

Sugar Basics

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By the end of this session you will:

- Locate sugar on the food label and ingredient list.
- Be able to find different types of sugar under the ingredient list.
- Identify cereals and other food items that are high in sugar.
- Be able to make nutritious substitutes for candies and cookies.

How much juice or soda is your child drinking per day?

- < 6 ounces
- 6-12 ounces
- > 12 ounces
- none

What is sugar?

- Sugar is identified as sugar or sucrose which is a simple carbohydrate derived from sugar cane beets. Sucrose's most important properties are its water solubility and its sweetness.
- Other simple carbohydrates or refined sugars on the market include fructose, glucose, high fru syrup, lactose, and maltose.

How much sugar are Americans eating?

- Americans consume about 64 lbs of sugar and sweeteners per person per year.
- Currently, Americans are consuming more than 20 teaspoons of sugar a day that equals to 320 can of Pepsi has 10 teaspoons of sugar and contains 150 calories.

Sugar Facts

- My Pyramid and other dietary guidelines say to use sugar in moderation.
- Since sugar contains calories, high intakes of sweets such as candy, cakes, and pies can lead to gain. You may notice that "low fat" products are often higher in sugar and sometimes calories.
- You can decrease eating simple sugars by purchasing less processed foods that are made with :
 - 1 teaspoon of sugar has about 16 calories
 - 1 teaspoon of sugar equals 4 grams

Finding Sugar on Food Labels

- Sugar can be found on the food label under total carbohydrate.
- You can find different types of sugar under the ingredient list. Here is a list of common sugars:
 - Sucrose
 - Fructose

- Glucose
- High fructose corn syrup
- Lactose
- Maltose
- Be sure to look for other refined sugars in the ingredient list such as confectioners sugar, powdered sugar, dextrose, maple syrup, tubinado sugar and mannitol sugar.

The ingredients listed first on the ingredient list are the highest amount for that particular food item.

Where to Find Sugar on the Nutrition Facts Food Label

Sugars: No daily reference value has been established because no recommendations have been made for the total amount of sugars to eat in a day. Keep in mind, the sugars listed on the Nutrition Facts panel include naturally occurring sugars (like those in fruit and milk) as well as those added to a food or drink. Check the ingredient list for specifics on added sugars.

Sugar on the ingredient list

The ingredient list is usually located under the Nutrition Facts Food Label of a food item or on the side of the food label. For example:

Baked Apple Pie:

Apples, corn syrup, sugar, water, modified corn starch, sorbitol, dextrose, brown sugar, sodium alginate, spices, citric acid, salt, dicalcium phosphate. In a pastry consisting of: Enriched bleached wheat flour (reduced iron, thiamine mononitrate, riboflavin, folic acid), vegetable shortening (partially hydrogenated soybean and/or cottonseed oil), water, sugar, less than 2% of salt, yeast, l-cysteine (dough conditioner), lecithin. Topping: sugar, spice, partially hydrogenated soybean oil.

*Notice corn syrup is listed second on the ingredient list letting us know that sugar is a main ingredient.

* 1. There are _____ grams of sugar listed on the food label above.

- 5 grams
- 3 grams

2. List two different types of sugar that can be found under the ingredients list.

a.

b.

* 3. Calculate: A can of soda has 40 grams of sugar. How many teaspoons of sugar are in that can?

- 8 teaspoons
- 10 teaspoons
- 12 teaspoons

* 4. How many calories are in a can of soda?

- 100 calories
- 200 calories
- 150 calories

For more information on reading food labels [click here!](#)

Where's the Sugar?

Sugar is natural in some foods such as fruit, milk, and bread products. Sugar is also added to foods such as sucrose and corn syrup. Examples of these foods are candies and soft drinks. Many products have added sugar that is not needed in our diet. When buying juices look for items with "No sugar added" on the label. When buying canned fruit, look for fruits "in it's own juice" or in "light syrup". These items tend to have less sugar. Listed below are foods containing a combination of both types of sugars.

Food Item	Size	Grams of Sugar
Kroger Low Fat Cherry Yogurt	8 oz	43 grams
Ocean Spray Grape Juice	8 oz	40 grams
Dannon Yogurt Banana, Strawberry	8 oz	38 grams
Ocean Spray Cranberry with Calcium	8 oz	37 grams
Starbucks Frappacino	9.5 oz	30 grams
7UP	8 oz	26 grams
Pepsi	12 oz	40 grams
Tree Top Apple Juice 100%	8 oz	26 grams
Pillsbury Grands Cinnamon Rolls	17.5 oz	23 grams
Snapple Iced Tea with Lemon	8 oz	23 grams
Ocean Spray Jellied Cranberry Sauce	¼ cup	21 grams
Del Monte Lite Fruit Cocktail	½ cup	14 grams
Cut Yams in light syrup	½ cup	20 grams

Look at the table above and answer the following questions.

* 1. Select the food item with the highest amount of sugar.

- Ocean Spray Cranberry with Calcium
- Kroger Low Fat Cherry Yogurt

* 2. Select the food item with the lowest grams of sugar.

- Del Monte Lite Fruit Cocktail
- Cut Yams in light syrup

Sugar in Breakfast Cereals

Other common foods that most children and adults eat are breakfast cereals. Like most packaged foods, cereals contain a lot of sugar. Let's compare the sugar of breakfast cereals for a 1 cup serving in the table below.

Cereal	0-1 tsp	1-2 tsp	2-3 tsp	3-4 tsp	4 + tsp
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Cheerios Regular	X		
Corn Flakes	X		
Shredded Wheat	X		
Grape Nuts		X	
Honey Bunches of Oats		X	
Life		X	
Cap'n Crunch			X
Frosted Flakes			X
Golden Grahams			X
Apple Jacks			X
Coco Puffs			X
Trix			X
Cinnamon Cluster Raisin			X
Total Raisin Bran			X
Cracklin Oat Bran			X

Look at the Breakfast Cereal table above and answer the following questions.

* 1. Select the cereal that has 4 teaspoons or more of sugar.

- Cinnamon Cluster Raisin
- Golden Grahams

* 2. Select the cereal with the least amount of sugar.

- Corn Flakes
- Golden Grahams

Tips to Reducing Sugar

Read the nutrition fact label and the ingredient list; purchase foods with lower amounts of sugar.

- Purchase breakfast cereals with the least amount of sugar and add fresh fruit.
- Purchase low-fat plain yogurt and add your favorite fruit.
- Add spices, such as cinnamon to add flavor to your toast or other snacks.

Sugar and Obesity:

Eating sugar does not make you "fat". Eating too many calories, not sugars, causes your body to produce pounds of body fat. Increasing your total caloric intake combined with a lack of physical activity will result in an increase in body size.

Also note that "sugar-free" does not mean "calorie free". A sugar-free food may not contain sugar, but contain calories from other carbohydrates, fat, and protein. To find the calories and total sugars in a serving of any packaged food, read the Nutrition Facts panel on the food label.

Sugar and Tooth Decay:

Unless we brush our teeth after every meal, it is inevitable that sugar will be left on and in-between teeth. This is what causes tooth decay. Eat healthy snacks to prevent erosion of the teeth. Choose low sugar like WIC cereals as opposed to high sugar cereals such as sugary snacks. Minimize foods that are high in sugar such as cookies, candies, kool-aid and sodas.

Fruit Snacks Ideas (without the added sugar):

- Fruit Pops. For a nutritious popsicle, freeze fruit (mango, papaya, or apricot) juice in ice cube paper cups with wooden sticks.
- Frozen Bananas. Push a wooden stick into half of a peeled banana. Roll in yogurt or a light coating of chocolate syrup, then in crunchy corn flakes. Wrap and freeze.
- Fruit-Mix. Mix up a zipper-top bag of dried fruits of your choice: apple slices, apricots, blueberries, cherries, cranberries, pear slices, and raisins, among others.
- Frozen chips. Slice bananas into thin rounds. Spread them flat on a baking pan; cover. Freeze and enjoy as a fun snack.

Recipes:

Apple Muffins

Makes: 12 muffins

Ingredients:

1½ cups sifted all-purpose flour
½ tsp. cinnamon
2 tsp. double-acting baking powder
½ tsp. salt

½ cup Splenda®
1 egg
1 cup skim milk
¼ cup applesauce
1 cup grated raw apple with skin (remove core first)

Preheat oven to 400° F.

Line a muffin tin with paper baking cups. Sift flour, cinnamon, baking powder, salt, and sugar into bowl. In a separate smaller bowl beat egg until frothy. Stir in milk, applesauce, and grated apple well in flour mixture. Pour liquid ingredients into dry ingredients all at once. Stir quickly, just until Do not beat. Mixture will be lumpy.

Bake for 25 minutes.

Calories: 119, Fat: 1 gram, Carbohydrate: 25 grams

Blueberry Cobbler

Makes: 2 servings

Ingredients:

5 oz frozen blueberries
¾ tsp flour
4 packets Equal

1/3 cup Bisquick
3 Tbsp skim milk
1 Tbsp vegetable oil
Cooking spray

Use two individual oven proof glass custard cups for baking. Spray cups with cooking spray. Let blueberries thaw until they are separated. Mix flour and Equal into the blueberries and put mixture into prepared dish.

Add milk and oil to Bisquick; mix until dry ingredients are moistened. Mixture will be lumpy. Spoon onto berry mixture. Bake for 15 minutes at 400° F. Reduce oven temperature to 350° F and bake until golden brown.

Peanut Butter Drops

Makes: 60 cookies

Ingredients:

1 1/4 cups all-purpose flour
1/2 tsp baking soda
1/4 tsp salt
1 cup brown sugar

1/2 cup butter
1/2 cup peanut butter
1 tsp vanilla
1 egg
1/4 cup turbinado sugar

Preheat oven to 350° F. Coat 2 sheet pans with baking spray.

In medium bowl, whisk together flour, baking soda and salt. Set aside.

In large bowl, cream together brown sugar, butter and peanut butter. Gradually stir in vanilla and e flour mixture and blend well.

Drop dough by teaspoonfuls onto prepared sheet pans, spacing cookies about 2 inches apart. Dip the the glass in sugar and press cookies flat, dipping glass between each pressing. Sprinkle cookies with sugar. Using the tines of a fork, make a criss-cross pattern on the top of each cookie.

Place cookie sheets in preheated oven and bake 10 - 12 minutes, until golden brown on bottom. Rer cookies from sheet pans; transfer to racks to cool completely.

49 calories; 5 g carbohydrate; 3 g fat, 1 g saturated fat

Let's Review!

- * 1. My Pyramid and other dietary guidelines recommend using sugar in moderation.
 True False
- * 2. Excessive calories from sweets like candy, cakes, and pies can lead to weight gain.
 True False
- * 3. You can decrease eating simple sugars by purchasing more processed foods.
 True False
- * 4. Fruit snacks are nutritious substitutes for candies and cookies.
 True False
- 5. List one fruit snack you can substitute for candies and cookies.

Thank you for completing the Sugar Basics Education Component.