

# Too much water is a hazard

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For The Sun News

We all know that hot, humid weather can lead to problems such as dehydration and heat stroke if we do not drink enough fluids.

But another condition called water intoxication also needs to be closely monitored.

Drinking too much water too fast for the kidneys to process causes water intoxication. The kidneys of a healthy adult can process about 15 liters of fluids a day.

Even if a person drinks more than the recommended eight glasses of water a day, the kidneys have no problem as long as the consumption is stretched out over time. It is when large quantities of water are consumed all at once that problems can arise.

Sally Pierce, registered nurse with SOS Health Care, said, "If a person drinks too much water too fast, the body's cells and tissues get saturated because there is nowhere else for the water to go. It can cause swelling and can even cause the cells to burst, leading to severe tissue damage."

When too much water enters the cells, it dilutes the electrolyte solution in the cells, causing another serious condition called hyponatremia. The cells try to correct this imbalance by absorbing more water and swell to the point of bursting.

The electrolyte imbalance and tissue swelling can cause irregular heartbeat and allow fluid to enter the lungs. Other symptoms are extreme weakness, muscle twitching, cramping and confusion. It can also put pressure on the brain and nerves causing behavior resembling alcohol intoxication.

If treatment is given before tissue swelling causes too much cell damage, then complete recovery should be achieved in a few days. In extreme cases, swelling of the brain tissue can cause seizures, coma and death unless water intake is restricted and a hypertonic saline solution administered.

"The first signs of swelling

## Avoid water intoxication

Follow these simple steps and chances are you will never be sickened by water intoxication.

- Mix infant formula with water only as directed. Never try to stretch it out by adding extra water.
- Do not use water as a substitute for food while dieting.
- Drink the recommended eight glasses of water during the course of the day, but not all in one sitting. Spread it out.

➤ If you are hot and sweating a lot, use a fortified drink to replenish the electrolytes your body is losing.

➤ Watch for signs of heat stress. If you get a headache or sweat a lot, go inside.

Source | Sally Pierce,  
registered nurse with SOS

are usually in the legs and feet," Pierce said. "Elevate the legs above the heart to get the fluid back in circulation. It is very important to get the person to the emergency room because heart problems can occur and the person needs to be monitored closely."

Athletes and outside workers can fall victim to water intoxication by getting overheated and dehydrated, then guzzling

too much water at one time.

It is important for them to take rest breaks often, cool off and have caffeine-free drinks. Sports drinks such as Gatorade can prevent hyponatremia by replacing the fluids and electrolytes lost by sweating.

Also, a person can become dehydrated by vomiting or diarrhea, and lose electrolytes that are not replaced by drinking plain water. That is why many doctors recommend that their sick patients supplement their fluid intake with sport drinks.

Pierce stresses that anyone can fall prey to water intoxication.

"Dieters who fill up with water instead of food, and infants if their formula is watered down too much," she said. "I have had four cases of infants having to be hospitalized to get their bodies back in balance."

Those suffering from water intoxication, which is not common but can be serious, may have impaired judgment because of heat stroke, drug use or psychological distress. When combined with heat stroke or drugs, the condition can be difficult to identify and treat.