# Dehydration

# What is dehydration?

Dehydration is a loss of too much fluid from your body. The human body needs water to maintain normal functions. If your body loses much more fluid than you are drinking, you become dehydrated. If the loss of fluid is severe, you can become very ill and possibly die.

You lose fluids when you:

urinate vomit or have diarrhea sweat breathe, especially during rapid breathing overexert yourself in hot or humid weather have a fever.

Along with the fluids, your body also loses electrolytes (mineral salts), which are also important for normal body functions.

## How does it occur?

The usual causes of dehydration are diarrhea and vomiting. Dehydration can also occur if you do not eat or drink much during an illness or if you do not drink enough during or after strenuous exercise. Medicines that control excess body fluid (diuretics, or "water pills") by causing fluid loss are a common long-term cause. Diabetes can also cause water loss.

Although anyone can become dehydrated, adults who become dehydrated the most easily are:

older adults anyone who has a fever people in hot weather people with diabetes if they are urinating a lot because their blood sugar is too high.

## What are the symptoms?

Symptoms of early or mild dehydration include:

thirst flushed face dry, warm skin small amounts of dark, yellow urine lightheadedness or dizziness made worse when you stand weakness cramping in the arms and legs having few or no tears headache a lack of energy dry mouth and tongue with thick saliva.

When dehydration is moderate to severe, other symptoms are:

low blood pressure fainting severe muscle contractions in the arms, legs, stomach, and back convulsions a bloated stomach sunken eyes with few or no tears lack of skin elasticity (a bit of skin lifted up takes a long time to go back to its normal position) rapid and deep breathing.

# How is it diagnosed?

Your healthcare provider will review your symptoms and do a physical exam.

# How is it treated?

If you are mildly dehydrated, you need to drink enough liquid to replace the fluids you have lost. Also, you need to replace the electrolytes you have lost. Drinking sips of water slowly, along with eating the typical American diet, which is high in salt, will replace fluids and salts you have lost. You should see a healthcare provider if you are feeling confused, dizzy, or faint or if you have persistent nausea or vomiting.

You can replace fluids and electrolytes by drinking sports drinks or other oral rehydration solutions (ORS). Drink the solution right away. Do not wait until dehydration becomes severe.

You can buy packets of oral rehydration salts at drug and grocery stores. Mix the contents of a packet with 1 quart or liter of drinking water. If you are not sure if the water is safe to drink, first boil the water for at least 5 minutes.

If you don't have a sports drink or ORS packet, you can make an oral rehydration solution using the following recipe: To 1 quart or liter of drinking water or boiled water, add the following:

2 tablespoons sugar

1/4 teaspoon salt1/4 teaspoon baking soda (bicarbonate of soda).

If you don't have any baking soda, add another 1/4 teaspoon of salt. If possible, add 1/2 cup orange juice or some mashed banana to improve the taste and provide some potassium.

Drink sips of the ORS every 5 minutes until urination becomes normal. (It's normal to urinate 4 or 5 times a day.) Adults and large children should drink at least 3 quarts or liters of ORS a day until they are well.

If you are vomiting, keep trying to drink the ORS. Your body will retain some of the fluids and salts you need even though you are vomiting. Remember to take only sips of liquids. Chilling the ORS may help.

If you have diarrhea, keep drinking the ORS. The fluids will not increase the diarrhea.

If you have symptoms of severe dehydration, you need to go to an emergency room or other healthcare facility to get intravenous (IV) fluids. If you are able to drink, you should also drink the ORS.

During or after treatment of dehydration, you should also be treated for whatever is causing diarrhea, vomiting, or other symptoms. Changes in medicine and control of underlying illnesses are often needed. Diabetics are particularly prone to dehydration and should see a healthcare provider as soon as possible if they become dehydrated or have a prolonged period of high blood sugar.

#### How long will the effects last?

If dehydration is not treated, it can cause death. If it is treated in time, recovery is usually complete.

#### How can I take care of myself?

Know the symptoms of dehydration. Try to drink extra fluids if you know your body is losing them rapidly. Do not drink alcohol or beverages with caffeine.

Know the recipe for ORS.

If you are traveling in a country that may not have safe water for drinking, carry with you a quart (liter) of boiled water and packets or the ingredients for making oral rehydration solutions.

#### How can I help prevent dehydration?

Make sure you drink plenty of water. When you are physically active, especially in hot weather, it is best to drink water some time before starting the exercise or sport. Then drink small amounts of water often during the exercise. Continue to drink

liquids after exercise.

If you have diarrhea or vomiting or you are not drinking much, force yourself to drink more liquids before you become dehydrated.

If you are with someone you think is becoming dehydrated, follow these guidelines when possible:

Give more liquids than usual.

Remember that a dehydrated person will have less of an appetite. Encourage him or her to eat and drink small amounts of food and liquids 5 to 7 times a day.

Watch for signs of more severe dehydration and get medical help as soon as possible.

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