



Lesson Materials:

- Pencils/Pens
- Plastic baggies or clear eight to nine ounce cups
- Granulated sugar or sugar cubes (approximately one pound)
- Measuring teaspoons
- One 20 ounce soda bottle – see Training Day Preparation
- Set of Drink Label Cards
- Optional: Calculators

Trainer Materials:

- Sign-in sheet
- Name tags (optional)
- Self-stick flip chart paper
- Colored markers
- Nutrition Glossary
- Drink Label Card Calculations Key
- Optional: Water tasting ingredients and cups – see Training Day Checklist

Participant Handouts:

1. Set of Drink Label Cards
2. *Calculating How Much Sugar is in a Container* handout
3. *Show Me the Sugar!* handout
4. *How Much Sugar?* worksheet
5. *Nutrition Facts Scavenger Hunt* worksheet
6. Cucumber Mint Breeze recipe card
7. *MyPlate* icon
8. *Choose MyPlate* handout
9. *Make Better Beverage Choices* handout

Agenda

Welcome and Introductions	5 minutes
<i>MyPlate</i> Overview	5 minutes
<i>Rethink Your Drink Campaign</i>	5 minutes
Sugary Drinks Overview	10 minutes
Nutrition Label Reading Lesson & Activity	20 minutes
Do You Remember?	5 minutes
Reflection	5 minutes
Closing and Home Connection	5 minutes

Total Time

60 minutes

Objectives

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

1. Describe how healthy beverages fit into the *MyPlate* dietary recommendations;
2. Understand the link between sugary drinks, obesity, and type 2 diabetes;
3. Identify types of sugary drinks in their diets;
4. Calculate the amount of sugar in beverages they commonly drink;
5. Identify drinks with less or no added sugar.



Training Day Preparation:

1. **Make copies of participant handouts**
2. **Prepare sign in sheets and nametags**
3. **Collect Lesson and Trainer materials**
4. **Prepare display bottle:**
 - Empty and wash 20 ounce soda bottle and cap. Allow to dry completely.
 - Remove label from bottle and replace with Nutrition Facts label from Drink Label Cards for 20 ounce soda.
 - Fill bottle with 17 teaspoons of sugar or sugar cubes and recap.

Optional Display Materials and Handouts

- Sugar Synonyms poster
- *Beverages: Make Every Sip Count* handout
- *How Much Sugar is in Your Drink* poster
- Information about upcoming nutrition education opportunities

Training Day Checklist

1. **Sign-in sheet and nametags**
2. **Participant handouts (see list)**
3. **Lesson and Trainer materials (see lists)**
4. **Set up sugar, measuring spoons and baggies/cups on a table at the front**
5. **Optional: Set up water tasting**

Cucumber Mint Breeze

1 cucumber, washed and sliced

1 bunch mint, washed

Ice

Water

Pitcher or dispenser

Tasting Cups

1. Put half of ice in dispenser/pitcher.
2. Add lightly crushed mint leaves and sliced cucumber on top of ice.
3. Top with more ice, and then fill with water.
4. Serve with tasting cups during breaks.
Note: Flavor gets stronger the longer it sits! Refill as needed.





PRESENTER NOTES	PRESENTER SCRIPT
5 minutes	Welcome & Introductions
<p><i>Introduce yourself and share a short professional background of yourself and your organization.</i></p> <p><i>Optional: Ask the participants to introduce themselves.</i></p>	<p>Thank you all for joining me today.</p> <p>Today's topic is sugary drinks. You will learn about:</p> <ol style="list-style-type: none"> 1. How healthy beverages fit into the <i>MyPlate</i> dietary recommendations; 2. The link between sugary drinks, obesity, and type 2 diabetes; 3. Types of sugary drinks that may be in your diet; 4. How to calculate the amount of sugar in beverages; 5. Healthy beverages you and your family can drink.
5 minutes	<p>MyPlate Overview</p> <p>Materials:</p> <ul style="list-style-type: none"> • <i>MyPlate</i> icon • <i>Choose MyPlate</i> handout
<p><i>Introduce participants to MyPlate and the five food groups (Fruit, Vegetable, Grain, Protein Foods, and Dairy) by displaying the colorful MyPlate icon.</i></p>	<p>Let's begin with <i>MyPlate</i>. The <i>MyPlate</i> icon serves as a reminder that a person should eat foods from the five food groups each day.</p> <p>By eating a variety of foods from each food group, we give our bodies what they need to be and stay healthy.</p>
<p><i>Invite participants to share what they observe about the MyPlate icon.</i></p>	<p>Do you notice any differences in the food groups shown on the <i>MyPlate</i> icon?</p>
<p><i>Showcase to participants that half of the plate should be fruits and vegetables.</i></p>	<p>The portion sizes of each group are slightly different because we need different amounts from each food group. For example, we need more vegetables than fruit.</p>



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<p><i>Objective #1</i> <i>Describe how healthy beverages fit into the MyPlate dietary recommendations</i></p> <p><i>Reference the Choose MyPlate handout.</i></p>	<p>Notice that the beverage served with meals is milk. The lowest in fat are lowfat 1% and non-fat milk, and therefore they are better choices.</p> <hr/> <p>In each food group, there are healthier foods that we should choose more often. These foods contain a lot of nutrients but not a lot of added sugars or solid, or saturated, fats.</p> <p>The <i>Choose MyPlate</i> handout will help you and your families choose to eat these healthier foods more often.</p>
<p>5 minutes <i>Rethink Your Drink Campaign</i></p>	
<p><i>Transition from MyPlate introduction to Rethink Your Drink Campaign</i></p> <p><i>Wait for responses.</i></p>	<p>There are some foods and beverages made up almost entirely of added sugar and/or solid fats. In fact, these foods and beverages do not contain enough of any nutrients to put them into any food group within <i>MyPlate</i>.</p> <hr/> <p>We're going to learn a few skills today that will help us to identify these foods and beverages so that we can begin to make healthy choices for ourselves and for our families.</p> <hr/> <p>Who here can share with the group if they have heard about the <i>Rethink Your Drink Campaign</i>, and what they know about it?</p>
<p><i>Introduce the Rethink Your Drink Campaign from the California Department of Public Health</i></p>	<p>The <i>Rethink Your Drink Campaign</i>:</p> <ul style="list-style-type: none"> • Educates Californians about healthy drinks, • Helps Californians recognize the amount of added sugar and calories in sugary drinks, • Communicates the link to health risks.



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<p><i>Introduce health consequences.</i></p> <p><i>Objective #2</i></p> <p><i>Understand the link between sugary drinks, obesity, and type 2 diabetes</i></p>	<p>Why? Extra calories from added sugar—like those in sugary drinks—can and do contribute significantly to overweight and obesity. In fact, sugary drinks are the largest source of added sugar in the American diet.¹</p> <hr/> <p>Sugary drinks contribute to increased risk for certain chronic diseases such as type 2 diabetes and heart disease.^{2,3}</p> <hr/> <p>Drinking sugary drinks nearly doubles the risk of dental cavities in children.⁴</p> <hr/> <p>Plus, strong evidence shows that children and adolescents who consume more sugary drinks have higher body weight compared to those who drink less.⁵</p>
<p>10 minutes</p>	<p>Sugary Drinks Overview</p> <p>Materials:</p> <ul style="list-style-type: none"> • <i>Make Better Beverage Choices</i> handout • <i>Flip chart & markers</i>
<p><i>Objective #3 Identify types of sugary drinks in their diets</i></p> <p><i>Wait for responses.</i></p> <p><i>If a participant mentions a specific branded product, affirm their participation and name the type of sugary drink it is.</i></p>	<p>What are sugary drinks?</p> <hr/> <p>Who can share an example of a sugary drink in their diet?</p> <hr/> <p>Thank you for participating. That particular brand that you mentioned is a type of sugary drink called ____.</p> <hr/> <p>Can anyone else think of another type of drink that has added sugar?</p>



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<p><i>List the types of drinks that are called out on the flip chart pad.</i></p> <p><i>Facilitate discussions during lulls in class participation by offering suggestions from the table at right.</i></p>	<p>Are there any others?</p> <p>Types of sugary drinks that may be named:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Soda/Soda pop</td> <td>Sports drinks</td> </tr> <tr> <td>Energy drinks</td> <td>Juice drinks</td> </tr> <tr> <td>Flavored milk (e.g., chocolate, strawberry, vanilla)</td> <td>Coffee drinks (hot or iced) with sweeteners or flavoring</td> </tr> <tr> <td>Blended coffee drinks</td> <td>Mocha</td> </tr> <tr> <td>Vitamin-added waters</td> <td>Milk tea</td> </tr> <tr> <td>Boba/ Bubble/ Pearl tea or drink</td> <td>Sweetened teas (hot or iced)</td> </tr> <tr> <td>Horchata</td> <td>Agua fresca</td> </tr> <tr> <td>Yogurt drinks</td> <td>Grass jelly drinks</td> </tr> </table>	Soda/Soda pop	Sports drinks	Energy drinks	Juice drinks	Flavored milk (e.g., chocolate, strawberry, vanilla)	Coffee drinks (hot or iced) with sweeteners or flavoring	Blended coffee drinks	Mocha	Vitamin-added waters	Milk tea	Boba/ Bubble/ Pearl tea or drink	Sweetened teas (hot or iced)	Horchata	Agua fresca	Yogurt drinks	Grass jelly drinks
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<p><i>Wait for responses.</i></p>	<p>How many of you are surprised by some of drinks considered sugary drinks?</p>																
<p><i>Be sure to choose facts to which your audience can relate.</i></p>	<p>The number of types of sugary drinks is amazing!</p> <p>It is important to address sugary drinks because as mentioned, there's a link between sugary drinks and overweight, obesity, and type 2 diabetes. Many sugary beverages offer calories, but provide few nutritional benefits. Some other facts to consider:</p> <ul style="list-style-type: none"> • In California, 62% of adolescents, 41% of children and 24% of adults drink one or more sodas per day.⁶ • Each year, the average California adolescent consumes the equivalent of 39 pounds of sugar from sugary drinks.⁶ • And, adults who drink one or more sugary drinks a day are 27% more likely to be overweight than adults who do not drink sugary drinks.⁶ 																



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<p><i>Wait for responses.</i></p>	<p>How many teaspoons of sugar do you think is in a typical 20 ounce bottle of soda?</p>
<p><i>After participants guess, show them the prepared display bottle filled with sugar. Pass the display bottle around the class.</i></p>	<p>Answer: A typical 20 ounce bottle of soda can have as much as 14 teaspoons of sugar, or even more.</p> <p>This bottle has 14 teaspoons of sugar.</p>
<p><i>Objective #4</i> <i>Calculate the amount of sugar in beverages they commonly drink</i></p>	<p>I'd like to show you how you can find out how much sugar is in a beverage by teaching you how to read a Nutrition Facts label.</p> <p>By the way, this is also a great exercise to do with your family the next time you're shopping for groceries.</p> <p>Please get into pairs or small groups of 3-4 people.</p>

Calculating How Much Sugar is in a Container

<p><i>Calculating How Much Sugar is in a Container</i> handout</p>	<p>Please refer to the <i>Calculating How Much Sugar is in a Container</i> handout.</p>
<p><i>Wait for responses.</i></p>	<p>Can someone tell the class, what is the serving size listed in the Nutrition Facts label?</p> <p>Answer: This label lists 20 fluid ounces as the serving size.</p>
<p><i>Wait for responses.</i></p>	<p>Can someone tell the class, how many servings per container are listed in this Nutrition Facts label?</p> <p>Answer: This label lists one serving.</p>



PRESENTER NOTES	PRESENTER SCRIPT
<i>How Much Sugar?</i>	
<p><i>Provide each group with</i></p> <ul style="list-style-type: none"> • One Drink Label Card • How Much Sugar? worksheet • A pen and/or pencil • Calculator (optional) 	<p>Let's take a closer look at the sugar that is in a few popular types of drinks.</p> <p>In pairs or small groups, please fill in the <i>How Much Sugar?</i> worksheet with the following, based on your Drink Label Card:</p> <ul style="list-style-type: none"> • Beverage name (type) • Grams of sugar per serving • Servings per container • Total grams of sugar per container • Total teaspoons of sugar • Form(s) of added sugar (natural, added, none, or both)
<p><i>Set up a table at the front of the class with:</i></p> <ul style="list-style-type: none"> • Granulated sugar or sugar cubes • Measuring teaspoon • Plastic baggies or clear eight to nine ounce cups. <p><i>Have one participant from each group:</i></p> <ol style="list-style-type: none"> 1. Share the information on their sheet; 2. Measure out the number of teaspoons of sugar into the baggies/ cups. 	<p>Once your team has completed the <i>How Much Sugar?</i> worksheet, please identify one team member to come up to show the class how much sugar is in your drink.</p> <hr/> <p>Please share with the class the information listed on your worksheet: beverage name, grams of sugar per serving, total grams of sugar, total teaspoons of sugar, form(s) of sugar.</p> <p>Let's help <u>[name of participant]</u> count out loud the number of teaspoons in his/her drink.</p> <hr/> <p>Was anyone surprised by the amount of sugar in any of the beverages?</p> <p>Did it seem like there was a lot of sugar in some of the beverages?</p> <p>Would you eat that amount of sugar or put that much into your coffee each day?</p>



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<p><i>Objective #5</i> <i>Identify alternative drinks with less sugar or no added sugar</i></p> <p><i>Wait for responses.</i> <i>Give suggestions from the listing.</i></p>	<p>You may ask, “What can I drink instead of a sugary drink?”</p> <p>Try these...</p> <ul style="list-style-type: none"> • Water – Plain or flavored with added fruit, vegetables and herbs, like we have available today • Unsweetened seltzer water or unflavored sparkling water • Unsweetened tea (iced or hot) • Unsweetened coffee (iced or hot) • Non-fat or lowfat (1%) unflavored milk
<p>Break Wrap up lesson and activity. Leave time for Q&A.</p>	

Common Questions

What about juice?

100% fruit juices have a lot of natural sugar. It is recommended that we limit our daily juice intake to four to six ounces for children, and up to eight ounces (or one cup) for adults. When you do drink juice, choose 100% juice—so check the label!

Also, remember that it is better to eat whole fruits and vegetables, like apples or carrot sticks. If you choose a whole fruit instead, you’ll be on your way to reaching the *MyPlate* goal of making your half your plate fruits and vegetables and you’ll add fiber to your diet. Fiber may help lower the risk of high blood pressure, heart disease, stroke, and some types of cancer.



Common Questions (Continued)

What about diet drinks?

Diet sodas and some processed foods contain non-caloric sweeteners approved by the Food and Drug Administration (FDA). If you're trying to lose weight or prevent weight gain, drinks sweetened with artificial sweeteners may appear attractive because they have virtually no calories. On the other hand, some research has suggested that drinks with artificial sweeteners may be associated with increased weight, but it is uncertain if they are the cause.⁷

A better alternative is a glass of water. Cool and refreshing water is: sugar-free, calorie-free, and cost-free. If you want a fizzy beverage, try seltzer water or unflavored sparkling water instead.

How much milk should you drink?

According to the *2010 Dietary Guidelines for Americans*, recommended amounts of milk and milk products, including fortified soy beverages, are:

- Three cups per day for adults and children and adolescents ages nine to 18 years,
- Two and one-half cups per day for children ages four to eight years,
- Two cups for children ages two to three years.

And remember to choose lowfat or non-fat milk for anyone over two years of age.

What can I drink instead of a sugary drink?

- Water – Plain or flavored with added fruit, vegetables and herbs, like we have available today
- Unsweetened seltzer water or unflavored sparkling water
- Unsweetened tea (iced or hot)
- Unsweetened coffee (iced or hot)
- Non-fat or lowfat (1%) unflavored milk (ages two and above)

Reducing the number of sugary drinks may lead to weight loss and better health. Plus, if you are not buying these drinks, it can help you save money.



PRESENTER NOTES	PRESENTER SCRIPT
5 minutes	Do You Remember?
	<p>We've covered a lot of important information today, so before we end our time together, let's review a few of the key highlights:</p>
	<p>How many teaspoons of sugar are in a typical 20 ounce soda bottle?</p> <p>14 teaspoons of sugar</p>
	<p>How do you calculate the number of teaspoons of sugar in a beverage?</p> <p>Grams of Sugar ÷ 4 = Teaspoons of Sugar</p> <p>Bonus: Multiply by Total Servings = Total Teaspoons in container</p>
	<p>True or False: Adults and children who drink one or more sugary drinks a day are more likely to be overweight or obese.</p> <p>True</p>
	<p>Instead of a sugary drink, name another beverage you can drink.</p> <ul style="list-style-type: none"> ▪ Water – plain or flavored with added fruit, vegetables and herbs ▪ Unsweetened seltzer water or unflavored sparkling water ▪ Unsweetened tea (hot or iced) ▪ Unsweetened coffee (hot or iced) ▪ Non-fat or lowfat (1%) unflavored milk



PRESENTER NOTES	PRESENTER SCRIPT
5 minutes	Reflection

<p><i>Ask participants to share aloud with the group.</i></p> <p><i>Thank and encourage participants who are willing to share. Validate responses and offer refinements to align with MyPlate recommendations.</i></p>	<p>This next section is about reflection. It is an opportunity for you to reflect on what you learned, what you felt, and what you will do after our time together.</p> <p>For example:</p> <ul style="list-style-type: none"> • I LEARNED that it is recommended that I drink less sugary drinks. • I FEEL that I can drink water instead of sugary drinks between meals. • I am GOING to carry a water bottle with me.
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5 minutes	<p>Closing and Home Connection</p> <p>Materials:</p> <ul style="list-style-type: none"> • <i>Calculating How Much Sugar is in a Container</i> handout • <i>Nutrition Facts Scavenger Hunt</i> worksheet • Optional: Information about upcoming nutrition education opportunities
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***Calculating How Much Sugar is in a Container* worksheet**

<p><i>Calculating How Much Sugar is in a Container</i> worksheet</p>	<p>Take this worksheet home with you and practice the skills that we learned today:</p> <ol style="list-style-type: none"> 1. Read the Ingredients list. 2. Find the amount of sugars per serving on the Nutrition Facts label. <ul style="list-style-type: none"> ○ Multiply the sugars per serving by the number of servings you typically eat or drink in a sitting. ○ Divide by four to find the number of teaspoons of sugar in that food or drink.
	<p>To help you remember, post the <i>Calculating How Much Sugar</i> handout on your refrigerator at home, or tape it to the inside of your kitchen cupboard.</p>
	<p>I would expect that, like today, you'll be surprised at what you find.</p>



PRESENTER NOTES

PRESENTER SCRIPT

Nutrition Facts Scavenger Hunt worksheet

<p><i>Nutrition Facts Scavenger Hunt worksheet</i></p>	<p>You each have a copy of the Nutrition Facts Scavenger Hunt. Think of the foods and drinks you most commonly have at home.</p> <p>Are there any that you feel may be high in added sugar?</p>
<p><i>Encourage participants to complete the scavenger hunt and to be mindful of the commitments they made to their health during the “Reflection” activity.</i></p>	<p>Expand the scavenger hunt! Help friends and family do a scavenger hunt activity in their kitchen!</p>
<p><i>Also have available:</i></p> <ul style="list-style-type: none"> • <i>Information about upcoming nutrition education opportunities</i> • <i>Contact information for questions or follow-up</i> 	<p>Many thanks to each of you for your participation and your willingness to share in the learning experiences together today.</p>



Additional Resources for Healthy Beverage Information:

- USDA Team Nutrition:
 - Serving Up My Plate—A Yummy Curriculum
<http://www.fns.usda.gov/tn/resources/servingupMyPlate.htm>
 - Juice or Fruit Drinks
http://www.teamnutrition.usda.gov/Resources/Nibbles/Nibbles_Newsletter_19.pdf
- USDA Choose *MyPlate*: <http://www.chooseMyPlate.gov/healthy-eating-tips/ten-tips.html>
- Women, Infants & Children Supplemental Food Program Rethink Your Drink Materials:
<http://www.cdph.ca.gov/programs/wicworks/Pages/WICRethinkYourDrink.aspx>
- Dairy Council of California Rethink Your Drink Materials:
<http://www.healthyeating.org/Schools/Parent-Nutrition-Education/Rethink-Your-Drink.aspx>

Citations:

1. Guthrie JF, Morton JF. Food sources of added sweeteners in the diets of Americans. *J Am Diet Assoc.* Jan 2000;100(1):43-51.
2. Malik VS, Popkin BM, Bray GA, Despres JP, Willett WC, Hu FB. Sugar-sweetened beverages and risk of metabolic syndrome and type 2 diabetes: a meta-analysis. *Diabetes Care.* Nov 2010; 33(11):2477-2483.
3. Fung TT, Malik V, Rexrode KM, Manson JE, Willett WC, Hu FB. Sweetened beverage consumption and risk of coronary heart disease in women. *Am J Clin Nutr.* Apr 2009;89(4):1037-1042.
4. Sohn W, Burt BA, Sowers MR. Carbonated soft drinks and dental caries in the primary dentition. *J Dent Res.* Mar 2006;85(3):262-266.
5. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans*, 2010. Washington, DC: U.S. Government Printing Office; December 2010.
6. Babey SH, Jones M, Yu H, Goldstein H. *Bubbling over: Soda consumption and its link to obesity in California*. Los Angeles, CA: UCLA Center for Public Health Advocacy; 2009.
7. Slavin J. Beverages and body weight: Challenges in the evidence-based review process of the Carbohydrate Subcommittee from the 2010 Dietary Guidelines Advisory Committee. *Nutrition Reviews.* Nov 2012; 70(suppl 2):S111-S120.