

PRESENTATION GUIDE: “BE SUGAR SAVVY”

INGREDIENTS FOR A DYNAMITE DEMONSTRATION

Supplies

- 1 baggie filled with 17 sugar cubes
- 1 empty 20-ounce soda bottle

Handouts

- Be Sugar Savvy: Presentation guide
- Calculating Sugar in a Container
- Show Me the Sugar!
- Sugar Shockers!
- Frequently Asked Questions About Sugar

STEP 1— WE ARE EATING TOO MUCH SUGAR

[Ask the audience] How much sugar do you think the average American eats in a year?

[Answer] Almost 60 pounds a year...

The average person eats about 17 teaspoons (or 17 cubes) of sugar a day or 5 pounds a month. This is what 17 teaspoons of sugar looks like. And this is 5 pounds of sugar.

[Hold up 17 sugar cubes in a baggie. Reveal 5 pounds of sugar.]

The good news is that this has gone down. When this curriculum was developed in 2007, the average American was consuming about 26 teaspoons of sugar a day, which was about 100 pounds a year. Extra calories from all this sugar can contribute to serious health problems such as diabetes, certain cancers and heart disease.

STEP 2— RE-THINK YOUR DRINK

You’re probably wondering “is it really possible that people eat this much sugar?” And “where is all this sugar coming from?”

We’re talking about the extra sugar that manufacturers add to food and drinks. Most of the added sugar in our diets comes from sodas and other sweetened beverages. So, let’s begin to *think about what we drink*. For example, look at how much sugar is in a 20-ounce soda, since this is a common size. We’ll start by reading the label.

Use the Label

The label tells us there are over 16 teaspoons of sugar in this bottle. How do we know that by reading the label?

[Pass out label with calculation]

If we look at the label for the whole package, there are 65 *grams* of sugar in this bottle. Since grams are a measure that most people don’t use, let’s change the grams into teaspoons... How many *teaspoons* of sugar are in this bottle?



**4 grams of sugar equals one teaspoon.
If you divide 65 grams by 4, you get about 16.25 teaspoons.**

How Much Sugar is in That Bottle?

Let's see what 16 teaspoons of sugar looks like.

[Ask for a volunteer to count out 16 sugar cubes from the baggie]

Please count out 16 teaspoons/cubes of sugar and put them in this 20-ounce bottle. I'll help you count. [Count: 1-2-3-4-5...keep going! ... you're halfway there...] O.K. Take a look at this bottle. This is the amount of sugar in this one 20 oz. soda.

Let me ask you a question...would you put this much sugar in your coffee?

So...now... don't you want to *re-think your drink*?

STEP 3— SHOW ME THE SUGAR!

I know some of you are thinking: "I'm safe. I don't drink soda every day."

That's great! But soda is not the only place we find an abundance of sugar in our diets. Eating and drinking large amounts of sugar has become way too easy. Most processed or packaged foods and beverages contain some added sugar, and many contain a shocking amount.

*[Pass out **Sugar Shockers** list (Popular Food Items Ranked by Amount of Sugar)]*

Sugar Shockers

Remember how we said the average person eats *about 17 teaspoons of sugar a day*? Well look how easy it is to get to that amount:

Let's start at the beginning of the day with a bowl of cereal, like the popular Kellogg's Special K, and a cup of coffee. If you look at the **Sugar Shockers** list, you'll see that Special K contains one teaspoon of sugar, and you added one teaspoon of sugar to your coffee.

[Count out 2 sugar cubes from baggie and place on your demo table]

At lunch, let's have a Subway Salad with sliced turkey and Fat Free Italian Dressing. As you can see from your **Sugar Shockers** list, the salad with dressing totals 9 grams of sugar, which is about 2 teaspoons. We're doing OK so far!

However, when we add in our 20-ounce soda (which, as you remember, contains about 16 teaspoons of sugar), we've had a total of 18 teaspoons of sugar for lunch!

[Count out 18 more sugar cubes for lunch]

So, we've had 2 teaspoons of sugar for breakfast and 18 for lunch, which totals 20 teaspoons. It's only mid-day and we've already surpassed the daily average of 17 teaspoons of sugar!

[Hold up empty baggie]

Now it's the afternoon and we're ready for a little break. Looking at your Sugar Shockers list, see if you can pick out one or two items that you or your family might eat in a typical day.

[Ask the audience] Which snacks did you pick?

Here's what I've chosen:

I feel like having some chocolate and so I've chosen a Snickers bar. When I check the Sugar Shockers list, I see that this snack contains 8 teaspoons of sugar! So, let's see where we are now in our total teaspoons of sugar for the day...

[20 tsp from breakfast and lunch + 8 tsp for a snack = 28 tsp of added sugar!]

With this snack, I've eaten 28 tsp of sugar—far more sugar than the daily average of 17 tps!

Food/Beverage	Container Size	Grams of Sugar	Teaspoons of Sugar
Special K Cereal	1 cup	4g	1 tsp
Coffee with 1 tsp sugar	8 oz cup, 1 tsp sugar	4g	1 tsp
Subway salad with fat free dressing	1 salad, 2 oz. dressing	9g	2 tsp
Regular Cola	20 oz.	65g	16 tsp
Snickers bar	2 oz.	30 g	8 tsp
TOTAL TEASPOONS			28 tsp

If you thought it was hard to imagine eating 17 teaspoons of sugar a day—well, we're there already. See how quickly the sugar adds up, and we haven't even had dinner or dessert!

If we had chosen to drink water for lunch instead of soda, and had an apple for an afternoon snack, we would be at only 4 teaspoons through breakfast, lunch and a snack—which is way below the daily average of 17 teaspoons of added sugars!

STEP 4— BE SUGAR SAVVY

What else can we do, besides switching to water, to have a healthy diet? First, we need to know how to find the added sugar in foods and beverages, so we can limit it.

*[Pass out **Show Me the Sugar** handout]*

Show Me the Sugar

Let's look at the product shown on this handout — it's a box of cereal bars. The box tells you that they are heart healthy, they lower both blood pressure and cholesterol, and the product is named "Smart Start." But the Nutrition Facts label tells us that one small bar has 13 grams of sugar, which is more than 3 teaspoons.

It's important to know where to find the hidden sugars in any product. Take a look at your handout for a list of common names for sugar-in-disguise. *Can someone in the audience read the list of common names for sugar?*

Now that we've heard all these different names, let's look at the Smart Start Healthy Heart Bars Ingredients List to find all the sugar. The words highlighted in red are all names for sugar in this one product. *Let's say them aloud together...*

[Ask the audience] How many different forms of sugar are in this one product?

[Answer] 12

A Low-Sugar Lifestyle

How can we lead a healthier, low-sugar lifestyle?

[Invite audience to answer]

Here are some tips:

1. Limit added sugar as much as possible. It is best to eat fresh, whole foods, especially fresh fruits and vegetables, and limit processed and packaged foods.
2. Drink water instead of sugary drinks. Water is best and has absolutely no sugar. Try replacing at least one sugary drink with water every day. You can add a slice of orange, lemon, or cucumber for almost no calories and lots of flavor. Other healthy drink options are non-fat milk, unsweetened iced tea and 100% fruit juice in limited amounts—not more than half a cup a day). *Once is a while* diet soda is OK; it doesn't contain the added sugar but is still *not* a healthy drink alternative.
3. Remember: one small change will make a big difference. Added sugar is everywhere. So... **Be Sugar Savvy! Know how to find it; know how to limit it; and know how to replace it** with healthy options.

CALCULATING HOW MUCH SUGAR IS IN A CONTAINER

Nutrition Facts		Amount/Serving	% Daily Value
		Total Fat 0g	0%
		Sodium 75mg	3%
		Total Carb. 65g	24%
		Total Sugars 65g	
		Incl. 65g Added Sugars	130%
		Protein 0g	
Serv. Size 1 Bottle			
Calories per serving	240	Not a significant source of sat. fat, <i>trans</i> fat, cholest., fiber, vit. D, calcium, iron and potas.	

Calculation:

Grams of Sugar ÷ 4 = Teaspoons of Sugar

65 Grams ÷ 4 ≈ 16 Teaspoons

Note: If the container has more than one serving, multiply the number of teaspoons by the number of servings to get the Total Teaspoons of sugar in the container.

For example: 10 teaspoons x 2 servings = 20 total teaspoons in the container



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Sugar Shockers!

Popular Food Items Ranked by Amount of Sugar

Food	Typical Serving	Calories	Sugar (g)	Sugar (tsp)
McDonald's Triple Thick Choc Shake (medium)	16 oz	580	84	21
Coca Cola (regular)	20 oz	240	65	17
Rockstar Energy Drink	16 oz	280	62	16
Sunny Delight	16 oz	260	60	15
Wendy's Vanilla Frosty (medium)	16 oz	410	57	14
Jarritos Mandarin Drink	16 oz	240	54	14
Snapple Lemonade Iced Tea	16 oz	220	54	14
McDonald's Deluxe Breakfast (w/ regular sized biscuit)	1 meal	1320	49	12
Starbucks Grande Mocha Frappuccino (no whipped cream)	16 oz	290	48	12
Dryer's Grand Rainbow Sherbet	1 cup	260	46	12
Tropical Skittles (regular sized bag)	2.17 oz	240	45	11
Capri Sun Fruit Drink (big pouch)	11.25 oz	152	38	10
Original Gatorade	20 oz	140	35	9
Vitamin Water	20 oz	125	32	8
Original Kool-Aid (1 scoop dry mix and 16 oz water)	16 oz	120	32	8
Plain M&Ms (regular sized bag)	1.69 oz	240	31	8
Yoplait Yogurt (flavored, 99% fat free)	6 oz	180	31	8
Snickers (regular bar)	2 oz	280	30	8
Otis Spunkmeyer Wild Blueberry Muffin	1 muffin	420	30	8
Bubble/Boba Tea	16 oz	265	29	7
Red Bull Energy Drink	8 oz	110	27	7
French Toast Sticks (frozen)	5 pieces	513	26	7
Cap'n Crunch Cereal	1.5 cups	220	24	6
Pancake Syrup	2 tbsp	98	24	6
Gummi Bears	14 bears	140	22	6
Burger King Honey Flavored Dipping Sauce	1 oz	90	22	6
Oreos	3 cookies	160	14	4
Nutrigrain Mixed Berry Cereal Bar	1 bar	140	13	3
Kellogg's Fruit Flavored Snacks	1 pouch (25 g)	80	13	3
GoGurt	2.3 oz	80	11	3
Burger King Whopper Sandwich	1 sandwich	670	11	3
SpaghettiOs	1 can	332	10	3
Newman's Own Low-fat Sesame Ginger Dressing (packet)	1.5 fl oz	90	10	3
Kraft BBQ Sauce	2 tbsp	39	8	2
Lay's BBQ Chips	3 oz bag	525	6	2
Soy Vay Teriyaki Sauce	1 tbsp	30	5	1
Subway Turkey Breast Salad	1 salad	110	5	1
Fat Free Italian Salad Dressing	2 oz	35	4	1
Kellogg's Special K Cereal	1 cup	120	4	1
Graham Crackers	2 squares	59	4	1
Del Monte Ketchup	1 tbsp	15	4	1



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SHOW ME THE SUGAR!

Nutrition Facts		
Serving Size	1 Bar	
Servings Per Container	6	
Amt Per Serving	%DV	
Calories	150	
Total Fat	2.5 g	4%
Saturated Fat	0 g	0%
Trans Fat	0 g	
Cholesterol	0 mg	0%
Sodium	85 mg	4%
Total Carbohydrate	30 g	
Dietary Fiber	2 g	9%
Sugars	13g	
Protein	3 g	

To find out how much sugar is in a package, first check the *Nutrition Facts* panel on the food package.

Look for the word “Sugars” to see how much sugar is in the food per serving. (To convert grams into teaspoons, divide grams by four.) To find the hidden forms of sugar, check the list of ingredients.

SUGAR HAS MANY DISGUISES

Sugar comes in many forms. Here are some common words for sugar in the ingredients list:

- | | |
|----------------------------------|--------------------------|
| Agave Nectar/syrup | Malt syrup |
| Barley Malt Syrup | Maltose |
| Brown-rice syrup | Mannitol |
| Corn sweetener | Maple syrup |
| Corn syrup, or corn syrup solids | Molasses |
| Cane Juice | Raw sugar |
| Dehydrated cane juice | Rice Syrup |
| Dextrin | Saccharose |
| Dextrose | Sorbitol |
| Fructose | Sorghum or sorghum syrup |
| Fruit juice concentrate | Sucrose |
| Glucose | Syrup |
| High-fructose corn syrup | Treacle |
| Honey | Turbinado Sugar |
| Invert sugar | Xylose |
| Lactose | |
| Maltodextrin | |



INGREDIENTS:

Oat bran, rice, **corn syrup, sugar, fructose**, whole grain rolled oats, **dextrose**, oat and fruit clusters (toasted oats [rolled oats, **sugar**, soybean oil, **honey, molasses**] **sugar**, rolled oats, strawberry flavored apples, **corn syrup, brown sugar**, natural and artificial flavors), **high fructose corn syrup**, vegetable oil, contains 2% or less of potassium chloride, **brown sugar**, sorbitol, glycerin, malt flavoring, natural and artificial flavor, salt, soy lecithin, niacinamide, nonfat dry milk, whole wheat flour, BHT, vitamin A, B6, riboflavin, thiamin mononitrate, folic acid, vitamin B12.

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Note: Product formulations, as well as packaging and portion size, may change over time. As a result, ingredients, amounts listed, and nutrition information may change.

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Frequently Asked Questions About Sugar

Is bottled water a healthier choice than tap water?

Not necessarily. A four-year review of the bottled water industry concluded that just because water comes out of a bottle, there is no assurance that it is any cleaner or safer than water from the tap. In fact, about 25 percent or more of bottled water is really just *tap water in a bottle*—sometimes it is treated further and sometimes it is not. In addition, bottled water is not as rigorously regulated as tap water and —unlike water from the tap—often lacks fluoride, which is essential for dental health. Finally, bottled water costs considerably more than the water that comes from your tap. According to the East Bay Municipal Utility District (EBMUD), our local tap water is considered safe and does not require further filtering or purification.

Is diet soda better than regular soda?

Diet soda does not contain the sugar and calories that regular soda does, but it is still not considered a healthy drink alternative. Although most of the artificial sweeteners used in diet sodas have been deemed safe (see below), diet sodas, like regular sodas, provide no nutritive value and contain phosphoric acid, an ingredient that could increase the risk of bone loss later in life.

Are artificial sweeteners safe?

Artificial sweeteners are widely used to reduce or replace the sugar in foods and drinks while keeping the taste and reducing the calories. In 2023, Aspartame, one of the most widely used artificial sweeteners, will reportedly be classified as a possible carcinogen by the World Health Organization. The WHO has released a new guideline on non-sugar sweeteners (NSS) which recommends against the use of NSS to control body weight or reduce the risk of noncommunicable diseases. Common sweeteners include: Equal® or Nutrasweet® (aspartame) in the blue packet; Splenda® (sucralose) in the yellow packet and Sweet N Low® (saccharin) in the pink packet.

Is the high fructose corn syrup used to sweeten sodas and other beverages a problem?

High fructose corn syrup flooded the American food supply in the early 1980s, about the same time as the unprecedented rise in obesity rates. Some researchers believe that high fructose corn syrup may have different metabolic effects in the body than other sugars and as a result, corn sweeteners have been accused of being major contributors to the nation's obesity epidemic. However, most experts believe that the real problem with high fructose corn syrup is that it is an especially inexpensive and ever-present form of sugar. High fructose corn syrup is pervasive in the food supply and we are eating too much of it in the form of empty calories in ever-increasing portion sizes.

Are energy drinks a healthy beverage option?

“Energy drink” is a term created by the beverage industry. Energy drinks are not considered to be healthy as they contain extremely large amounts of sugar and caffeine, along with some vitamins and herbal ingredients. Examples of energy drinks include Red Bull and Rockstar. These beverages are not recommended for children and adolescents because they may cause an elevation in blood pressure.



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Does carbonated or sparkling water impact our health?

If consumed in large amounts (six or more servings per day) the phosphoric acid used to carbonate beverages can reduce calcium levels and lead to a higher risk of bone loss. However, in moderation, carbonation does not impact health.

Are sports drinks, electrolyte replacement drinks, and vitamin waters healthy beverage options?

Sports drinks and electrolyte replacement drinks can be healthy options for people participating in endurance events to increase liquid intake, replace electrolytes and provide energy. Most people, however, do not need sports drinks since regular food and beverage intake is sufficient to replace electrolytes lost during moderate physical activity. Vitamin waters are made with distilled water, fructose, electrolytes and vitamins, and some varieties may also contain caffeine. Like sports drinks and electrolyte replacement drinks, vitamin waters are not unhealthy, but can be expensive and are not necessary if one eats a well-balanced diet and is adequately hydrated.

What is the difference between the sugar in candy and the sugar in fruit?

There is an important distinction between the sugar in candy and the sugar in fruit. Foods like candy are high in *added sugar*—which refers to any type of sugar that has been added during the processing of a food or beverage— and these foods supply *empty calories*—which means they have few nutrients but lots of calories. Fruits also contain sugar but unlike candy, the sugar is naturally occurring (already part of the food) and it contains nutrients (vitamins, minerals, fiber, etc.) that are an important part of a healthy diet.

Is honey healthier than sugar?

Honey is not healthier than sugar because both sweeteners are made from the same two sugar molecules, and both contain about the same amount of calories per serving.

Why are low-fat foods so high in sugar?

In low-fat or fat-free foods, manufacturers often replace the fat with sugar to maintain the product's taste and texture. Recent studies indicate that people actually eat *28% more calories* when they eat low-fat foods!

Does sugar cause diabetes?

Eating excessive amounts of sugar does not cause diabetes directly. Many factors are involved in developing diabetes, some of which include genetics, being overweight, and lack of exercise. Excess sugar intake may contribute to weight gain which may in turn contribute to the development of diabetes.

How does juice compare to soda?

100% fruit juices may have about as many calories as sodas and other sweetened soft drinks, but they also contain vitamins, minerals, phytochemicals and some fiber. It is best to limit the intake of fruit juice and instead eat more whole fruits because they retain all their nutrients and are more filling than juice.

Frequently Asked Questions About Sugar

Does soda make people fat?

Regular, non-diet sodas and other sugar-sweetened beverages contribute to weight gain. Sodas contain about 140–150 calories (all from sugar) in a 12 oz. can. By adding just one can of regular soda a day to one’s diet, everything else being equal, the average person will gain 15 pounds in a year. Even for people who are not watching their weight, there is no reason to fill up on “empty” calories from soda.

Does soda harm teeth?

All sugary foods, including sodas, can cause tooth decay, especially if they are consumed frequently and without regular brushing.



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