#### **Human Biology Review Sheet**

Chapter 15: Nutrition and Digestion

#### **NUTRITION**

Nutrient Calorie Carbohydrate Cellular Respiration Simple Sugar- glucose + fructose Complex sugar- sucrose Complex Carbohydrates Cellulose Solvent Fats Saturated Fats Unsaturated Fats Vitamins Deficiency Water Colon Excess Carbohydrates Protein Enzymes Amino Acids Essential Amino Acids Complete Proteins Incomplete Proteins Water Soluble Vitamins Fat Soluble Vitamins Minerals- Sodium, Potassium, Calcium, Phosphorus, Iron

# What Nutrient is responsible for the following function?

- 1. Cooling \_\_\_\_
- 2. Controls body processes (nerve impulses, carry oxygen) \_\_\_\_\_
- 3. Enzymes/Hormones \_\_\_\_\_
- 4. Insulation \_\_\_\_\_
- 5. Regulates body functions \_\_\_\_\_
- 6. Main Source of Energy \_\_\_\_\_

# What Nutrient has the following structure?

Building blocks (subunits)	Macromolecule
2 hydrogen + oxygen	
	Proteins
Long chains of sugars	
Small amounts of inorganic materials	
	Vitamins
Fatty acids + glycerol	

\_\_\_\_\_

### Fill in the blank:

- 7. An example of a simple sugar is \_\_\_\_\_
- 8. Rice, pasta, potatoes, bread, and veggies are examples of

\_\_\_\_\_

- 9. Excess carbohydrates are *first* stored in the \_\_\_\_\_ and \_\_\_\_ as glycogen (a form of glucose).
- 10. Unused excess carbohydrates are stored in the \_\_\_\_\_ as fat.
- 11. Enzymes are a type of protein. Their function is to \_\_\_\_\_\_
- 12. In order for your body to function properly, you need \_\_\_\_\_\_ amino acids to survive.
- 13. There are \_\_\_\_\_ Essential Amino Acids that you must get from food.

- 15. One of the main functions of \_\_\_\_\_\_ is storage of energy and vitamins.
- 16. Fats contain \_\_\_\_\_\_ times calories compared to proteins and carbohydrates.
- 17. What is the main function of cellulose?
- 18. "S" for "saturated, "S" for solid at room temperature. Why are saturated fats bad for you?
- 19. What is the difference between complete and incomplete proteins?
- 20. List the 4 factors that determine how many calories an individual needs each day

Directions: Answer the questions below based on the image.



Use arrows to point and label by name the **phalanges**, **metacarpals and carpals**.

Observe the hand and the muscles that would be moving the bones. What type of muscle tissue is in the hand?

Which side of the hand would have muscles that contract? \_\_\_\_\_\_ Which side would have muscles extend?

This is known as "\_\_\_\_\_"

Is this voluntary or involuntary movement?

Do you think there would be any nutrients in the food in the picture? Explain your answer.

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Amount Per Serving		and the second second
Calories 219		Calories from Fat 79
		% Daily Value*
Total Fat 8.8g		14%
Saturated Fat 7.0g		35%
Trans Fat 0.0g		
Cholesterol 2mg		1%
Sodium 64mg		3%
Total Carbohydra	tes	33.3g <b>11</b> %
Dietary Fiber 1.7g		7%
Sugars 17.5g		52253
Protein 2.7g		
Vitamin A 64%	36	Vitamin C 2%
Calcium 8%	8. <del>8</del>	Iron 9%

1. How is the serving size measured?

9. Which minerals does the food contain? List all you can identify.

10. Does this food contain a lot of cellulose? How do you know?

11. Do you think this food item is a good source of protein? Why or why not?