kilograms.
   c. grams.
   d. units of weight.

4. Your food intake on a daily basis affects your health because:  
   a. you must eat adequate amounts of every nutrient daily to stay healthy.
   b. improper balance of nutrients over time can lead to chronic diseases in the future.
   c. malnutrition is a result of not eating enough foods.
   d. overeating will result in very quickly developing a chronic disease.

5. Foods that provide zero discretionary calories:  
   a. are naturally low in fat and have no added fats or sugars.
   b. should be avoided when trying to lose weight.
   c. are more processed foods.
   d. are not as nutrient dense.

6. Chemical digestion of all nutrients mainly occurs in which organ?  
   a. mouth
   b. stomach
   c. small intestine
   d. large intestine

7. Cells are organized into tissues that perform specialized tasks and tissues, in turn, are grouped together to form whole organs.  
   a. true
   b. false
8. Timing of meals is important because the digestive tract is unable to digest food at certain times.
   a. true  
   b. false  

9. Which of the following cells normally replace themselves once every few years?  
   a. muscle  
   b. skin  
   c. digestive tract  
   d. red blood  

10. Which of the following types of cells do not reproduce, and if damaged by injury or disease, are lost forever?
    a. skin cells  
    b. red blood cells  
    c. muscle cells  
    d. brain cells  

11. The blood picks up oxygen and releases carbon dioxide in the:  
   a. heart.  
   b. liver.  
   c. digestive system.  
   d. lungs.  

12. When the pancreas detects a high concentration of the blood’s sugar, glucose, it releases:  
    a. lymph.  
    b. insulin.  
    c. antibodies.  
    d. glucagon.  

13. Hormones are secreted and released into the blood by ______.  
    a. antigens  
    b. enzymes  
    c. glands  
    d. antibodies  

14. The nervous system’s role in hunger regulation is coordinated by the:  
    a. pancreas.  
    b. brain.  
    c. digestive tract.  
    d. spinal cord.
15. The primary organ of digestion and absorption is the:  
   a. mouth.  
   b. stomach.  
   c. small intestine.  
   d. large intestine.  
   **C**

16. The purpose of the villi and microvilli in the intestinal tract is to:  
   a. move food components through the intestinal tract to be removed from the body.  
   b. reduce the absorbing surface of the intestines.  
   c. trap the nutrient particles and absorb them into the cells.  
   d. prevent nutrients from being absorbed.  
   **C**

17. The liver converts excess energy-containing nutrients into:  
   a. glycogen.  
   b. protein.  
   c. fat.  
   d. a and b  
   e. a and c  
   **E**

18. Which of the following is **not** one of the major storage systems which store and release nutrients to meet the cells’ needs between meals?  
   a. liver  
   b. muscles  
   c. fat cells  
   d. pancreas  
   **D**

19. Complex carbohydrates:  
   a. include both single sugar units and linked pairs of sugar units.  
   b. are known as the monosaccharides and disaccharides.  
   c. are long chains of sugar units arranged to form starch or fiber.  
   d. a and b  
   e. b and c  
   **C**

20. Which monosaccharide is responsible for the sweet taste of fruit?  
   a. glucose  
   b. fructose  
   c. galactose  
   d. sucrose  
   **B**

21. When fructose and glucose are bonded together they form:  
   a. table sugar.  
   b. malt sugar.  
   c. milk sugar.  
   d. fruit sugar.  
   **A**
22. The disaccharides include: D
   a. sucrose, galactose, and maltose.
   b. maltose, fructose, and galactose.
   c. lactose, glucose, and fructose.
   d. sucrose, maltose, and lactose.

23. Which of the following is the most-used monosaccharide inside the body? C
   a. fructose
   b. lactose
   c. glucose
   d. galactose

24. Fruits differ from concentrated sweets because: D
   a. their sugars are diluted in large volumes of water.
   b. they are packaged with fiber.
   c. they are less nutrient dense.
   d. a and b
   e. b and c

25. Which of the following is not an example of fiber? C
   a. “strings” of celery
   b. membranes surrounding kernels of wheat
   c. residue in milk
   d. skins of corn kernels

26. Which of the following is the preferred fuel for most body functions? C
   a. protein
   b. ketones
   c. carbohydrate
   d. fat

27. Which of the following is not an effect of fiber? A
   a. promotes weight gain and feeling of fullness
   b. prevents constipation and hemorrhoids
   c. reduces the risks of heart and artery disease
   d. prevents appendicitis and diverticulosis

28. Potential harmful effects of too much fiber include: D
   a. dehydration.
   b. limited absorption of iron.
   c. extreme weight loss.
   d. a and b
   e. b and c
29. The best way to achieve a desirable amount of fiber is to: D
   a. include fruits, vegetables, and grains in the diet.
   b. emphasize whole, unprocessed foods.
   c. add purified fibers to foods.
   d. a and b
   e. a and c

30. Which of the following nutrients is not required by law to be added to refined grain products? C
   a. riboflavin
   b. folate
   c. magnesium
   d. thiamin
   e. niacin

31. Which of the following terms would you look for on a bread label to choose the most nutritious product? B
   a. wheat flour
   b. whole grain
   c. unbleached flour
   d. brown bread

32. Which of the following statements is false concerning the splitting of glucose for energy? D
   a. Inside a cell glucose is broken in half and these two halves have two pathways open to them.
   b. Glucose can be broken down to yield energy and carbon dioxide.
   c. Glucose fragments can be hitched together into units of body fat.
   d. Body fat can be converted into glucose to feed the brain adequately.

33. When the blood glucose level rises after a meal, the first organ to respond is the: A
   a. pancreas.
   b. liver.
   c. stomach.
   d. gallbladder.

34. The extent to which a food raises the blood glucose level and elicits an insulin response as compared with pure glucose can be measured and ranked on a scale called the: B
   a. digestibility index.
   b. glycemic index.
   c. hypoglycemic index.
   d. insulin index.
35. Which of the following is characteristic of type 1 diabetes?  
   D  
   a. the person’s immune system attacks the cells of the pancreas  
   b. the pancreas no longer produces insulin  
   c. the person is usually overweight  
   d. a and b  
   e. b and c  

36. Characteristics of type 2 diabetes include all of the following except:  
   C  
   a. insulin resistance of the body’s cells.  
   b. blood glucose levels that rise too high.  
   c. a pancreas that makes too little or no insulin.  
   d. blood insulin levels that rise too high.  

The following questions pertain to the food labels on the next page:  

37. If you ate two servings of the whole grain whole wheat bread what percentage of your daily total fat allowance has been fulfilled?  
   B  
   a. 6%  
   b. 4%  
   c. 8%  
   d. 2%  

38. Take a look at the ingredients list of the multi-fiber low carb bread. Which of the following are found in the highest amounts in these bread:  
   C  
   a. wheat gluten, cellulose and yeast  
   b. cracked wheat, salt and barley  
   c. water, wheat gluten and cellulose  

39. If you ate half a loaf of the low carb bread, how many calories would you be consuming?  
   E  
   a. 60 calories  
   b. 120 calories  
   c. 1200 calories  
   d. 690 calories  
   e. 630 calories  

40. Natural wheat bread contains the highest dietary fiber per serving of all three bread choices  
   B  
   a. true  
   b. false
### Whole Grain Whole Wheat

**Nutrition Facts**

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<td>Protein</td>
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**Ingredients:**
- Unbromated Stone Ground 100% Whole Wheat Flour
- Water
- Crushed Wheat
- High Fructose Corn Syrup
- Partially Hydrogenated Vegetable Shortening (Soybean and Cottonseed Oils)
- Raisin Juice Concentrate
- Wheat Gluten
- Yeast
- Whole Wheat Flakes
- Unbleached Wheat Flour
- Soy Lecithin
- Cultured Whey
- Unbleached Wheat Flour

### Natural Wheat Bread

**Nutrition Facts**

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<tr>
<td>Protein</td>
<td>4g</td>
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**Ingredients:**
- Unbleached Enriched Wheat Flour
- Malted Barley Flour
- Niacin
- Reduced Iron
- Thiamin Mononitrate (Vitamin B1)
- Riboflavin (Vitamin B2)
- Folic Acid
- Water
- High Fructose Corn Syrup
- Molasses
- Partially Hydrogenated Soybean Oil
- Yeast
- Corn Flour
- Salt
- Ground Caraway
- Wheat Gluten
- Calcium Propionate (Preservative)
- Monoglycerides
- Soy Lecithin

### Multi-fiber Low Carb

**Nutrition Facts**

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**Ingredients:**
- Unbleached Enriched Wheat Flour
- Water
- Wheat Gluten
- Cellulose
- Yeast
- Soybean Oil
- Cracked Wheat
- GR Barley
- Natural Flavor Preservatives
- Monocalcium Phosphate
- Millet
- Corn
- Oats
- Soybean Flour
- Brown Rice
- Flaxseed
- Sucralose