

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

Group Member Names: \_\_\_\_\_

## **Macromolecules: Food Label Activity**

**Reminder: YOU MAY work with a group for this activity, but your work MUST be your own!**

### **Introduction:**

All living things need energy and materials in order to survive. Animals, such as humans, consume food in order to obtain the energy they need to power their bodies and the materials they need to produce more cells in growing bodies. Today you will examine the nutritional content of your food and determine if you are getting the energy and nutrients you need.

### **Reading Nutrition Labels**

The Nutrition Facts Label tells you what nutrients (components of food your body needs to grow and stay healthy) and how much of those nutrients are found in one serving. The Nutrition Facts label can help you make choices about the food you eat. The Nutrition Facts label is on the outside of most food packages, but isn't on most fresh foods (like fruits and vegetables). Below is an example of a Nutrition Facts label and explanations of the information found on the label.

### **Part I: A Snack!**

Pick out one food label in your bag of something you might eat as a snack. Your group members must pick a different label. Read the labels of the snack and answer the questions below. Discuss the questions with your group members. Provide an answer even if you are not sure if you are correct.

1. What ingredients are listed for your snack type?
  - a. How does your snack compare to those of the other members of your group?
  
2. What groups or categories (which organic molecules, vitamins, minerals, etc) can be used to classify the snack's contents?
  
3. What is a calorie? How is it different from a Calorie? (You may use your book if you are not sure)
  - a. Which ingredients provide the majority of the calories in your food item?
  
4. Which of the materials found in your snack type are necessary for your survival?
  - a. Why do you need them? What do they provide for your body?

**Part II: Sample Food Labels** - Put your answers on Table 1.

1. Pick 3 food labels out of the sample bag that your group is given in addition to the food label from your snack (4 total). You are going to rank each of the four labels based on:

1. The amount of **Lipids** in the food
2. The amount of **Carbohydrates** in the food
3. The amount of **Protein** in the food
4. And the amount of **Calories** in the food

2. Spread the 4 labels out. Find the one that has the MOST LIPIDS and put that as #1 under the column “Lipids.” Record the name of the food and the amount of lipids it has. Find the next most and put that as #2 and so on.

**3. Repeat this for Carbohydrates, then for Proteins, then for Calories.**

<u>Table 1</u>								
	<b>Lipids</b>		<b>Carbohydrates</b>		<b>Proteins</b>		<b>Total Calories</b>	
Rank of Sample	Name of food	Number per serving	Name of food	Gm/ser	Name of Food	Gm/ser	Name of food	Amt./serv
#1								
#2								
#3								
#4								

**Part II Questions:**

Choose one item from your list for each and say why this food would be good IF:

1. You were packing survival food for a proposed three hour car trip. A severe blizzard is forecast.
2. You were going to eat one hour before a track meet.
3. You are trying to build up muscle mass and/or heal injuries.
4. Why is it necessary to have an adequate intake of nutrients from all the major food groups studied?
5. What are the products of the metabolic breakdown of:

a. Polysaccharides: \_\_\_\_\_ b. Proteins: \_\_\_\_\_

c. Lipids: \_\_\_\_\_ c. Nucleic Acids: \_\_\_\_\_

**STAPLE YOUR FOOD LABELS TO THIS SHEET BEFORE YOU TURN IT IN.**