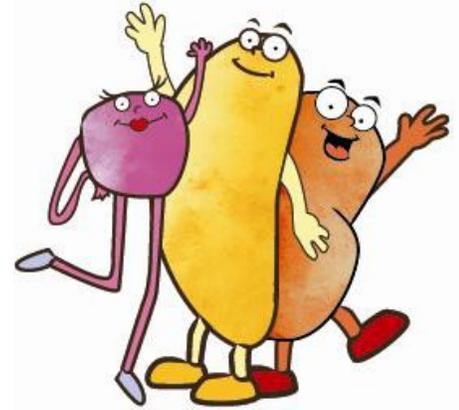


Watch Out for the Sugar Baddie™ Activities



Introduction (5 minutes)

1. Play the *Sugar: Master of Disguise* video.
2. Key discussion questions:
 - What was the main idea of this video?
 - Do you think sugar is good or bad for you? Why?

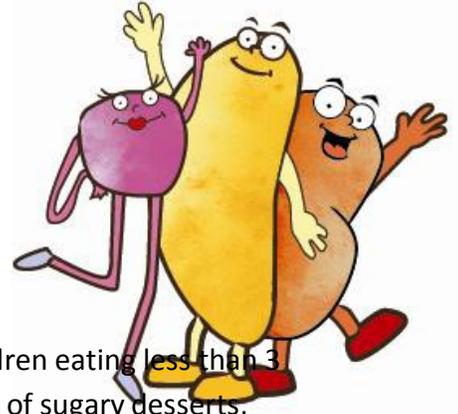
Shared Reading (15 minutes)

1. Preview the book *Chocolatina*, by Erik Kraft, with a “picture walk.” Share the cover, title and a few pictures with the children. Have them predict what might happen in the text.
2. Read the book. Stop briefly every few pages to give students an opportunity to predict what might happen next.
3. Show children the front cover of the book and ask them three questions: **“What was the main idea of the book?”** and **“Was this story true or fantasy? How do you know?”**
4. Other key questions to discuss:
 - Why do you think *Chocolatina* ate so much chocolate?
 - Have you ever eaten too much chocolate or too much sugar? How did it make you feel?
 - What lesson can you learn from this book? (It is important to limit sugar consumption and to eat healthfully).
5. Summary Questions:
 - Chocolatina* eats a lot of sugary foods. What sugary foods did Russet and Yukon eat in the video?
 - Why do you think Russet and Yukon ate so many sugary foods?

Points to Ponder (5 minutes)

1. Water is a healthy choice since it has no added sugar or chemicals.
2. Drinking water is the best way to keep your body hydrated.

3. Drinking too many sugary drinks can lead to obesity, and the single biggest source of sugar is soda.¹
4. Drinking two 20 ounce colas per day results in consuming 243 cups of sugar per year.²
5. A child's obesity risk increases by 60% with every added serving of sugary drinks per day.³
6. Drinking sodas and other sugary drinks is a cause of tooth decay. Sugar in soda works with bacteria in your mouth to form acid, which attacks your teeth and weakens tooth enamel. You start to get cavities when your enamel is weakened.⁴
7. It can be difficult to resist the temptation of refined sugar, even knowing it is not a healthy choice. What are some ways to make sure we don't eat too much sugar? For example: children eating less than 3 tsp. of sugar per day, choosing sweet tasting fresh fruit instead of sugary desserts, making sure we are not eating sugar every day, eating small amounts instead of filling large serving dishes, avoiding sugary foods at breakfast time might help us to crave less during the day.



What's in a Label (15 minutes)

1. Use these websites to show students how to read and understand the information in a nutritional label.
<http://www.mayoclinic.com/health/nutrition-facts/NU00293>
<http://www.fda.gov/Food/ResourcesForYou/Consumers/NFLPM/ucm274593.htm#twoparts>
http://www.nutridata.com/sample_nutrition_facts_formatted_label.asp
2. Show them how to locate the grams of sugar in foods and drinks.

¹ <http://www.kingcounty.gov/depts/health/nutrition/sugary-drinks.aspx>

² <http://www.kingcounty.gov/depts/health/nutrition/~media/health/publichealth/documents/sugarydrinks/10thingsParents.ashx>

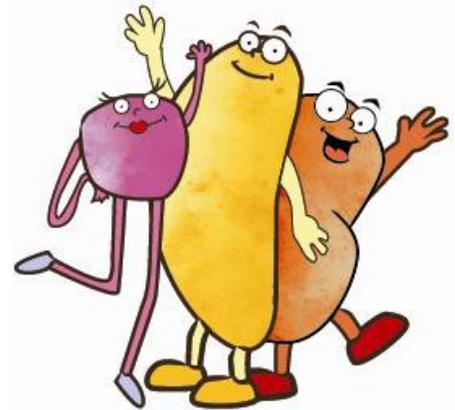
³ <http://www.kingcounty.gov/depts/health/nutrition/~media/health/publichealth/documents/sugarydrinks/10thingsParents.ashx>

⁴ http://msdh.ms.gov/msdhsite/_static/43,2809,151,299.html

3. Show students how to look toward the top of the label to find the number of servings that package contains. Many food and drink containers, such as high calorie snacks, contain more than one serving. The grams of sugar listed on the label, however, only represent a single serving. It is important to note that many grams of sugar are in each serving. For example, if an item contains 3 servings, the grams of sugar shown for each serving must be added 3 times in order to represent the total sugar in that container.
4. Show students how to add the grams of sugar for each serving to get the total grams of sugar in the container.
Optional: Students or teacher can bring in empty containers of sodas, sport drinks and juices and demonstrate how many bottles contain multiple servings and high volumes of sugar. In particular, bottles containing more than 12 oz. of a beverage often contain multiple servings.
5. Point out to students that there are different names for sugar: glucose, fructose, galactose, sucrose, lactose, maltose, etc. Notice that these names for sugar end in –ose.
6. Summary Questions:
-In the video, where does Sugar Baddie say he hides in our foods and drinks?
(Dextrose, Fructose, Sucrose and Corn Syrup)

Show Me the Sugar! (10 minutes)

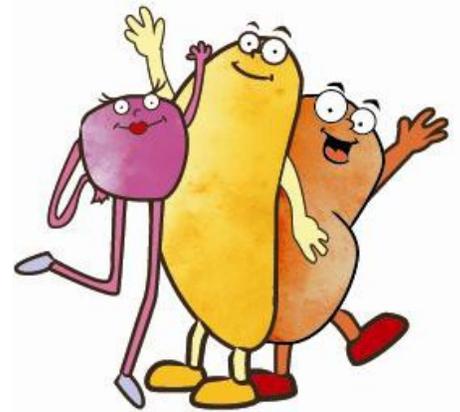
1. Explain to the class that they are going to see exactly how much sugar is in a soda.
2. Have a student look at the soda can nutritional label to find out how many grams of sugar are in it. As in the preceding activity, it is important to show students the serving size and how that impacts the total sugar in the container. For example, if the soda used in this demonstration contains 2 servings, the number of grams of sugar indicated on the label per serving will need to be doubled.
3. Explain that 4 grams is equal to about 1 teaspoon. (You will divide the total number of grams of sugar in the soda container by 4 to find how many teaspoons of sugar are in the drink.)



4. Set out the bowl/glass and fill it with the number of teaspoons of sugar (the answer from 3).
5. **Ask the children if they are surprised.** Remind them that the recommended limit is 3 teaspoons for the entire day. **If they drink this one soda, will they be drinking more than the 3 teaspoons of sugar they should have in a day?**
6. Summary Questions:
 - In the video, what food does Sugar Baddie put in Yukon and Russet's mouths? Give an example of a healthy snack they could eat instead of the cake.
 - How might Russet and Yukon have behaved differently when they were tempted by all the desserts?

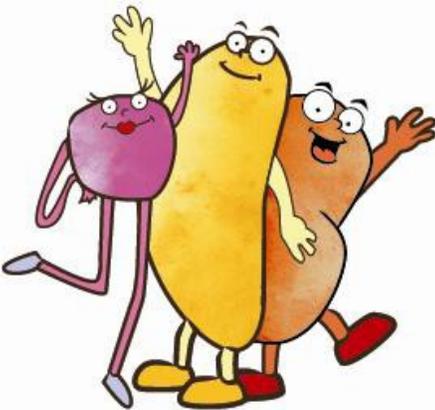
Be A Sugar Detective (45 minutes)

This is both a math and reading activity. Students will work together to discover how much sugar is in the beverages that they consume.



1. Explain to students that they will be detectives who find the amount of sugar in drinks by reading Nutritional Fact tables. They will work in groups to fill in the chart, "Where is Sugar Hiding?" with the information. You should model this by completing a sample student chart with the class.
2. Divide the class into groups of 4. Assign one student in each group to be the "Recorder." The "Recorder" will record the team's information on the worksheet. The other students in the group will be the "Detectives."
3. Each "Detective" will choose one empty drink container. They will read the label to find the number of grams of sugar in it. Then, they will represent the number of grams with Unifix cubes. The students will need to check the serving size and add those same number of cubes for each serving listed. For example, if the drink has 4 grams of sugar in each serving, and the entire container holds 3 servings, the students will need to count out the 4 grams three times for a total of twelve to account for all servings.
4. The "Recorder" will write down the number on their group's chart.
5. Every student in the group will say if they drink this drink.
6. The "Recorder" will write down the number of kids in the group who do consume that drink.

7. Repeat steps 3 – 6 for each drink on the worksheet.
8. The group will use the information they collected to put the drinks in order from those with the least grams of sugar to those with the greatest.
9. Groups report back to the class to discuss their investigations.
10. Summary Questions:
 - What three sugary foods does Sugar Baddie turn into in the video?
 - Did you see any of the drinks from your experiment in the video? Which ones? Would drinking those drinks be a healthy choice?
 - In the video, is the Sugar Baddie character a bad guy or a good guy? Defend your answer. Does he help Yukon and Russet make good, healthy choices?



Kindergarten Activities

Option One:

TEKS: Math: 1(A,B,C); 13(A)

Display an enlarged nutritional fact table with the sugar grams highlighted. Have students work with partners to show the sugar in the drink by counting out the number of grams using Unifix cubes.

It is important to show students how to read the serving size and where this information is located above the nutritional chart. If the drink contains more than one serving, the teacher should explain this to the children. For example, if the drink contains 2 servings, illustrate this by pouring it into two glasses. The students can then show the amount of sugar in each serving (glass) using Unifix cubes.

Materials: Unifix cubes or familiar counters, various nutritional fact labels that have been enlarged for this lesson. These are available online at:

<http://extension.missouri.edu/fnep/JIFF/7samplelabels.pdf>

Option Two:

TEKS: Math: 1(A,B,C); 13(A)

Display an enlarged nutritional facts table with the sugar grams highlighted. Have children locate the number on a “Hundreds Board.” Do this for several different drinks.

Compare the sugar amounts in each drink by comparing which numbers are larger/smaller. As noted in the activity above, the number of servings that a drink contains should be brought to the students' attention and calculated to show the total sugar in that drink. The number of grams of sugar in the total drink can then be located on the "Hundreds Board."

Materials: A class "hundreds board" or smaller boards for each pair of students, various nutritional fact labels that have been enlarged for this lesson. These are available online at: <http://extension.missouri.edu/fnep/JIFF/7samplelabels.pdf>

Second Grade Activities

Option One:

TEKS: Math: 11(A,B); 13(A,B)

Print the reproducible label samples from this site:
<http://extension.missouri.edu/fnep/JIFF/7samplelabels.pdf>

There are a total of 10 labels, 3-4 per page.

Give each student one page. Have the student locate the number of grams of sugar in each food item on their page.

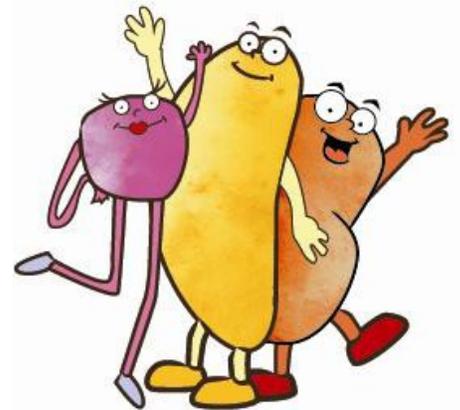
The student will create a bar graph to compare the sugar content of the different food items. They can also create a pictograph by illustrating the number of grams of sugar in pennies. One penny weighs approximately 1 gram and can represent each gram of sugar.

Note that it is critical to draw students' attention to the serving size and show them how to interpret this information. For example, if the beverage used contains 2 servings and each serving has 20 grams of sugar, students would need to count out 2 sets of 20 pennies to represent the total grams of sugar that the drink contains.

Materials: copies of sample nutritional labels from website, paper for student graphs

Option Two:

TEKS: Math: 13(A,B)



Have kids keep a journal of what beverages they drink and the amount of sugar in them for one week. As noted in the activities above, make certain that the students are aware of the number of servings a drink contains and to include the total grams of sugar present in the entire drink.

Materials: a sheet of paper to record their beverage choices and the grams of sugar.

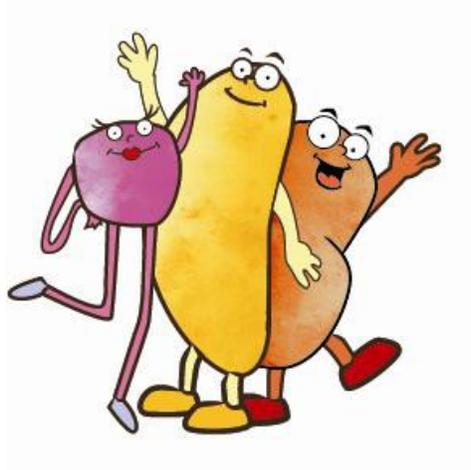
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<http://www.fda.gov/Food/ResourcesForYou/Consumers/NFLPM/ucm274593.htm#twoparts>

<http://extension.missouri.edu/fnep/JIFF/7samplelabels.pdf>



Sugar: Master of Disguise Lyrics

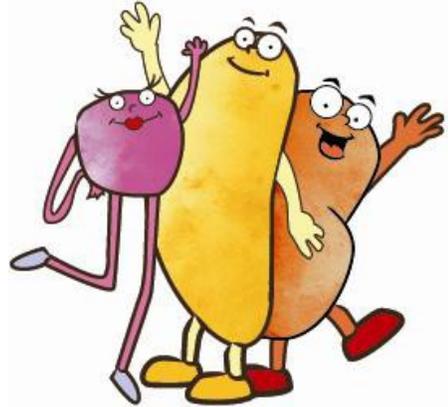
I go by many names
I'm a master of disguise
Dexrose, fructose, sucrose
And corn syrups' where I hide

I conceal myself in many foods
I love to ruin your good mood
I'll take you up
You'll feel so high
And then I'll drop you from the sky

You'll be cranky, crabby too
My sugar is so bad for you

Tastes, tastes, tastes so sweet
But watch what happens as you eat
Those teeth will rot
That belly pops
Diseases come
Oh, that's no fun

But me – I'm just so sweet
It's just a little treat
So go ahead...eat, eat, eat
BAAHHHAAAAHAAA!



Sugar: Master of Disguise Lyrics
(Spanish Translation)

Yo tengo muchas caras Soy
maestro del disfraz Dextrosa,
fructose y sacarosa Jarabe,
miel y mucho más
No te creas que no haya peligro
De encontrarme escondidito
Si te sientas un poco emocionado
Y luego muy malhumorado

Estarás del mal humor
Mi azúcar te causará un dolor
Tengan cuidado amiguitos
Tal vez podrán ver efectos nocivos
Dientes podridos, y barriguitas revueltas
Entre más devoras, lo más te enferma
Y a cualquiera que pregunte, cualquiera que se asome
Yo le diré come, come, come

