

Lesson: Sugar Smarts

Supplies Needed:

- 4.4_LV_Sugar-Smarts-Visual
- Sugar cubes (optional)

Goals:

- Students will be able to identify foods containing sugar
- Students will know the benefits of reducing added sugar intake
- Students will understand the difference between natural sugars and added sugars and the importance of moderation

Background:

The average U.S. child consumes around 22 teaspoons of added sugar each day, and a U.S. teen consumes nearly 34 teaspoons! We will see how a diet high in added and refined sugar can negatively impact one's health. The goal is not to tell children how much sugar they can or cannot have in a day; rather, the idea is to empower children with knowledge about how much sugar is in items and how to read food labels, so that they can make better choices.

The three types of sugars are fructose, lactose and sucrose. Fructose and lactose are naturally occurring. Fructose is found in fruits and vegetables and lactose is found in milk and dairy products. Sucrose comes from plants, but is refined into table sugar. This is the type of sugar added to baked goods and candy bars.

Man-made sugars, such as corn syrup, are a combination of sucrose and fructose. These sugars are manipulated by food manufacturers and used to sweeten soda and candy. These should be consumed only occasionally.

Sodas, energy drinks and sports drinks are the number one sources of added sugar in the United States.

Lesson:

Last month we talked about fats. Why is fat an important part of our diet?
(It gives us energy, helps us feel full, and it keeps our skin and nerves healthy.)

What are the three types of fat we discussed and are they Go or Slow? (*Unsaturated is for you - Go, saturated - Slow, and trans fat is trouble - Slow*)

What are some words we should look for to see if a food has trans fats?
(*Partially hydrogenated*)

When looking at percentages of fat on the nutrition label, what % of saturated fat qualifies the food as being a Slow Food that should be eaten in moderation? (*10% or more saturated fat*)

Today we are going to talk about sugar. Our bodies use sugar as the major source of energy, but too much sugar is not good. Does anyone know why? (**Show slide 1.**) Consuming too much sugar can lead to: increased risk of type 2 diabetes, weight gain, tooth decay, and a weakened immune system.

In order for us to be in charge of what we are eating, we need to know what foods have added sugar in them. Raise your hand if you can think of a food that contains added sugar.

(*Baked goods, candy, soda*)

Did you know that there are some Go Foods that contain sugar? (**Show slide 2.**) Fruits, some vegetables and milk all contain sugar.

Let's look at the difference. Sugar is found in food two different ways. There are natural sugars and added sugars. Natural sugars are found in Go Foods like apples, oranges, bananas, carrots, and milk. Added sugars are sugars that are added to a food to make them sweet. Examples of foods with added sugars are candy bars, cake, cookies and sodas.

Choosing natural sugars is usually the best decision because foods with natural sugars will be high in other nutrients that are good for us like fiber, vitamins and minerals. Or, in the case of milk, you will be getting calcium.

How many fruits and vegetables should you eat every day?
(*Five total - two fruits and three vegetables*).

How many milk or dairy products should we eat every day?
(*Dairy is part of MyPlate and should be part of every meal*)

Therefore, natural sugars are healthy for our bodies when eaten in Go Foods. It is the added sugars that should be once in a while foods.

So how do we become sugar smart? We need to read nutrition labels and ingredient lists. First we should look at the nutrition label. This is where we can find how much sugar an item contains. Sugar is listed in grams, which is a measurement by weight. In order to understand how much a gram of sugar is, let's look at this demonstration (**Show slide 3.**)

(Optional: Use actual sugar cubes to demonstrate.) Each one of these cubes is one teaspoon of sugar. One teaspoon of sugar is four grams. Can anyone guess how many teaspoons of added sugar not counting what we get from fruits, vegetables and milk the average U.S. child consumes each day?
(22 teaspoons or sugar cubes = 88 grams!)

Let's look at a nutrition label for a candy bar. **(Show slide 4.)** How many grams of sugar are in this bar? (29 grams - 7 ¼ teaspoons or sugar cubes)

How many grams of fiber? (1 gram)

This candy bar is also very low in vitamins and minerals. Now let's look at the ingredients to see if these are added sugars or natural sugars. We know there is added sugar when we see words like sugar, high fructose corn syrup and sugar cane in the ingredient list. Sugar is in the first ingredient so we now know that this bar has more sugar than any other ingredient.

Now let's look at the nutrition label for a medium orange. **(Show slide 5.)**

Who can tell me how much sugar is in this orange?
(14 grams of sugar or 3 ½ teaspoons or sugar cubes)

How many grams of fiber? (4 grams)

What makes this orange a Go Food is the 4 grams of fiber and over 100% of your daily requirement of vitamin C.

If our body uses natural sugar the same way as added sugar, why it is better to choose the orange rather than the candy bar when they both have sugar in them?
(Fiber, vitamins, minerals and an orange has less sugar)

Who remembers why fiber is good for us?
(Makes us feel full, helps to slow down the absorption of sugar into our blood so we do not get a sugar high)

Let's take a look at another nutrition label, this time for 100% orange juice. **(Show slide 6.)** There are 22 grams of sugar, 5 ½ teaspoons or sugar cubes and no fiber in one serving of juice. The USDA recommends to only drink one cup of 100% juice a day. Can anyone tell me why? The reason is even though this is naturally occurring sugar, the juice does not contain the fiber that a whole orange does. Without the fiber to slow down the sugar absorption, our blood sugar levels will rise quickly. Sugar is sugar, natural or added, therefore adding the fiber helps slow digestion keeping blood sugar levels even. When possible, choose the whole fruit instead of the fruit juice.

Let's see if anyone can match the grams of sugar to the food item shown. **(Show slide 7.)**

(Carrots = 5.8 grams; chocolate ice cream in a sugar cone=17 grams; 1 tablespoon ketchup=3.4 grams)

Is anyone surprised with these answers?

Who can give me some ideas about how to keep our sugar intake within a healthy range?

(Eat a whole fruit instead of juice; have sweets/desserts in moderation and/or for special occasions; split the candy bar with friends; read nutritional labels and the ingredient lists, eat fruit for dessert). **(Show slide 8.)**

Instead of having a cookie dessert, try a banana or apple for dessert. You still get to have something sweet and you get the added benefits of fiber, vitamins and minerals. Plus, you can count that fruit toward your two daily fruits that is recommended.

We get used to eating and develop a taste for certain foods. Typically if you eat a lot of sugar you will crave more sugar. But most of us can change this, like changing a habit. If you start replacing sweet foods with foods lower in sugar, after some time you may find that you don't crave it any more. Try replacing a sweet treat with a healthier snack for a couple of weeks and see if you still crave the sugary treat.

References

<http://www.health.gov/dietaryguidelines/dga2000/document/choose.htm>