### The Challenges — Teacher Resources

# Why Should We Drink Water?

By Cindy Cranford

What do all living things have in common? They all need water to survive. It may not seem like it, but water is the most necessary nutrient of all — so important that humans cannot survive for more than a few days without it. In fact, more than half of your body weight is water.

Water is the main component of all the fluids in your body systems. These fluids are vital to you as they travel through your body carrying nutrients to and waste from all your cells and organs. In your circulatory system, water is the main component of blood. Water is also the main part of the juices in your digestive system that help you properly digest food. Water moves through your body systems to help get rid of wastes, and also plays an important role in regulating your body temperature through perspiration.

Water is also used as a lubricant in the fluid that keeps the body's joints moving. Without proper lubrication, you would not be able to easily bend your legs or fingers. Other parts of the body also stay lubricated with water as it makes up the largest part of mucus that is contained in your eyes, nose, throat, stomach, and other internal parts of your body. Saliva, also known as spit, is made mostly of water and keeps your mouth and everything all the way down into your digestive system well lubricated. In other words, without water in our body, things just wouldn't work correctly.

Human bodies normally stay at a temperature of about 98.6 degrees Fahrenheit. However, if you are out running around and exercising or just sitting outside on a hot day, you begin to feel very hot. That is where water becomes especially important! When your body generates a lot of heat, water comes up through pores (tiny openings) in your skin as perspiration or sweat, and evaporates into the air. As the sweat evaporates, it cools your skin, which then cools your blood. When your blood becomes cooler, your inside body temperature is reduced and soon your whole body cools. It is just like having your own personal air conditioner.

Now think about all the studying and homework you do. Did you know that water also acts as a source of energy for your brain? Without enough water in the brain, thoughts do not easily move from one brain cell to another. When the water in your brain is replenished, thinking processes are improved. Hydrating the brain allows you to think more clearly and process information better. That sounds like another good reason for drinking plenty of water.

### The Challenges — Teacher Resources

As you can see, water performs a lot of tasks in your body every day. That is why it is important to give your body the water it needs to carry out all its different jobs. On a regular day, your body loses two to three quarts of water. That is more than enough water to fill a 2-liter soda bottle. As you have learned, your body loses water as it empties waste and through perspiration, especially on a hot day. However, your body also loses water through evaporation.

Evaporation occurs when water escapes from your body through your skin and as you breathe. Your breath contains tiny droplets of water that are usually too small to see. They may become visible for a few seconds in the cold air when you can "see your breath." But with every breath, water is evaporating from your body. Your skin also contains water that evaporates into the air. Just like a wet sponge that dries out as the water evaporates, so does your skin. The water droplets are released through the pores of your skin and escape into the air. Dry skin might be a sign that your body needs more water.

Eating and drinking is one way to replace the water lost from your body. Most foods have a lot of water in them, especially fruits and vegetables. However, you cannot rely on food alone to get water back into your body. You must drink water to help replace the needed supply of water. Most doctors recommend that individuals drink eight to 12 cups of water each day. If you're exercising and sweating, drinking water is even more important. When you sweat, your body loses even more water than normal.

In other words, drinking water is a healthy thing to do. No matter how many cups of water you drink, water contains no calories. Drinking other liquids, such as juice or low-fat milk, may help you get some of the water back. It is okay to drink iced tea or soda occasionally, but they are usually loaded with sugar and caffeine. Caffeine is a diuretic (di u-ret'ik), which means it makes you lose more water and urinate more often. It is not helpful to be losing water when you are trying to replace it.

It is also important to drink water before you feel thirsty. Once you feel thirsty, your body is already dehydrated, meaning your body needed water earlier. Therefore, when it is hot, or you are exercising, it is much better to drink water even when you are not thirsty. You'll feel better and have more energy.

Water is great for the body. It helps every cell live, keeps things moving properly, and even cools the body when necessary. Keep your body healthy by getting enough water. Water does a body good.

Information is from Kids Health and Teaching With the Brain in Mind, by Eric Jensen, The Nemours Foundation.

## The Challenges — Teacher Resources

#### **Reading Response Questions**

#### Why Should We Drink Water?

By Cindy Cranford

• Short response

The human body loses water on a daily basis. How can this water be replaced?

• Extended response

Our bodies lose water in various ways. Think of at least two ways our bodies lose water. Use detailed information from the text to explain these processes.

• Extended response

Evaporation is a process that occurs in many things. Discuss how water leaves the human body through evaporation. Be sure to use facts and information from the text.