Think About What You Drink

By Lynn Brunelle

Hydration Nation

Your body is made up of about 65 percent water. Every day you lose water through sweating, breathing, and urinating. So every day you need to replace that fluid to keep your body running smoothly. A lot of the water you need comes from the foods you eat—fruits and vegetables are mostly water—but you also should drink water for optimum health.

So how much do you need? There are many factors to consider, such as your age, weight, and activity level. “An average 110-pound kid needs about 2 liters of fluid a day,” according to Dr. Maureen Koval, a family practitioner in Bainbridge Island, Wash. “But that’s all fluid from all beverages and whatever food you eat.” Drink to satisfy your thirst and even more if you are exercising or if it’s really hot outside.

Big Business

Bottled water is big business—about $100 billion annually and growing. Banking on the need for portable drinking water and promoting the idea of fresher, cleaner water, the bottled water industry has created a huge market. At a markup of as much as 1,000 times the cost of tap water, there is much money to be made.

Bottled Up

Is packaged water better than tap? Not all companies regulate the water that goes into their bottles. A study conducted in 1999 by the Natural Resources Defense Council, an environmental group, found that “an estimated 25 percent or more of bottled water is really just tap water in a bottle.”

Clearly, that’s not what many bottled water buyers think they’re getting. “If it says ‘natural spring water’ on the label, it probably comes from a groundwater source, but these days up to 40 percent of bottled water is simply repackaged tap water,” says John Stewart, national organizer of the Think Outside the Bottle campaign.
Annoyed to learn of that practice? You’re not alone. “Bottled water tastes good and it’s convenient, but the idea of companies packaging tap water and selling it back to me just bugs me,” says Kate S., 17, of Colorado.

Stewart’s group wants the practice of repackaging tap water to change. “We’re working to get major bottlers of water to state clearly on their labels where their water comes from,” he says. And those efforts are making a difference. Grassroots actions such as petitions, call-in days, and letter-writing campaigns have put pressure on large bottled water companies. The response has been good; soon, many labels will be clear about where the water actually comes from.

**Is Plastic So Fantastic?**

A lot of oil and energy go into every bottle of water. Huge amounts of energy are used to produce the bottles and package the water. Those bottles are shipped hundreds of miles from the bottling companies to the stores, and transporting them burns even more oil.

Safety concerns also exist. Although the chemicals used to make the bottles are safe, toxins can leak into the water if the bottles are exposed to extreme heat or cold. Recent studies show that chemicals called phthalates, which may disrupt hormones, can seep into bottled water from the plastic container. Not much is known yet about the potential health risks, but you may be getting more than you bargained for when you drink from a plastic bottle.

What happens to the plastic after you drink the water? The good news is that plastic is recyclable. The bad news is that not all bottles are recycled. “Less than 20 percent get recycled,” says Stewart. “More than 4 billion pounds of plastic end up in landfills and along the roadside every year.”

**The Big Drip**

The federal Food and Drug Administration (FDA) sets standards for bottled water, and the Environmental Protection Agency sets standards for public water supplies. But their rules aren’t the same. As a result, there can be a big difference in how bottled water and tap water compare in terms of safety.

“Tap water comes from reservoirs and is tested for contaminants hundreds of times a month,” says Stewart. “Public water systems also have annual reports available so you can check on the health of your local tap water.
Less than 1 percent of the FDA’s time and resources is spent on regulating bottled water, so many of the companies are left to police themselves.”

**Chemical Additives**

Does your tap water taste funny? Public water can have small amounts of good or not-so-good chemicals that can change the taste. Chlorine is added in many public water systems to kill germs, but it can leave an aftertaste. Another chemical, fluoride, may be added to public water because it is helpful in preventing tooth decay.

Not all chemicals are intentionally put in, though. Pipes can shed lead or rust. In certain parts of the country, runoff from nearby farms can taint the water.

A good filter can help. Tabletop pitchers with charcoal filters can absorb and remove chemicals and leave the tap water tasting fresh. Other filters placed directly on the tap can remove chemicals and small particles before they pass through the faucet.

**Tapping In**

So the next time you’re thirsty, drink up. But think about what you drink. “We’re not saying bottled water shouldn’t exist,” says Stewart. “In emergency situations it’s great. But clean drinking water is a human right and a public good, one you shouldn’t have to pay so much for.”

If only bottled water is available, drinking it is OK. Staying healthy is important. But if you have a choice, reaching for a glass or finding a fountain may make a big difference for the planet.

Just ask Isaac G., 14, of Washington. He says: “I drink both tap and bottled water, but I choose tap water whenever I can. It just makes more sense for me—and for the environment.”

**Drinking water is one of the healthiest things you can do for your body. There’s no argument about that. But what to drink?**

**Bottled water** is everywhere. However, even though the labels and commercials tell you that this or that brand of water is the purest, is it really better for you? Is drinking bottled water better for the environment?

**Tap water** may be better for the environment, and it certainly is cheaper, but is tap water really clean and healthy?
Thirsty yet? Here are a few things to think about the next time you need a drink.

**Do the Math**

Tap water is cheap. Bottled water? Not so much. A half-liter bottle costs about $1 on average. So that’s $2 a liter. At approximately 3.8 liters in a gallon, you’re up to about $7.60. That’s roughly three times the cost of a gallon of gas. When you buy bottled water, the cost isn’t in the water (which is tap water in many cases) but in the packaging, the shipping, the marketing, and the profit to the company bottling it. Do you think the convenience of bottled water is worth the price?
1. According to the passage, how much more does bottled water cost compared to tap water?

   A  65 percent more  
   B  2 percent more  
   C  100 times more  
   D  1,000 times more

2. The passage presents two sides of an argument debating whether it is better to drink bottled water or tap water. Which of the following statements supports drinking bottled water?

   A  Chemicals called phthalates can seep into bottled water from the plastic.  
   B  Less than 20 percent of plastic water bottles get recycled every year.  
   C  Bottled water is convenient and it tastes better than tap water.  
   D  Huge amounts of energy go into producing bottles and packaging for bottled water.

3. Based on the passage, why do many companies most likely repackage tap water and sell it as bottled water?

   A  Tap water is more expensive than bottled water.  
   B  Companies think that tap water is more nutritious.  
   C  Companies can make more money because tap water is cheaper.  
   D  Companies think that their customers enjoy the taste of tap water.

4. Read the following sentence: “Not all chemicals are intentionally put in, though. Pipes can shed lead or rust.”

   As used in the passage, **intentionally** means

   A  toxic  
   B  safely  
   C  accidentally  
   D  purposely

5. What is the central idea of this passage?

   A  Average kids need about two liters of water a day to stay healthy.  
   B  Bottled and tap water are both good sources of water, but not everyone agrees on which is the better choice.  
   C  Tap water tastes better than bottled water, so people should drink more tap water.  
   D  Many companies make a lot of money from selling bottled water.
6. According to the passage, what can help tap water taste better?

____________________________________________________________________________________
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7. Based on the passage, why is the Think Outside the Bottle campaign most likely trying to get water bottle companies to label where their water is coming from?

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____________________________________________________________________________________
____________________________________________________________________________________

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Use a filter with charcoal to remove chemicals _____ drinking tap water so it can taste fresh.

A after  
B but  
C before  
D so

9. Answer the following questions based on the sentence below.

In 1999, the Natural Resources Defense Council found that many water bottle companies were bottling tap water after they conducted a study.

What? the Natural Resources Defense Council

(did) What? ________________________________________________________________

When? ________________________________________________________________

How? ________________________________________________________________
Directions: Read the vocabulary word and definition below to complete questions 10a, 10b, and 11.

Vocabulary Word: factors (fac-tors): the things that affect a situation or result.

10a. Read the sentences below and underline all forms of the word vocabulary.

1. If you’re unsure about how much water you should drink consider the following factors that may affect the amount: age, weight, and activity level.

2. The President has to make tough decisions where there are usually many different factors to consider.

3. There are many factors that affect your health including eating healthy foods, getting enough exercise, and drinking enough water.

4. There are many factors affecting the time we’ll arrive at our destination, including the distance, traffic, and the speed of the car.

5. Before I buy a car, I consider all the factors including the price, color, and safety.

10b. Which image shows one of the major factors that add to environmental pollution?

![Image of factory smoke stacks and river pollution]

11. What is one possible factor when someone is deciding to buy a shirt?

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________
Teacher Guide and Answers

Passage Reading Level: Lexile 1010

Featured Text Structure: Argumentative – the writer sets out both sides of the argument, altering how the reader perceives a topic or issue

Passage Summary: This passage presents both sides of an argument about whether or not people should drink bottled water or tap water. The passage presents evidence about the environmental and health effects of both choices.

1. According to the passage, how much more does bottled water cost compared to tap water?
   A. 65 percent more
   B. 2 percent more
   C. 100 times more
   D. 1,000 times more

2. The passage presents two sides of an argument debating whether it is better to drink bottled water or tap water. Which of the following statements supports drinking bottled water?
   A. Chemicals called phthalates can seep into bottled water from the plastic.
   B. Less than 20 percent of plastic water bottles get recycled every year.
   C. Bottled water is convenient and it tastes better than tap water.
   D. Huge amounts of energy go into producing bottles and packaging for bottled water.

3. Based on the passage, why do many companies most likely repackage tap water and sell it as bottled water?
   A. Tap water is more expensive than bottled water.
   B. Companies think that tap water is more nutritious.
   C. Companies can make more money because tap water is cheaper.
   D. Companies think that their customers enjoy the taste of tap water.

4. Read the following sentence: “Not all chemicals are intentionally put in, though. Pipes can shed lead or rust.”
   As used in the passage, intentionally means
   A. toxic
   B. safely
   C. accidentally
   D. purposely

5. What is the central idea of this passage?
   A. Average kids need about two liters of water a day to stay healthy.
   B. Bottled and tap water are both good sources of water, but not everyone agrees on which is the better choice.
   C. Tap water tastes better than bottled water, so people should drink more tap water.
   D. Many companies make a lot of money from selling bottled water.
6. According to the passage, what can help tap water taste better?

**Suggested answer:** Filters can help tap water taste better. Tabletop pitchers have charcoal filters. Some other filters can be placed directly on the tap to remove chemicals and other small particles. [paragraph 15]

7. Based on the passage, why is the Think Outside the Bottle campaign most likely trying to get water bottle companies to label where their water is coming from?

**Suggested answer:** The Think Outside the Bottle campaign is most likely trying to get companies to label where their water is coming from because many companies are just bottling tap water and not really filtering the water. Also, while tap water is well regulated by the Environmental Protection Agency, bottled water is not as well regulated by the federal Food and Drug Administration which only spends less than 1 percent of their time and resources on policing these companies. That means that many companies are most likely getting away with breaking the rules. [paragraphs 4-7, 11-12]

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Use a filter with charcoal to remove chemicals _____ drinking tap water so it can taste fresh.

A. after  
B. but  
C. before  
D. so

9. Answer the following questions based on the sentence below.

In 1999, the Natural Resources Defense Council found that many water bottle companies were bottling tap water after they conducted a study.

What? the Natural Resources Defense Council  
(did) What? **found that many water bottle companies were bottling tap water**  
When? **in 1999**  
How? **After they conducted a study**

**To the Teacher:** ReadWorks recommends that you teach this vocabulary word to the whole class out loud using the four steps listed below.

**Vocabulary Word:** factors (fac-tors): the things that affect a situation or result.

**Step 1:** Introduce the word

a. Teacher writes the word on the board and divides it into syllables: (fac-tors)

b. Teacher says: “This word is factors. What is the word?” [All students reply together out loud: “factors.”] 

**Step 2:** Provide a child-friendly definition

a. Teacher says: “Factors are the things that affect a situation or result.”
b. Teacher says: “The passage states that in order to decide how much water someone should drink, the factors include a person’s age, weight, and activity level. Each of these factors can affect, or change, how much water they should drink. In addition, the passage presents many factors, or things to think about, that can help people make a decision about whether to drink tap or bottled water.

c. Teacher says: “What is the word?” [All students reply together out loud: “factors.”]

Step 3: Practice the word

Teacher provides examples and additional opportunities to repeat the word. Read the first sentence out loud to your students. Begin reading it again and when you come to the vocabulary word prompt students to say the vocabulary word out loud. Then, finish reading the sentence out loud to your students.

Directions: Read the vocabulary word and definition below to complete questions 10a, 10b, and 11.

Vocabulary Word: factors (fac-tors): the things that affect a situation or result.

10a. Read the sentences below and underline all forms of the word factors.

1. If you’re unsure about how much water you should drink consider the following factors that may affect the amount: age, weight, and activity level.

2. The President has to make tough decisions where there are usually many different factors to consider.

3. There are many factors that affect your health including eating healthy foods, getting enough exercise, and drinking enough water.

4. There are many factors affecting the time we’ll arrive at our destination, including the distance, traffic, and the speed of the car.

5. Before I buy a car, I consider all the factors including the price, color, and safety.

Step 4: Check for student understanding

To the Teacher: This step can be completed as a whole class activity or as an independent practice.

10b. Which image shows one of the major factors that add to environmental pollution?

11. What is one possible factor when someone is deciding to buy a shirt?

Suggested answer: When someone is deciding what shirt to buy they may consider the following factors: the price, color, or size. These are all factors that would affect their decision.

Suggested Additional Vocabulary: fluid, optimum, factors, average, satisfy, beverages, annually, portable, promoting, regulate, conducted, estimated, organizer, major, petitions, fantastic, toxins, extreme, disrupt, potential, reservoirs, contaminants, preventing, intentionally, taint, absorb, convenience, hydration