# All you need to know about hyperchloremia

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Hyperchloremia is a disorder in which a person has too much chloride in their blood. Chloride is an electrolyte, and changes in electrolyte levels can cause dehydration.

Electrolytes such as chloride, sodium, and bicarbonate are [minerals that dissolve in the fluids of the body](https://www.scientificamerican.com/article/what-are-electrolytes/).

With careful management of fluids and food, and with prompt treatment for any underlying conditions, most people can regain normal electrolyte levels.

### Fast facts on hyperchloremia:

* People with hyperchloremia have too much chloride in their bloodstream, often due to changes in the body’s fluid levels.
* People undergoing [chemotherapy](https://www.medicalnewstoday.com/articles/158401.php) have many risk factors for hyperchloremia.
* Treatment for hyperchloremia depends on the cause.
* It is not always possible to prevent hyperchloremia.

## What is it?

[Share on Pinterest](https://www.pinterest.com/pin/create/button/?url=https%3A%2F%2Fwww.medicalnewstoday.com%2Farticles%2F319801&media=https%3A%2F%2Fcdn-prod.medicalnewstoday.com%2Fcontent%2Fimages%2Farticles%2F319%2F319801%2Fgloved-hand-holding-a-blood-sample.jpg&description=Hyperchloremia%20(high%20chloride)%3A%20Symptoms%2C%20causes%2C%20and%20treatments)Usually, high levels of chlorine in the blood is discovered during tests for electrolyte levels.

When the body is stressed, electrolyte levels may become imbalanced. The kidneys help regulate electrolyte levels, so electrolyte problems can signal a problem with the kidneys.

Hyperchloremia often points to another problem. People discover they have hyperchloremia as part of a collection of tests to measure electrolyte levels.

A doctor may order these tests if a person appears to have nutritional or fluid imbalances, kidney problems, or is undergoing chemotherapy.

## Symptoms

Chloride helps the body maintain its fluid balance. It also helps make the digestive enzymes that help the body metabolize food. Changes in chloride levels can harm these functions.

When chloride levels are moderately high, a person may not notice any symptoms. Long-term hyperchloremia, however, can cause a range of symptoms.

Those include:

* [fluid retention](https://www.medicalnewstoday.com/articles/187978.php)
* [high blood pressure](https://www.medicalnewstoday.com/articles/159283.php)
* muscle weakness, spasms, or twitches
* irregular heart rate
* confusion, difficulty concentrating, and personality changes
* numbness or tingling
* seizures and convulsions

The severity of symptoms depends on how high chloride levels are, how long they have remained that high, and individual factors such as:

* health
* nutritional status
* use of various medications

The symptoms of hyperchloremia and electrolyte imbalances are so general that it is impossible to diagnose this syndrome based on symptoms alone. People should not self-diagnose.

A simple blood test can detect hyperchloremia.

## Causes

[Share on Pinterest](https://www.pinterest.com/pin/create/button/?url=https%3A%2F%2Fwww.medicalnewstoday.com%2Farticles%2F319801&media=https%3A%2F%2Fcdn-prod.medicalnewstoday.com%2Fcontent%2Fimages%2Farticles%2F319%2F319801%2Fnewborn-infant-swaddled-in-baby-carrier-on-mother-s-chest.jpg&description=Hyperchloremia%20(high%20chloride)%3A%20Symptoms%2C%20causes%2C%20and%20treatments)Newborn infants may have hyperchloremia, without having any health problems. This is considered normal.

In newborns, hyperchloremia is normal.

A study that measured chloride levels in healthy infants, as well as preterm infants and those with health issues, found that chloride levels rose in the week following birth.

This increase was independent of whether the baby was premature or had health problems. This suggests that chloride levels naturally rise in newborns and that this rise is not due to a health problem.

[Some research](https://www.hindawi.com/journals/ijpedi/2012/931597/) supports this but also suggests that babies’ chloride levels are related to their chloride intake.

In children and adults, [causes of hyperchloremia](http://chemocare.com/chemotherapy/side-effects/hyperchloremia-high-chloride.aspx) include:

* Gastrointestinal problems, such as vomiting or [diarrhea](https://www.medicalnewstoday.com/articles/158634.php). These issues can cause [dehydration](https://www.medicalnewstoday.com/articles/153363.php).
* A high [fever](https://www.medicalnewstoday.com/articles/168266.php) that causes sweating and dehydration.
* Dehydration due to medications, intense exercise, heat exposure, or not drinking enough fluids.
* High sodium levels in the blood. Chloride tends to rise when sodium does.
* Too much salt intake. Chloride is an ingredient in sodium chloride, which is table salt.
* [Diabetes insipidus](https://www.medicalnewstoday.com/articles/183251.php), which causes the kidneys to pass large amounts of fluid.