

Healthy Beverages

Early Childhood Health Lesson



Objective: Learn the importance of making healthy beverage choices for a healthy body.

WE CAN! MESSAGE

Drink water, or fat-free, or low-fat milk instead of sugar-sweetened beverages. Limit the availability and accessibility of sugar-sweetened beverages.

NATIONAL PRE-K–2ND GRADE HEALTH PERFORMANCE STANDARDS

Identify that healthy behaviors impact personal health.

ADULT MESSAGE

Limit the sugar-sweetened beverages you serve in your house.

DEVELOPING PRESCHOOL READINESS SKILLS

Learn science skills such as: cause and effect, measuring, compare and contrast, and volume.

PROGRAM CONTENT

Themed lessons incorporating art, science, literacy, movement and music support a multi-disciplinary approach to teaching young children and adults.

Program Length: 70 minutes

INTRODUCTION/DISCUSSION

Materials: Name stickers, markers

Welcome families with name stickers and “hello” song. Ask families if they drink water. Discuss when and how they drink water. Highlight how a human body is 70% water. Water is essential for our bodies because it is in every cell, tissue, and organ in the body. Water is also fat-free and calorie-free! Fun fact to share with families is that fruit and vegetables also contain water. Then review with families the importance of drinking fat-free or low-fat milk; it helps to build strong bones. Ask if the families drink other drinks. Inform families that the sugar-sweetened drinks they may drink (fruit juices, regular sodas, and sports drinks) provide water, but usually have added sugars and more calories than unsweetened beverages. To help with weight control, families should substitute sweetened beverages with water and fat-free or low-fat milk. Mention that beverages with added sugar can cause tooth decay. Highlight how water and fat-free or low-fat milk are healthier choices than drinking sweetened beverages.

Visual References: Illustrated human body figure filled with 70% of water. Nutrition Label break-down. Comparative image highlighting sugar content in drinks.

Key Teaching Messages

- Water is a GO drink; drink it anytime!
- Water is essential to our body's survival. It helps every part of your body.
- Fat-free or low-fat milk and fortified 100% orange juice are important sources of calcium, which helps build strong bones. (Note: not all juices are fortified with calcium.)

ACTIVITY DEMONSTRATIONS

Water Exploration

Materials: Water, measuring cups of various sizes and shapes, funnels and “people” shaped sponges. Adults and children will receive individual water bowls with various cups and funnels. Children will explore concepts of empty and full as they pour and measure cups of water.

Goal is to help children become familiar with water through water exploration. Educator can also introduce the fact that when the body is low on water, a person may feel “thirsty,” and that water or fat-free or low-fat milk are healthy options to increase the body's fluids.

Science Activity 1: Measuring Sugar In Soda, 100% Juice, & Juice Drink Demonstration

Materials: Funnels; empty 12-ounce soda, 100% orange juice and juice drink bottles (clear); spoons and 1lb granulated sugar in covered bowl.

Educator will begin discussion by asking adults and children how much sugar they think is in a 12-ounce bottle of orange soda. Educator will record responses. Educator will have the amount of sugar in a covered container to be revealed as the children help with the experiment. (There are 4 grams in 1 teaspoon so divide the grams of sugar on the nutrition label by 4 to get the teaspoons of sugar. Make sure to check the serving size for the bottle to figure out how many grams are in the full container.) Children will take turns scooping out the sugar and putting it through the funnel into the 12-ounce bottle can until the container is empty and the amount is revealed. Do the same experiment for a 12-ounce bottle of 100% orange juice and 12-ounce bottle juice drink and compare the results to the soda.

Educators will show parents the nutrition label graphic and help adults locate where the sugar facts are located on the label. Educator should point to section on the nutrition label: “Sugars = X grams.”

Science Activity 2: Soda And Teeth Decay Experiment

Materials: 2-liter bottle of coca cola and 2-liter bottle of orange soda, small clear cups (1 for each family) and eggshells (from white, not brown eggs).

Families perform a science experiment to see how the chemicals and sugar in soda affect teeth by using eggshells. Eggshells are made up of calcium, just like teeth. Families pour a half-cup of soda (their choice of cola or orange soda) into clear glass with their name on it. They then carefully place the eggshell into the cup, making sure to submerge the shell below the surface of the liquid. Meanwhile, the educator will place an eggshell in water, as a comparison example. Families will discuss what they predict will happen to the eggshell in soda and why. Educator should record hypotheses. Families will leave the experiments in the classroom until the following week. The following week, educators will lead a discussion with the families as they describe the changes that have occurred during the week. Educator will compare eggshells left in soda to eggshells left in water. (The longer the eggshell can sit in the soda, the better the result.) Educator will point out the difference between the eggshell submerged in soda

(which has changed color and is weaker) and the eggshell placed in water. Families will be given a toothbrush to try and clean the eggshell as if they were brushing their teeth! They will learn that brushing does not clean the eggshell, and that the eggshell has become too fragile to brush. Educator will explain how the chemicals and sugar in soda break down the calcium found in teeth and eggshells. For teeth, it means tooth decay and cavities! The best way to protect teeth is to drink water and low-fat milk instead of sugar-sweetened drinks (juice, soda).

Clean up: Give children a 5 minute warning. Always let children know that you will be transitioning and ending the project soon. After the warning, sing a clean-up song to focus children and encourage participation in the clean-up process. One example: "Clean up, clean up, one, two, three. I'll help you and you help me. Clean up, clean up, one, two, three. I'll help you and you help me."

PHYSICAL ACTIVITY: MOVEMENT/MUSIC

Weekly Structure: Warm-up, Active Play Time, Movement/Music (song/activity), Cool-down. Children should do at least 60 minutes (1 hour) or more of physical activity each day.

Warm-up:

Marching Movement Song

We're marching, marching, marching
We're marching in a circle
We're marching, marching, marching until it's time to stop!

We're jumping, jumping, jumping
We're jumping in a circle,
We're jumping, jumping, jumping until it's time to stop!
(add hopping, stomping, running, tiptoeing, etc.)

In and Out Circle Song

Let's go in and in and in
And out and out and out
And in and in and in and in
And out and out and out!

Active Play Time:

Do 5 or 10 minutes of each exercise

- Playing Tag
- Hopscotch
- Jumping Jacks
- Jumping (one foot, together then apart, front to back)

Movement/Music:

Parachute play. Using the parachute, children and grown-ups will explore wave patterns, fish movements, and "empty and full" movements together.



Cool-down:

It is important for the body to cool down gradually.

- Breathing–Place hands on belly or lower back. Inhale and fill the lungs. Feel the abdomen and ribs inflate. Exhale and empty the lungs. Feel the chest and abdomen relax.
- Yoga Moves
 - Downward Dog–Have the children make a bridge with their bodies. From here you can kick one leg up at a time and start to stretch body long.
 - Tree Pose–Have the children balance on one leg, bending their other leg at a 90 degree angle, stretching their hands above their heads.
 - The Horse–Stand in place for 30 seconds with a wide stance and knees bent (like a halfway down squat position).

GROUP STORYTIME

A Cool Drink of Water by Barbara Kerley

Dog is Thirsty by Satoshi Kitamura

Thirsty Baby by Catherine Ann Cullen

HEALTHY SNACK

Offer exciting ways to make a healthy beverage. Create your own fruit water. Select from a variety of fruits (i.e., limes, lemons, oranges, strawberries). An educator-led discussion will give children and adults the opportunity to discuss strategies for incorporating healthier beverages.

Encourage children to wash hands with soap and warm water before eating snack. **Hand Washing Strategy:** Wash hands for 20 seconds to fight off all germs and then rinse well under running water. Sing the ABC Song while you wash.

REVIEW FAMILY HANDOUT

Goal: Replace regular soda and sugar-sweetened drinks with water or fat-free or low-fat milk.

Fact of the Week: Regular soda has no nutritional value and is high in calories.

At-Home Strategies:

- Drink a glass of water at every meal. Replace soda with water. Tap water is free!
- When your child is 2 years old, it is a good time to switch from drinking whole to fat-free or low-fat milk.

LESSON VISUALS

- Body with water level
- The Hidden Truth – 100% Juice or Real Juice
- The Hidden Sugar Truth – Soda
- The Hidden Water Truth

