Sugar Sugar!

Goals:

- *Students will be able to identify foods containing sugar*
- *Students will know the benefits of reducing added sugar intake*
- *Students will be able to make better choices to balance sugar intake as part of a nutritious diet.*

Audience:

- *3rd - 5th grade*

Materials:

- *My Pyramid Poster*
- *Sugar cubes*

Background information: The average US child consumes around 22 teaspoons of added sugar each day, and a US teen consumes nearly 34 teaspoons! We will see how a diet high in refined (added) 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.

Lesson:

Leader: We all know that sugar is a substance that makes things sweet. Does anyone remember which color on the food pyramid sugar is? (It is a trick question—sugar is not on the food pyramid!). There is a note on the bottom that says "know your limits"— (Show poster)—"get your fat facts and sugar smarts from the Nutrition Facts label". So we are going to be talking about how to do that today.

Leader: Did someone say that sugar is ----(choose any other category on the poster except orange (grains) and purple (meat and beans)?. Well, you are on to something! Natural sugars are present in vegetable, fruits, and milk products. Fructose is the sugar naturally found in fruits and vegetables. Lactose is the sugar naturally found in milk products. Notice the ending "ose"? That is a clue that sugar is involved!

Leader: Table sugar is sucrose. (Show a sugar cube). Sucrose is actually a combination of glucose and fructose, and is a man-made substance made from sugar cane and –guess what…beets!

Leader: The problem with sugar is not what it is, but how much we consume of it. (Show sugar cube). Each one of these cubes is 1 teaspoon of sugar. Can anyone guess how much added teaspoons of sugar (**not** counting what we get from fruits, vegetables and milk) the average US child consumes a day? (Let them guess). 22!

Leader: Can anyone think of any reasons why this is not a good thing? (Let them brainstorm). Then lead them to a few of the following reasons: increased risk of type 2 diabetes, weight gain, tooth decay, suppressed immune system.

Leader: So how to do we become "sugar smart"? We can learn to read Nutrition Facts on the labels of foods. The number of grams of sugar an item contains is posted on their nutrition label. (Demonstrate a label showing grams of sugar. Then demonstrate how the grams turn into teaspoons, and then visually into sugar cubes. 4 grams=1 teaspoon=1 cube).

Examples:

- Soda (12-oz can): 44 grams (11 cubes or 11 tsp)
- Snickers: 28 grams (7 cubes or 7 tsp)
- One cup of skim milk: 8 grams (2 cubes or 2 tsp)**
- Orange Juice (28 grams) (7 cubes or 7 tsp)**

Leader: Wait a minute--- a glass of orange juice contains the same amount of sugar as a snickers bar?! How can that be? Here is the tricky part: Natural occurring sugar and added sugar is not differentiated on the Nutrition Facts labels. In this example, the sugar from the orange juice is naturally occurring (it comes from the natural fructose in the orange). The sugar in the Snicker's bar is added (as high fructose corn syrup, which is made through a complicated chemical process). Which sugars do you think your body is best equipped to handle?

Leader: What can we do to make our sugar intake healthier? (Let them brainstorm). Ideas: Eat the whole orange, since it comes with fiber to slow down the body's absorption of the sugar; Split the snickers bar across several friends; substitute water or milk for the soda (note: if a child mentions sugar free sodas please mention that chemical sugar substitutes are not healthy for children).

Leader: So by having a glass of water instead of soda, we reduce our sugar intake by 44 grams? By having a glass of milk we reduce our sugar intake by 36 (44-8) grams? That's much better! And the sugar found in milk, lactose, is naturally occurring.

Leader: (Optional). Let's have a contest/play a game! We are going to guess how much sugar there is in (up to 10) foods and drinks. Let's see how good we are at estimating how much sugar is in various foods and drinks. When we are better able to estimate and read labels to find out the actual amount, we will be "sugar smart" and can do a better job at balancing our sugar intake as part of a healthy diet.