

Lesson: Knowledge is Power

Goals:

- Students will be able to identify the number of grams or milligrams of fat, sugar, fiber, and sodium in one serving by reading the nutrition facts label.
- Students will be able to identify the %DV for these four nutrients.
- Students will be able to compare 4 different snacks and select the best Go Food option of the four.

Supplies Needed:

- 5.3_LW_Snack-Comparison_Worksheet
- Samples of nutrition facts labels for snack foods
- 5.3_LV_KNOWLEDGE-IS-POWER-VISUALS

Background:

Nutrition labels are on most food products found in the grocery stores. It is important for the students to learn how to read the labels and analyze the information. Analyzing nutrition labels empowers students to make food choices to provide the best nutrients for their bodies. Fats, fiber, sodium and sugar are some of the key nutrients to be considered when making food selections. Students should use nutrition labels to make the best choices for *their* bodies. Nutrients can be evaluated by grams, milligrams or percent daily values.

If any of the students ask why the total fat grams is higher than the saturated and trans fat grams added together, explain that unsaturated fats are not often listed on the nutrition facts label, but if they were they would account for that missing amount. Manufacturers are not required to list the amount of unsaturated fats on the nutrition facts label, because they are considered healthy fats. That is why a Go Food is considered any food with less than 10% DV of saturated fat. Explain that it is important to remember that we want to limit fat intake in general.

The percent daily value, %DV, is a reference intake level used to determine if a food is a good source of a particular nutrient. According to the 2010 US Dietary

Guidelines, a food less than 5% of the Daily Value is considered a low source of the nutrient.

A food with 10-19% DV is considered a “good” source of a nutrient and an “excellent” source if higher than 20% DV, with the exception of those nutrients that we want to keep low like saturated fats and sodium. There is no %DV for trans fat or sugar. At this time the US Dietary Guidelines only include a recommendation to reduce overall intake of sugar and trans fat.

Lesson:

Let’s start out by doing 15 jumping jacks.

How many minutes should we be moving every day? *(60 minutes)*

What is the preferred Go beverage when you are thirsty? *(Water)*

What is your favorite Go Food? *(Allow students to respond.)*

Does anyone remember the four questions we ask ourselves when we look at an advertisement? *(What is the ad selling? Who is the target audience? What is the hook? What are they not telling me?)*

Why do we need to ask these questions? *(In order to have a better understanding of the product being sold and evaluate whether it is something we want to nourish our bodies with.)*

Did anyone pay closer attention to the ads on TV or ones they saw during the day on buses or signs? *(Encourage students to share their experiences.)*

Now let’s pretend we are watching TV, and we are feeling like we want something to eat. The first thing that you want to do is stop and ask yourself these questions: “What am I feeling? Am I hungry? Am I thirsty? Am I bored?”

If you still cannot decide if a snack is what you need, think about what made you feel like eating.

Perhaps it was an advertisement you just watched where everyone was eating crunchy chips, or you saw or smelled a food that made you think about eating? Is this appetite, thirst or hunger? *(Probably appetite)*

Maybe you just finished exercising or playing outside with a friend? Is this appetite, thirst or hunger? *(Probably thirst or hunger)*

If you think you may have an appetite for food but you don't think your body needs fuel, then have a glass of water and get busy with another activity. If you find that your mind keeps returning to thoughts of having a snack, maybe you are hungry and you need some fuel for your body.

Now it's time to choose a Sensational Snack. What are some ideas about how to choose healthy snacks? (*Look at nutrition label, think about what you have had that day, do you need more fruits and/or vegetables? Have you had any dairy?*)

It's very helpful to think about what you have been eating in the past few days. Maybe you're low on fruits and vegetables. Who remembers how many fruits and vegetables you should be eating each day? (*Three vegetables and two fruits*). You may realize that you are in need of some Go Foods because you have eaten more Slow Foods recently.

(Show Slide 1.) While choosing a snack it is always helpful to look at the nutrition labels. Who remembers some key nutrients we have talked about in past Nurture lessons? (*Fiber, sodium, sugar, fats; saturated, unsaturated and trans*) Every nutrient on the nutrition label is important, but today we are going to focus on fats, sodium, fiber, and sugar.

(Show Slide 2.)

- Let's start with fats. Who can remember how fat help our bodies? (*It gives us energy, helps us feel full, and it keeps our skin and nerves healthy.*) Who can remember the three kinds of fats? (*Saturated, unsaturated and trans*) Which are the Slow fats? (*Saturated and trans fat. Saturated starts with an 's' which is for slow and trans fat starts with a 't' which is a trouble fat*). Which is the Go fat? (*Unsaturated; starts with a 'u' which stands for a good for 'you' fat*)
- The next nutrient is sodium. Does anyone know the other name for sodium? (*Salt*) That's exactly right. The chemical name is sodium. Salt and sodium are very similar, so when you see the word sodium on a food label, remember that sodium is part of salt. It's a mineral used by our bodies to help maintain normal water and electrolyte balance. Electrolytes are very small minerals needed by our bodies to function properly. We want to try and eat foods that are low in sodium.
- Now let's look at fiber. Who remembers why fiber is important for our bodies? (*Fiber helps you feel full, it helps regulates blood sugar, and helps maintain a healthy digestive tract.*) Does anyone remember what foods have fiber? (*Fruits, vegetables, whole grains, cereals, beans*)

- The last one is sugar. Our bodies use sugar as the major source of energy, but too much sugar is not good because consuming too much sugar can lead to increased risk of type 2 diabetes, weight gain, tooth decay, and a weakened immune system. Natural sugar is the sugar found in Go Foods such as fruit and milk. Added sugar is added to make foods taste sweet and is the sugar found in Slow Foods such as cookies or cakes.

(Show Slide 3.) Now we understand the four nutrients that we want to consider when we are choosing a healthy Go Food snack. Let's look at a nutrition facts label.

The first line we are going to look at is the serving size. How many servings are in this package? (*Two and one half, which means there are 15 rolls in the package*) Determine how much you are going to eat. Is it more than one serving? If so make sure to multiply the nutrition facts by the amount of servings you are eating. So if you are going to have 2 servings, that is 12 rolls, then you will have to multiply all the nutrients times two.

Let's take a look at how the nutrients are measured according to the label. Right next to the nutrient on the label you will see that there is a measurement in grams or milligrams. That tells us how much the nutrient weighs. Then look at the far right side of that same line and you will see a percent that is called the %DV. That stands for the Percent of the Daily Value. On this label total fat is 14%. That tells you that by eating this one serving you will have eaten 14% out of 100% of your total fat for the day based on an average diet.

Now let's take a look at the nutrients on the nutrition label.

How much total fat is in this serving? (*Total fat is 9 grams.*) How much saturated fat is in this serving? (*2 grams*) How much trans fat? (*1 ½ grams*) Remember even if it says zero trans fat the product can still have less than 0.5 gram of trans fat per serving. If the ingredient list has partially hydrogenated listed it means that there is some trans fat in the food even if the label says zero trans fat. What is the % DV for total fat then? (*14%*). That means that if you eat one serving you will eat nine grams or 14% of your recommended total fat for the day. Look for foods with 10% or less of % Daily Value for saturated fats and for no trans fat.

The next nutrient is sodium. How many milligrams are there? (*390 mg*) What is the %DV for sodium? (*16%*) Percent DV tells how much of your total recommended

sodium for the day is in this one serving. (16%) Will this snack be somewhat close to 16% of your food and drink for the day?

Let's take a look at the sugar. How much sugar is in this serving? (3 grams) There is no %DV for sugar but we know that we want to keep sugar intake low.

The last nutrient we want to look at is fiber. The recommended intake of fiber for one day is at least 25 grams. How much fiber is in this one serving? (2 grams) What is the % DV? (7%)

Now that we have looked at the nutrition facts, do you think this is a Go Food or a Slow Food? (Slow Food - % daily value of saturated fat is higher than 10% there are 1½ grams of trans fat, and there are less than 3 grams of fiber)

Activity:

Let's give you all a chance to practice this on your own. We are going to have you break into five groups. Each group will get four different nutrition labels from snacks that you might have at home. We want you to look at the nutrients we discussed and fill out the chart. Then discuss among your group which snack you think would be best and why. There is no right or wrong answer. What is important is the reason you choose the snack. When you are finished each group will share their findings with the class.

(Show Slide 4) Let's look at this example. After you have filled out the chart, circle the snacks with the highest fiber and the lowest fat, sodium and sugar. This will help you evaluate which snack you want to choose.

Looking at the results, what snack would you choose? *(Probably snack #2 because it has both the lowest fat content and the highest fiber, but it is slightly high sodium. So you would have to consider what you had been eating that day and whether you need to cut back on sodium or fat. Then consider how much fiber you have had, have you been eating whole fruits and vegetables with a lot of fiber? Make your decision based on the other foods you have eaten that day.)*

Now let's have you all try this in groups.

(Show Slide 5. (Break class into 5 groups. Give each group one copy of the worksheet, 5.3_LW_Snack Comparison and nutrition labels from four food packages.

Group 1 - applesauce, canned peaches, fruit juice and fruit rollups
Group 2 - regular milk, chocolate milk, drinkable yogurts and fruit juice
Group 3 - Townhouse crackers, Cheez-its, Wheat Thins, healthy crackers
Group 4 - Cheetos, Takis, pretzels, Baked Lays potato chips
Group 5 - Special K protein bars, Quaker chewy peanut butter bars, Balance bar, Snickers bar

Have the groups compare the nutrition information from the snack packages in their group. Using the worksheet as a guide, students should select what they think to be the healthiest snack. Use Slide 4 and Slide 5 as a guide.

Have the groups share what surprised them, what they would choose as the best Go Food option, and why. There are no right and wrong answers. The point is to have the students learn to read the labels and make the best choice for themselves based on their bodies and what other foods they have eaten that day.)

Conclusion:

You all did an amazing job selecting an appropriate snack for your group. It is important to remember that most food products are required to have a nutrition label. The labels tell us what is in the food and helps allow us to make choices on what we want to put in our bodies. So the next time you go to the grocery store, spend some time reading the nutrition labels before you make your decisions. It is up to you to keep your body healthy!