

Activity 2. Water – A Great Thirst Quencher (5 mins)

Key Messages

- Drink water - it's always a great choice!

Objectives

- To discuss the importance of drinking water.

Preparation

- Make overhead transparency of Overhead 4: % Water in Human Body.
- Review Backgrounder: Water (page 108).

Eating Well with Canada's Food Guide or Eating Well with Canada's Food Guide - First Nations, Inuit and Métis also advises water as a great drink choice.



Activity

Level 1 and Level 2

- Explain with help of Overhead 4: % Water in Human Body that the body is made up of approximately 65% water.
- Discuss the importance of water. Cue students by using questions such as those below (see answers in Activity Tips):
 - Q1.** *Why do we need water?*
 - Q2.** *How much water do we need?*
 - Q3.** *What happens if we don't get enough water?*

Activity Tips

Q1. *Why do we need water?*

A1. Our bodies need water to: cool off by sweating, carry nutrients (like vitamins and minerals) to different parts of our bodies, carry waste (like carbon dioxide) out of our bodies; digest food, maintain blood pressure and kidney health, allow our muscles to contract, and many other vital bodily functions.

Q2. *How much water do we need?*

A2. Children (9-12 years old) need about 8 cups of fluid each day (about 1 L of water for every 1,000 calories burned). The best way to know if we are drinking enough water is to check our urine output. We should urinate every 2 to 4 hours, and the urine should be pale yellow (like lemonade) not dark (like apple juice).

Q3. *What happens if we don't get enough water?*

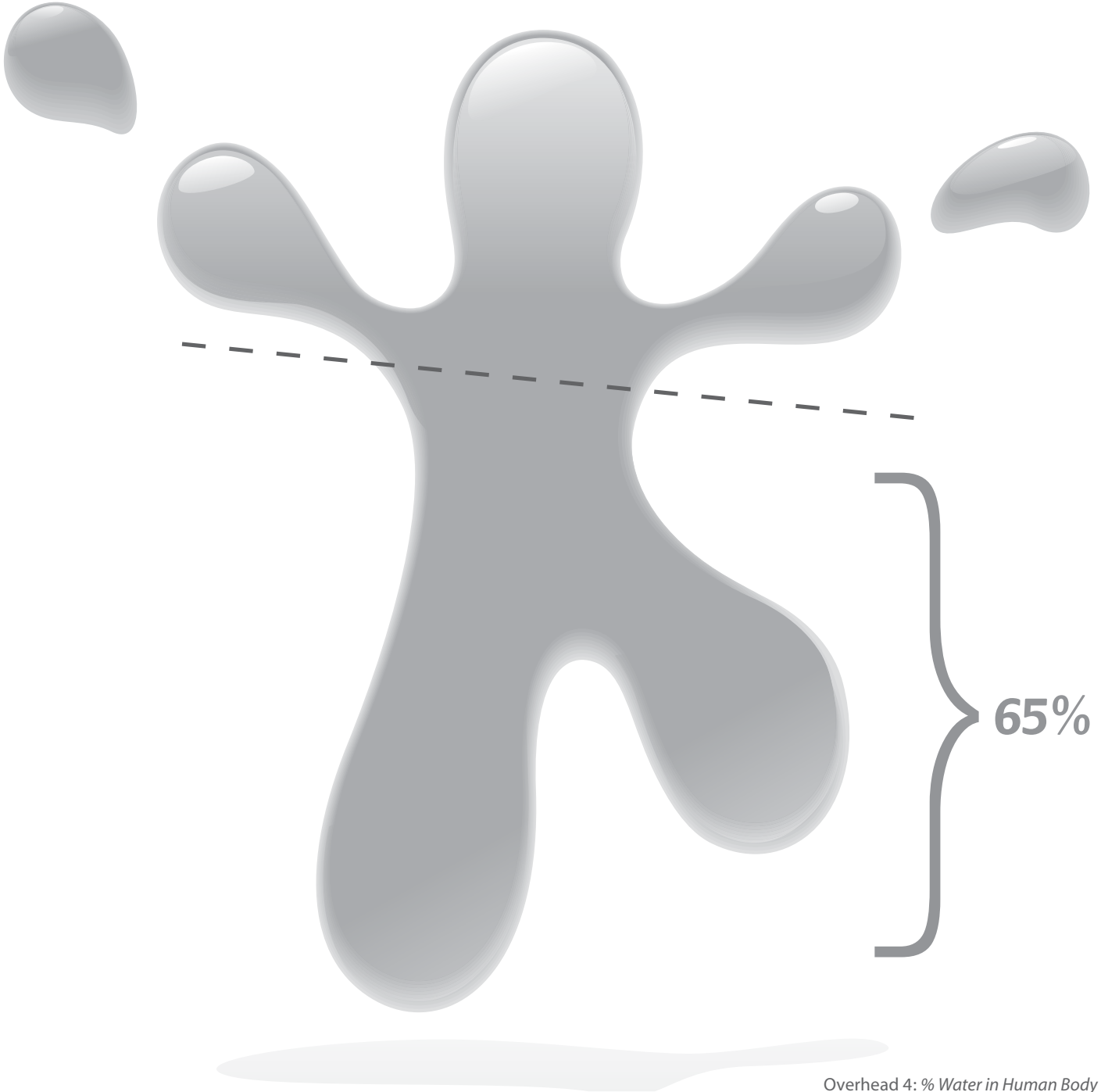
A3. Our bodies become dehydrated if we don't get enough water or other fluids. That is, we may feel tired, dizzy, have trouble concentrating, have a headache, have a higher heart rate, or have muscle cramps. At extreme levels of dehydration we can become delirious, our muscle and nervous systems can fail, and we can die.

The Punchline!

To stay healthy, a Grade 4, 5, or 6 student's body needs about 8 cups of **fluid** each day. Drink water – it's always a great choice!

SIP SMART! BC

% WATER IN HUMAN BODY



Overhead 4: % Water in Human Body

→ Backgrounders

Water

Our bodies need water to cool off by sweating, carry nutrients (vitamins, minerals, glucose, oxygen, fats) to cells, carry waste (carbon dioxide, lactic acid, etc.) away from cells, digest food, maintain bowel regularity and blood pressure, maintain kidney health, lubricate joints, allow muscles to contract, and many other vital bodily functions.

Our bodies are made up of approximately 65% water.

Children (9 - 12 years old) need about 8 cups of fluid each day (about 1L of water for every 1,000 calories burned). The best way to judge if we are drinking enough fluids is to monitor urine output: we should urinate every 2 to 4 hours, and the urine should be pale yellow (like lemonade) not dark (like apple juice).

Dehydration occurs if we don't get enough water or other fluids. We may feel tired, dizzy, have difficulty concentrating, have a headache, perform poorly at sports, have an increased heart rate, and muscle cramps. At extreme levels of dehydration we can become delirious, have complete muscle and nervous system failure, and die.

Features of tap water:

- It is easily available in most places – drinking fountains, taps in kitchens and bathrooms.
- It is cheaper than bottled water.
- Drinking water keeps us hydrated without adding sugar, sodium or caffeine to our diets.
- There is no evidence that bottled water is safer than municipal tap water (excluding local conditions).
- Empty (often plastic) bottles require energy to be recycled and add more non-biodegradable waste to the landfills.
- Energy is used to bottle water and fuel is used to transport it to stores.
- Potentially harmful toxins (e.g. bisphenol-A) can leach out of some plastic bottles.
- It is possible that some bottled water, such as demineralized water or distilled water is simply tap water that has undergone a process to lower the mineral content and to remove chemicals such as chlorine (Health Canada, *Frequently Asked Questions about Bottled Water*, 2016).

→ **Note:** Under some circumstances tap water can be unsafe. For example, untreated or inadequately treated water from wells and other sources can contain sufficient numbers of disease-causing organisms such as bacteria, parasites and viruses that cause illness. Under these circumstances, bottled water would be a safer choice.

References

HealthLink BC, *Drinking Enough Water*, November 2014

