

Lesson 3.1: Reduce Sugar-Sweetened Beverages



Background (Read before you teach): Health experts recommend drinking water instead of sugary beverages. Sugar-sweetened beverages, including colas, teas, fruit-flavored drinks/punches, sports drinks and others are the largest source of added sugar in the diets of US children and adults (USDA and HHS, 2016). Consuming a lot of added sugar makes it hard to achieve a healthy eating pattern. Dentists worry that the popularity of sports drinks, which are high in sugar and acid, may increase dental caries and erosion of teeth among children (Broughton, Fairchild, & Morgan, 2016). Energy drinks may be very high in caffeine and have been associated negative health effects in children, including feeling jittery or irritable, sleep disturbance, and increased blood pressure (Seifert, Schaechter, Hershorin, & Lipshultz, 2011). Choosing healthy foods and beverages that limit added sugars helps reduce the risk of cardiovascular disease, obesity, type 2 diabetes, and some types of cancer.

Figure 1. Parents learning about sugar-sweetened beverages.

Whereas consumption of sugary beverages among US children has declined over the past 10 years (Mesirow & Welsh, 2015), the opposite is true in Mexico (Stern, Piernas, Barquera, Rivera, & Popkin, 2014). In particular, consumption of flavored milk, *agua fresca* (fruit water with added sugar), and other fruit drinks increased from 1999 to 2012 among Mexican children. To make healthier beverage choices, parents often need to see how much sugar is found in different beverages. Since fruit and fruit-flavored beverages are popular in Mexican-origin audiences, promoting fruit-infused waters without added sugar can be an effective strategy.

Teaching Tips: While parents compare sugar content of different beverages, children can taste the fruit-infused waters in small cups and vote on their favorite flavors. Sharing the voting results with the parents is a good way to show that children accept fruit infused waters.

Target Audience: Latino families with young children, ages 3 to 8 years

Key Message: Drink water instead of sugary beverages.

Objectives: By the end of the lesson, participants will be able to:

- Compare amounts of added sugar in different kinds of beverages;
- Identify reasons for choosing water instead of sugar-sweetened beverages; and
- Try healthy alternatives to sugar-sweetened beverages.

Materials:

- Pens
- Assortment of empty beverage containers
- Bags of sugar
- Poster paper
- Markers
- Small cups and other supplies for food demonstration/tasting (suggested Fruit Infused Waters)

Handouts: beverage worksheet and answer sheet (2 pages), recipes (suggestion: fruit-infused waters)

Set-up: Collect empty bottles, cans, or juice boxes to get assortment of sugar-sweetened beverage containers in different sizes. Look for 8 or more containers of regular (non-diet) soda, ice tea, sports drinks, energy drinks, or fruit-flavored drinks. Alternatively, you might ask participants to bring empty beverage containers from their homes. Cover the containers with colored paper and write a letter (A-H), type of beverage, and container size on the paper. In plastic bags numbered 1-8, add tsp of sugar or sugar cubes to show amount of sugar in the different beverages. Use Table 1 below as a guide to prepare bags and containers for the activity. Additional information is available at (<https://ndb.nal.usda.gov/ndb/search/list?home=true>). For opening question, find a 44 oz cup and put about 10 Tbsp (30 tsp) of sugar in a small plastic bag. On day of the class, prepare three types of infused waters for tasting, making enough for adults and children. Be sure to prepare waters a few hours before class for the fruit to flavor the water. Arrange bags and containers on the tables before class. At each chair, place a pen and beverage worksheet.

Table 1: Sugar content of beverages

Beverage	Amount	Calories	Added sugar (calories)	Sugar (tsp)	Food groups
Fruit-flavored drink (Sunny Delight)	8 oz	108	43	2.8	¼ cup fruit
Soft drink, cola (regular Pepsi, Coke)	12 oz can	136	126	8.4	X
Sports drink (Gatorade)	8 oz	63	49	3.2	x
Ice tea, instant powder (sweetened w sugar)	8 oz	47	21	3.1	X
Energy drink (Monster)	8.3 oz	107	107	7.1	X
Fruit smoothie, nondairy	8 oz	130	34	17	1 cup fruit
Juice drink, reduced in sugar (Caprisun)	8 oz	97	85	5.6	¼ cup fruit

Source: USDA Nutrient database, 2018 <https://ndb.nal.usda.gov/ndb/search/list?home=true>

Caffeine content varies: 5.8-32 mg/oz in Monster energy drinks; 2.8-3.2 mg/oz in Cola beverages; 0.7-2.4 mg in Ice teas ([caffeine informer](#))

Note; though 100% fruit juice contributes to the fruit group, whole fruits are a better choice because they provide more fiber.

Opening (Anchor): (10 min) Welcome! Review what was covered last time and ask if participants have made changes, based on their goals. Congratulate and encourage them to keep on making changes.

Today, we will be talking about why making healthy beverage choices is important for your family's health.

To begin the class, show participants a large plastic cup (44 ounces). **Ask:** how many teaspoons of sugar is in a regular soft drink that size? (Answer: About 30 tsp, almost 500 calories). **Say:** Many people are surprised to find out how much sugar is added to beverages.

Lesson (Add): (10 min) Discuss the following points:

Ask: Why should we try to drink sugary beverages less often? Why should families choose water instead of sugary beverages? Listen to responses and summarize the key points below:

- Most sugary beverages with a lot of added sugars give us calories but little or no other nutrients.
- Especially in young children, sugary beverages take the place of other beverages (like milk) and foods that children need for normal healthy growth.
- When young children drink sugary beverages before eating a meal, they eat less during mealtime, especially eat less vegetables.
- Drinking sugary beverages can increase calorie intake and the risk of obesity among both children and adults and type 2 diabetics. Sugary beverages can also lead to cavities and in babies and toddlers, baby bottle tooth decay.
- Doctors and other health experts recommend drinking water rather than sugary beverages as part of a healthy lifestyle to prevent diabetes.
- Some sugary beverages, particularly energy drinks, also contain caffeine which can interfere with sleep.

Activity (Apply): (30 min) While the assistant starts the food demonstration, the educator leads the activity.

- **Say:** Let's compare how much is actually in the beverages that many families drink. Note that there are 8 beverage containers and 8 bags of sugar. You will have about 10 minutes to work in pairs to match the beverage with the correct amount of sugar.
- After people are finished, hand out the answer sheet. **Ask:** What surprised you the most about the amount of sugar in different beverages?
- **Ask:** What can families do to limit sugary beverages? Think about the common habit of keeping sodas in the house, just in case a visitor comes—who really ends up drinking those sodas? What can you say to your children, to your spouse, or to other adults in your family about sugary beverages? Why is it important that parents and other adults in the family model good behavior by drinking water?
- Food demonstration, tasting and sharing. Pass around small cups of the each type of water to all participants.

Closing (Away): (10 min) Pair-up and set specific goals

What did you learn? Why is this information important to you? Choose a goal to work on this month (week). Try to choose a goal that is doable within a week. For example: "I will keep a pitcher of infused water in the refrigerator for my family" or "I will place a water pitcher on the table at dinner".

Write your goal on the recipe handout. Ask a friend or family member to help support you in reaching your goal. Invite families to share their goals.

References and Resources:

- Broughton, D., Fairchild, R. M., & Morgan, M. Z. (2016). A survey of sports drinks consumption among adolescents. *Br Dent J*, 220(12), 639-643.
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- Mesirow, M. S. C., & Welsh, J. A. (2015). Changing Beverage Consumption Patterns Have Resulted in Fewer Liquid Calories in the Diets of US Children: National Health and Nutrition Examination Survey 2001-2010. *Journal of the Academy of Nutrition and Dietetics*, 115(4), 559-566.e554.
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- Seifert, S. M., Schaechter, J. L., Hershorin, E. R., & Lipshultz, S. E. (2011). Health effects of energy drinks on children, adolescents, and young adults. *Pediatrics*, 127(3), 511-528.

Stern, D., Piernas, C., Barquera, S., Rivera, J. A., & Popkin, B. M. (2014). Caloric Beverages Were Major Sources of Energy among Children and Adults in Mexico, 1999–2012. *The Journal of Nutrition*, 144(6), 949-956.

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US Department of Agriculture and US Department of Human Health and Services. 2015-2020 Dietary Guidelines for Americans. Jan 2016 <http://health.gov/dietaryguidelines/2015/>

Make Better Beverage Choices (Eng and Spa)

- <http://www.choosemyplate.gov/sites/default/files/tentips/DGTipsheet19MakeBetterBeverageChoices.pdf>
- <http://www.choosemyplate.gov/sites/default/files/tentips/DGTipsheet19MakeBetterBeverageChoices-sp.pdf>

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