

Dehydration

What is dehydration?

The human body needs water to maintain enough blood and other fluids to function properly. If your body loses much more fluid than you are drinking, you become dehydrated.

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).

How does it occur?

The usual causes of dehydration are a lot of 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. Medications that control excess body fluid (diuretics) by causing fluid loss are a common long-term cause. Although anyone can become dehydrated, those who become dehydrated the most easily are:

- babies less than 1 year old
- the elderly
- anyone who has a fever
- people in hot weather.

What are the symptoms?

Symptoms of early or mild dehydration include:

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

Symptoms of moderate to severe dehydration include:

- 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 doctor 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.

Nonprescription medicines are available that help replenish fluids and electrolytes. You can also replace fluids and electrolytes by drinking sports drinks or other oral rehydration solutions (ORS). Drink the solution immediately. Do not wait until dehydration becomes severe. Packets of oral rehydration salts are widely available. 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 or honey
- 1/4 teaspoon salt
- 1/4 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 health care facility to get intravenous (IV) fluids. If you are able to drink, you should also drink the ORS. With treatment for dehydration, whatever is causing diarrhea, vomiting, or other symptoms should also be treated.

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.
- 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.

What can be done to prevent dehydration?

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.