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Chloride test - blood

Chloride is a type of electrolyte. It works with other electrolytes such as potassium, sodium, and carbon dioxide (CO_2). These substances help keep the proper balance of body fluids and maintain the body's acid-base balance.

This article is about the laboratory test used to measure the amount of chloride in the fluid portion (serum) of the blood.

How the Test is Performed

A blood sample is needed. Most of the time blood is drawn from a vein located on the inside of the elbow or the back of the hand.

How to Prepare for the Test

Many medicines can interfere with blood test results.

- Your health care provider will tell you if you need to stop taking any medicines before you have this test.
- DO NOT stop or change your medicines without talking to your provider first.

Why the Test is Performed

You may have this test if you have signs that your body's fluid level or acid-base balance is disturbed.

This test is most often ordered with other blood tests, such as a basic or comprehensive metabolic panel.

Normal Results

A typical normal range is 96 to 106 milliequivalents per liter (mEq/L) or 96 to 106 millimoles per liter (millimol/L).

Normal value ranges may vary slightly among different laboratories. Talk to your provider about the meaning of your specific test results.

The example above shows the common measurement range for results for these tests. Some laboratories use different measurements or may test different specimens.

What Abnormal Results Mean

A greater-than-normal level of chloride is called hyperchloremia. It may be due to:

- Addison disease
- Carbonic anhydrase inhibitors (used to treat glaucoma)
- Diarrhea
- Ethylene glycol poisoning
- Ketoacidosis
- Kidney disease
- Lactic acidosis
- Metabolic acidosis
- Methanol poisoning
- Renal tubular acidosis - distal
- Renal tubular acidosis - proximal
- Respiratory alkalosis (compensated)
- Salicylate toxicity (such as aspirin overdose)
- Ureteral diversion

A lower-than-normal level of chloride is called hypochloremia. It may be due to:

- Bartter syndrome
- Burns
- Congestive heart failure
- Cushing syndrome
- Dehydration
- Excessive sweating
- Hyperaldosteronism
- Metabolic alkalosis
- Respiratory acidosis (compensated)
- Syndrome of inappropriate diuretic hormone secretion (SIADH)
- Vomiting

This test may also be done to help rule out or diagnose:

- Multiple endocrine neoplasia (MEN) II
- Primary hyperparathyroidism

Delirium may also alter chloride levels.

Alternative Names

Serum chloride test

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