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Cornell Cooperative Extension of Suffolk County
Department of Family Medicine at Stony Brook Medical Center

Funded by:
The New York State Department of Health, Mary Lasker Heart and
Hypertension Institute

NUTRITION UNIT

GRADE 7/8 - A

LESSON 1 - DIGESTING A FOOD LABEL IN BITE-SIZE PIECES

OBJECTIVES

- Students will be able to find the serving size on the food label and relate this information to the amount of food they eat.
- Students will be able to evaluate the fat content of a food item based on the label information.
- Students will be able to evaluate the vitamin and mineral content of the food item based on the label information.
- Students will be able to evaluate the sugar content of a food item based on the label information.

MATERIALS NEEDED

Provided in the Curriculum:

Pretest
Food Label Basics
Food Guide Pyramid

Other:

empty food packages
calculator (optional)

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INTRODUCTION

Explain to students that you are starting a unit on nutrition that will include nine lessons. Nutrition is the study of food and how it is used in the body. Explain that these nutrition lessons are being included in the physical education class because the food that you eat affects the physical activity that you can do, and because the food that you choose to eat and the activity that you choose to do have a great influence on how you feel, how you look and how healthy you will be now and as you get older.

PRETEST

Explain that you need to know what the students already know about nutrition, and what they need to learn. Distribute the pretest and ask them to answer the questions the best they can. They will not be graded. Give students about 5 minutes to complete the quiz.

THE FOOD GUIDE PYRAMID

Pass out the Food Guide Pyramid handout and briefly review the names and location of the food groups: 1) the Grain Group is the largest food group at the base of the Pyramid and most of the foods you eat each day should come from this group (breads, cereals, rice, pasta, crackers, tortillas, pita bread, etc.), 2) the Fruit and Vegetable Groups make up the second level of the Pyramid and you should choose at least 5 servings a day from this group (in addition to whole fruits and vegetables, real fruit and vegetable juices are included, but sugary fruit drinks are not), 3) The Meat and Milk Groups make up the third level of the Pyramid and you should choose 2 to 3 servings from each of these

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groups. The Tip of the Pyramid includes foods with large amounts of fats, oils and sugars. These foods should be eaten in moderation.

EXAMINING THE NUTRITION FACTS FOOD LABEL

Pass out the Introducing the Food Label Basics handout. Ask students if they read food labels? What exactly do they look for? Do descriptions on food packages like “lite” salad dressing, or “no added sugar” juice catch their eye? These terms are vague and may be misleading. For example, no sugar added means there is no sugar in the form of sucrose added, but sugar in the form of corn syrup can be added. Therefore, you should become familiar with the Nutrition Facts component of the food label. Here is where you will find the specific nutrition information for the food item.

Pass out empty food packages for students to share. On the hand out, refer students to the first paragraph of the left column. On the handout a serving size is one container. Ask students what the serving sizes are on the packages they are holding. Ask students if they would eat that much or more? Emphasize that the nutrition information on the label is for one serving, so if they eat 2 or 3 servings, they have to double or triple the numbers.

Next discuss calories and calories from fat. Ask students how many Calories and Calories from fat would be in one container of this food? (340 Calories and 45 Calories from fat) Show students that the Calories from Fat are determined by taking the Total Fat grams of fat shown on the label and multiplying it by 9, and then rounding off the answer to the nearest whole number. In this example, it would be 5 grams of fat multiplied by 9 equals 45 Calories from fat.

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In order to evaluate the fat content of a food, consider what percent of the total calories comes from fat. Put the following equation on the board:

$$\% \text{ Calories from fat} = \frac{\text{Calories from fat}}{\text{Total Calories}} \times 100$$

In the example on the handout you would fill in the following numbers:

$$\% \text{ Calories from Fat} = \frac{45 \text{ Calories from fat}}{340 \text{ Calories}} \times 100$$

Therefore, 13 % of all the calories in a container of this food come from fat. Thirteen is less than 30, so this food would be considered low in fat. If the number was greater than 30% the food would be considered high in fat. Ask students to read the Calories and Calories from Fat information on their food labels. Have them read the information aloud or come up to the board and fill in the information in the formula from their label. Then ask them to divide the numbers to get the % Calories from fat. (You may have them use a calculator so the process goes faster.)

Most of the foods you eat each day, should have less than 30% of their calories coming from fat. If you have a food with a higher percent Calories from fat, then you should try to eat a small to moderate amount. Although some people may be thin or have a hard time gaining weight, it is still not recommended that you fill up on fat calories.

Have students scan the vitamin and mineral percents. If a food has more than 10% of a vitamin or mineral it is considered a good source of that vitamin or mineral. Ask students if their food labels indicate if the food is a good source of any of the

vitamins or minerals shown. Review the concepts of Daily Values by discussing the text on the handout.

Now have students look on their food labels to find the grams (g) of sugar. Note that some foods naturally have a fair amount of sugar. For example a serving of fruit has about 15 grams of sugar, and a serving of milk has between 11 and 13 grams of sugar. These foods, however, also have a lot of vitamins and minerals that your body needs. It is important to include these foods in your diet. Some processed foods that have added sugar also provide important nutrients. However, cake, cookies, ice cream, candy, etc. have lots of added sugar and only a few, if any, nutrients. Therefore, eat these foods in moderate amounts. Most of the foods you eat each day should have less than 5 grams of sugar, except for milk products and fruits. Have students read aloud the sugar content of the foods they have. Which are high in sugar (have more than 5 grams). The example on the handout has 3 grams of sugar, and would be considered a low sugar food.

CONCLUSION

- There is a lot of information on the Nutrition Facts food labels, and it is helpful if you try to digest it in bite-sized pieces.
- First bite: take notice of the serving size on the label, and decide how many serving sizes you actually eat.
- Second bite: evaluate the fat content of the food item. Is it high or low in fat?
- Third bite: evaluate the sugar content of the food item.

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- Fourth bite: evaluate the vitamin and mineral content of the food using the % Daily Values. Does the food have a substantial amount of vitamins and minerals.
- Based on your evaluations above, you can decide on how much of the food to eat.

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