

What's Your Beverage?

Learner Objectives

Participants will be able to:

- identify alternative beverages to sugar-sweetened drinks;
- identify functions of water in the body and its health benefits;
- identify symptoms of dehydration; and
- identify one goal or action related to making smarter beverage choices.

Materials

- Plastic bowling ball and pin sets; may substitute 10 empty beverage containers and a plastic or rubber ball.
- If using empty beverage containers, try those that represent the beverages being discussed: low-fat milk, water, sugared beverages, and 100% fruit juice.

Discussion

1. Discuss beverages people drink every day.

- Mention water; sugar-sweetened, carbonated sodas or pop; fruit drinks; sport drinks; diet drinks; milk; fruit juice.
- How much water do you drink every day?

2. Which beverages should you drink more often? Which should you drink less often? Why? How easy is that to do?

- Sugar-sweetened sodas or pop provide empty calories and few or none of the vitamins and minerals growing bodies need.
- If you drink sugared pop and also eat as many calories as you need in a day, you will consume too many calories and gain weight.
- Sugary drinks are bad for your teeth.
- Diet drinks don't have extra sugar, but they also provide few, if any, nutrients. Often people drink them instead of healthier choices such as low-fat milk and water.
- Water is the drink of choice for maintaining a healthy body.
- Preteens should have 3 cups of low-fat dairy, such as skim milk and low-fat yogurt, a day.
- Don't drink more than 1 cup of 100% fruit juice a day. Fruit juice does not provide the fiber whole fruit does, and fruit drinks, which are often super-sized, contain extra calories.

3. What is hydration?

- Hydration is to supplying water to restore and maintain fluid balance.



Soda

4. Discuss the importance of hydration.

Water plays a vital role in all bodily processes such as:

- chemical reactions,
- lubrication,
- nutrient delivery,
- waste disposal,
- heat dispersion, and
- temperature regulation.

Diet Soda

5. Explain the hydration pyramid to the students.

- Most of your fluid intake should come from water.



Juice

Tips for choosing the most beneficial and low-sugar fruit juice

- Choose 100% juice because it is high in vitamins.
- Look for “no sugar added” on labels to reduce calories.
- Artificially sweetened drinks are lower in calories.
- Sports drinks are high in carbohydrates and electrolytes. They should only be consumed after 60 minutes or more of a high-intensity workout.



Milk

Water

Bowling Thirst Quencher Game

Use this game to remind youth which beverages to drink more often and which to drink less often.

1. Set up bowling pins (or beverage containers) in the normal bowling arrangement. Code each on the bottom so that for 10 pins you have:

- 1 labeled “100% fruit juice”
- 1 labeled “sugar-sweetened beverage”
- 3 labeled “low-fat milk”
- 4 labeled “water”
- 1 labeled “diet drink”

2. Everyone bowls to see how well they “quench” their thirst!

Players roll the ball once for **each** turn (frame), and keep score for a given number of frames.

The object is to get as many points as possible in a set number of frames or turns at bowling. Points are scored or lost by knocking down pins. *Note: Sugar-sweetened beverages subtract points, and fruit juices break even.* Randomly code and set the pins each time so the bowler does not know which pins he or she might strike and knock down.

3. Point values

Water: gain 2 points

Low-fat milk: gain 2 points

100% fruit juice: break even — no gain or loss of points

Diet drink: lose 1 point

Sugared beverage: lose 3 points

4. Examples

A strike, knocking down all 10 pins, equals:

4 pins of water \times 2 points = 8 points

3 pins of milk \times 2 points = 6 points

1 pin of fruit juice \times 0 points = 0 points

1 pin of diet drink \times -1 point = -1 point

1 pin of sugar-sweetened beverage \times -3 points = -3 points

Total = 10 points

Knocking over 2 pins of water and 1 pin of fruit juice equals:

2 points \times 2 = 4 points

0 points \times 1 = 0 points

Total = 4 points

During the game, students who are not bowling record the scores of the others. After everyone has bowled, they compare calculations.

Keep Score

1	6
2	7
3	8
4	9
5	10
Total:	

Resource Sheet

Instead of...	Try...	Approximate Calories Saved
1 cup fruit drink	½ cup fruit drink + ½ cup club soda	65
1 cup bottle coffee drink	1 cup black coffee + ¼ cup vanilla soy milk	100
1 cup apple juice	½ cup apple juice + ½ cup water	60
1 cup sweet tea	½ cup unsweetened tea + ½ cup light lemonade	35
1 cup orange juice	1 cup light orange juice beverage	60
12 ounce can regular soda	12 ounce can diet soda	140

Beverage	Calories per 8 ounce Serving
bottled water	0
club soda	0
100% apple juice	120
100% grape juice	152
100% orange juice	112
100% pineapple juice	136
100% tomato juice	40
fruit punch juice drink	128
grape juice drink	144
lemonade, powder mix	104
orange juice drink	136
whole milk	144
2% reduced fat milk	120
1% lowfat milk	104
nonfat milk	88
2% reduced-fat chocolate milk	192
caffeinated cola	88
diet cola, caffeinated	8
ginger ale	80
grape soda	104
sports drink	64

Symptoms of dehydration:

- increased thirst,
- dry mouth,
- light-headed feeling,
- fatigue,
- low urine output,
- inability to produce tears, and
- dry skin.

Sources of water:

- drinking water,
- other beverages, and
- water in solid foods (e.g. fruits and vegetables).

Caffeinated beverages:

- may cause nausea,
- cause headaches, and
- act as diuretics (increase water loss from urination).

Sugary and carbonated beverages:

- are absorbed more slowly,
- cause stomach cramps,
- cause nausea, and
- cause bloating and diarrhea.

*Water helps cool the body.
Children should drink 8 or more cups of water per day.*



How to Form the Water Habit

1. Carry a bottle

Get a bottle, fill it with water, and carry it around with you all day. When it's empty, fill it up and keep drinking.

2. Substitute it in place of other drinks

Choose water or low-calorie beverages instead of sugar-sweetened beverages. Choose water with meals and stock the fridge with water instead of other beverages.

3. Jazz it up

Make water more exciting by adding slices of lemon, lime, cucumber, or watermelon, or drink sparkling water. Add a splash of 100% juice to plain sparkling water for a refreshing, low-calorie drink.

4. Set a reminder

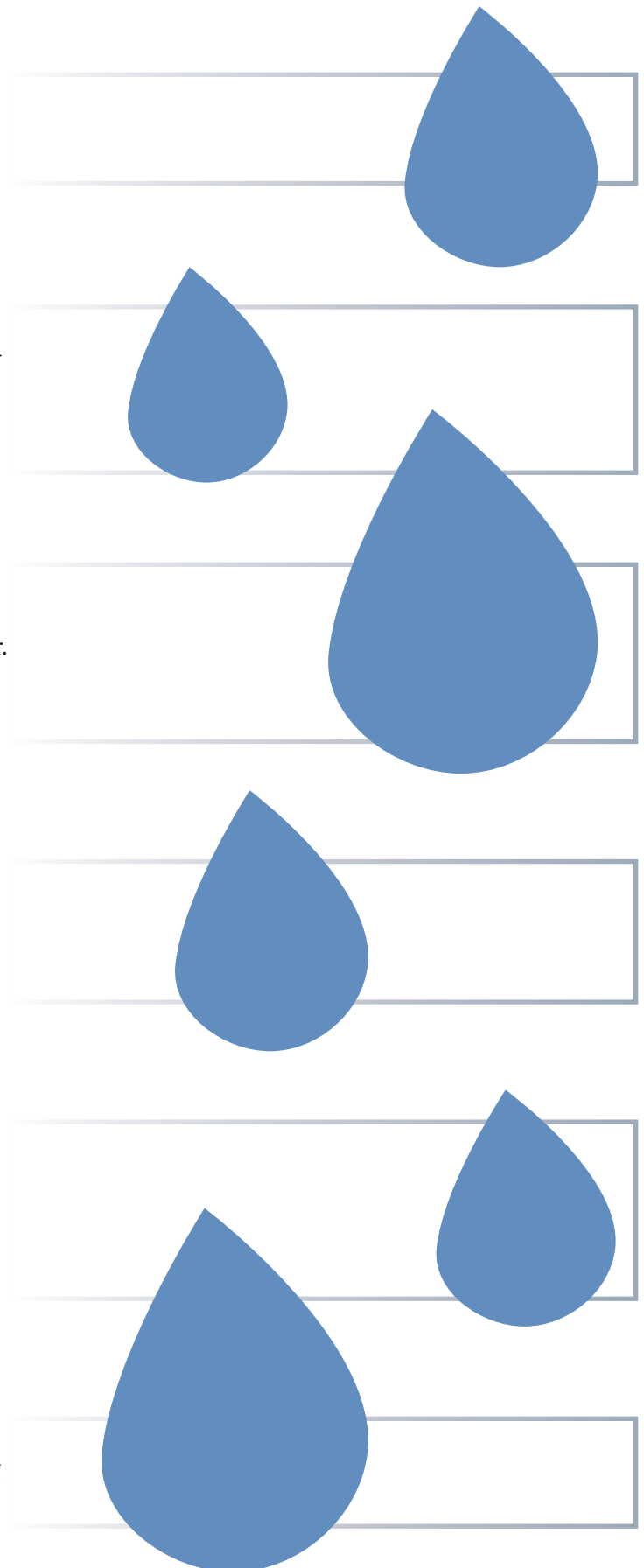
Set your watch or cellphone to beep during your class breaks to remind you to drink water.

5. Track it

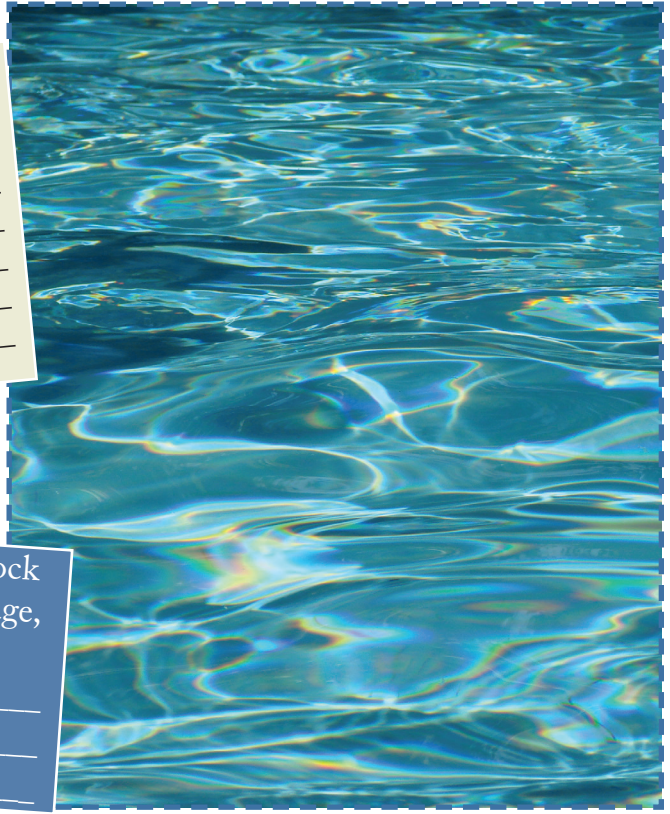
When forming a new habit, it helps to keep track of it. Keep a log. It can be as simple as a tick mark for each glass of water you drink.

6. Show others

Be a role model for your friends and family by choosing water and other healthy, low-calorie beverages.



Worksheet



1 What are some signs of dehydration?

2 In the Bowling Thirst Quencher Game, if you knock over 3 waters, 2 low-fat milk, and 1 sugared beverage, how many points will you earn?

3 Why should you avoid sugary or carbonated beverages during exercise?



4 What is one of the most important functions of water?

5 What are some sources of water?

6

How many calories do you save if you drink a 12-ounce can of diet soda rather than a 12-ounce can of regular soda?

7

How many more calories are in a grape juice drink than 100% apple juice?

8

How much water should you drink every day?

9

If you drink 8 ounces of 100% orange juice, 8 ounces of 1% milk, and 16 ounces of diet caffeinated cola, how many total calories will you be consuming?

10

What is one thing you can do today to make a smarter beverage choice?

Kansas School Wellness Policy Model Guideline — Nutrition Education

Classroom: Middle-High School

Requirements achieved in this lesson:	Basic	Advanced	Exemplary
Basic, Advanced, and Exemplary	At least 25 percent of nutrition education involves hands-on activities that engage students in enjoyable, developmentally appropriate, culturally relevant, participatory activities.	At least 50 percent of nutrition education instruction involves hands-on activities that engage students in enjoyable, developmentally appropriate, culturally relevant, participatory activities.	
Topic	Importance of drinking adequate water.		

References

Harvard School of Public Health, *Healthy Drinks*, <http://www.hsph.harvard.edu/nutritionsource/healthy-drinks/>

Capri Sun image <http://lamar.colostate.edu/~hillger/products/capri-sun.jpg>

Centers for Disease Control and Prevention, Rethink Your Drink: Better Beverage Choices Made Easy:

http://www.cdc.gov/healthyweight/healthy_eating/drinks.html

Answer Key

1. Increased thirst, dry mouth, light-headed, fatigue, low urine output, inability to produce tears, dry skin.
2. Seven points total. $3 \times 2 = 6$. $2 \times 2 = 4$, $10 - 3 = 7$
3. Stomach cramps, nausea, bloating or diarrhea.
4. It plays a vital role in all bodily processes.
5. Water, other beverages, fruits and vegetables.
6. 140
7. $144 - 120 = 24$
8. 8 cups
9. $112 + 104 + 8 = 224$
10. Answers vary.

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