

## BEVERAGE RELAY

### LESSON 5 FIVE

- Identify beverages that are high in calcium.
- Identify beverages that have added sugar.
- Work together to accomplish a goal.
- Demonstrate proper form for two different bone builder fitness activities.



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<b>Lesson Title</b>	Lesson 5: The Beverage Relay	
<b>Lesson Overview</b>	Students will complete a team challenge to identify drinks that are high in calcium and high in added sugar.	
<b>Estimated Time</b>	30-45 minutes	
<b>Grade Level Learning Standards</b>	<p><b>3<sup>rd</sup> Grade:</b></p> <ul style="list-style-type: none"> <li>• Explain importance of choosing healthy beverages. H1.N2.3</li> <li>• Participate in developmentally appropriate activities to improve overall fitness. PE3.6.3</li> </ul> <p><b>4<sup>th</sup> Grade:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate working cooperatively with others. PE4.4.3a</li> <li>• Participate in developmentally appropriate activities to improve overall fitness. PE3.6.4</li> </ul> <p><b>5<sup>th</sup> Grade:</b></p> <ul style="list-style-type: none"> <li>• Analyze nutritional content of food using nutrition facts. PE3.8.5c</li> <li>• Compare beverages to make a healthy choice. H5N2.5</li> <li>• Participate in developmentally appropriate activities to improve overall fitness. PE3.6.5</li> </ul>	
<b>Learning Outcomes</b>	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify beverages that are high in calcium.</li> <li>• Identify beverages that have added sugar.</li> <li>• Work together as a team to accomplish a goal.</li> <li>• Demonstrate proper form for two different bone builder fitness activities.</li> </ul>	
	<b>Lesson Preparation</b>	<b>Equipment/Resources</b>
	Divide students into groups. Determine ahead of time what students will do for the relay. Make copies of the “On Track to Building Healthy Bones” handout if using for take-home activity.	<ul style="list-style-type: none"> <li>- Beverage Cards (<a href="http://eatsmart.org">available at eatsmart.org</a>)</li> <li>- Think Your Drink Poster (<a href="http://eatsmart.org">available at eatsmart.org</a>)</li> <li>- Beverage Relay Handout (included)</li> <li>- 5 Pencils</li> <li>- Bone Builder Fitness Cards (from Lesson 1)</li> <li>- Optional: Building Healthy Bones Activity Sheet (<a href="http://eatsmart.org">available at eatsmart.org</a>)</li> </ul>

**Lesson Introduction**

**Estimated Time: 10-15 minutes**

**Step 1: Instant Activity & Fitness Development**

Have students line up on one side of the gym. Instruct students to jog the length of the gym once, then run with glute-kickers down and high knees back once before gathering for fitness development instruction.

Select two bone builder activities from the Bone Builder Fitness Cards (recommended activities: Plank Up-Downs and Mountain Climbers). Demonstrate activities using the critical elements and cues from the Bone Builder Fitness Card instructions. Demonstrate modifications as necessary. After each demonstration, have students do ten of the activities and provide feedback on their form.

**Step 2: Choosing a Healthy Beverage:**

Review Lesson 4. Ask, “Why would we want to drink beverages that are high in calcium?” Elicit responses. Remind students that what we choose to drink can impact our health.

Introduce sugar-sweetened beverages. Explain to students that some beverages we have access to are super high in sugar. These drinks are high in calories or energy. Many drinks that are high in sugar do not have nutrients (like calcium, vitamin D, or potassium) that our body needs to function or have more sugar than nutrients. These are **empty-calories** drinks—they have lots of calories, but almost nothing else. When we consume too much sugar over time, we can increase our chances of getting certain health problems.

- Ask, “What potential health problems could come from consuming too much sugar over time?” (Potential answers: When we eat too much sugar, over time we can put ourselves at risk for teeth problems (causes tooth decay/cavities), unhealthy weight gain, and certain diseases like type II diabetes and heart disease).
- Ask “What happens when you take in more calories than you burn calories?” Call on a student.

Compare drinks by holding up Beverage Cards and/or using a Think Your Drink Poster.

- Example: An 8 ounce cup of 2% milk, has 120 calories and 23% of my daily value of calcium, 15% of my daily value of potassium, and 16% of my daily value for protein. A 20 ounce soda has more sugar and less nutrients. The soda has 260 calories but no calcium, potassium or protein, which are nutrients my body needs to function. A soda is considered an **empty-calorie** drink. A soda would not help me fuel up to build strong bones or build strong muscles.

Discuss “added sugar” with students. Explain that many health organizations suggest limiting the amount of added sugar to 6 teaspoons each day. Added sugar is sugar that is added for taste, and is not naturally in a drink. Ask students for examples of drinks that are naturally sweet (Potential answers: white milk or 100% juice).

Explain that students can use Nutrition Facts labels to identify drinks with added sugar (point out on a Beverage Card where students can find added sugar, pointing out that added sugar and total sugar are not the same) and drinks that are high in calcium (show calcium amount and percent daily value on Nutrition Facts label).

### Lesson Content & Activities

**Estimated Time: 15 minutes**

Spread out a set of Beverage Cards along one baseline. This baseline will be “The Grocery Store.”

**Step 1: Directions for the Beverage Relay**

**Relay Race 1-Bone Building Beverages:** The objective is to collect the most calcium-rich drinks. Recommend students choose drinks with the greatest potential to strengthen bones. Each team will collect six drinks from “The Grocery Store” and then total up the percent daily value of calcium from the six drinks they collect. The goal is to have the highest total percent daily value of calcium value among all other groups.

**Relay Race 2-Added Sugar Beverages:** The objective is to collect the highest added sugar drinks. Each team will collect six drinks from “The Grocery Store” and then total up the grams of added sugar from the six drinks they collect. The goal is to have the highest total of added sugar for all six drinks among all other groups.

**Directions:**

- Students can only select one Beverage Card from “The Grocery Store” at a time.
- Partners must record the information from the Beverage Card that they select on the Beverage Relay handout, then return the card to the baseline and select another.
- If using partners, the next partner group cannot go until their hand is tagged.
- Partners tally their total percent calcium or total percent added sugar at the end of the relay.

**Alternative Relay Race Ideas**

- Partners must interlock elbows while fast walking down to “The Grocery Store” to collect the beverage card—they must keep elbows interlocked while picking up a card and returning it to their home base.
- Divide students into five teams instead of partners.
- Teams toss a ball or a bean bag to each other to advance towards “The Grocery Store.” Team members cannot move with the object in their hand and

must go in order (like a batting order). If the object is dropped, the entire team must start over. Repeat to return to home base with the Beverage Card.

- Create a Bone Builder course. Set up three cones in-between baselines of the gym. Students will complete the physical activity in between the cones as they move to the grocery store (example: Start to Cone 1: Skip, Cone 1 to Cone 2: Bearcrawl, Cone 2 to “The Grocery Store”: Hop, “The Grocery Store” to Start: Run). Partners must both be holding the Beverage Card when returning to start.

**Step 2: Beverage Relay Race**

After each relay race, confirm that students were able to correctly identify drinks high in calcium and high in sugar. Consider timing the activity.

**Closure/Assessment**

**Estimated Time: 5 minutes**

Have students turn and talk with a partner.

Below are possible discussion questions:

- Explain what an empty-calorie drink is?
- What are potential consequences of frequently drinking empty-calorie beverages?
- What is added sugar?
- What are two drinks that have a lot of added sugar, such as more than 15 teaspoons?
- What are two drinks that are high in calcium?

Conclude the lesson by saying that we will be able to perform our best if we are fueling up with foods and beverages that provide us with nutrients that our body needs. Nutrition Facts labels can help us determine if foods or drinks will provide us with fueling nutrients.

**Ideas for Differentiating Instruction**

- **Extended Relay Races**
  - Create different relay races with the Beverage Cards (example, collect the beverages with the most calories or the least calories).
- **Take Home Activity**
  - Distribute On Track to Building Healthy Bones. Ask students to complete the handout at home. Each person will earn two points for your team for returning a completed handout.

**The Team Challenge**

**Recommended Points:**

- Each individual shares their total percent calcium and total percent added sugar with their original group. Partners on the same team will have the same score for the round.
- 10 points for team with most percent total calcium
- 5 points for 2<sup>nd</sup> place team with most percent total calcium
- 10 points for team with fewest total added sugars
- 5 points for 2<sup>nd</sup> place team with fewest total added sugars
- 2 points for each person who returns a completed On Track to Building Healthy Bones Activity Sheet.

## BEVERAGE RELAY HANDOUT

### RELAY RACE 1: BONE BUILDING BEVERAGES

**Directions:**

Select drinks that have the highest percent (%) Daily Value of calcium.

Add up the total percentage for all drinks that you collected.

WRITE THE DRINK NAME		PERCENT (%) OF CALCIUM
1		
2		
3		
4		
5		
6		
<b>TOTAL PERCENT (%) CALCIUM:</b>		

### RELAY RACE 2: ADDED SUGAR BEVERAGES

**Directions:**

Select drinks that have the highest amount of added sugar.

Add up the total number of grams (g) of added sugar for all drinks that you collected.

WRITE THE DRINK NAME		GRAMS (g) OF ADDED SUGAR
1		
2		
3		
4		
5		
6		
<b>TOTAL GRAMS (g) OF ADDED SUGAR:</b>		