



[Home](#) → [Medical Encyclopedia](#) → Electrolytes

URL of this page: //medlineplus.gov/ency/article/002350.htm

## Electrolytes

Electrolytes are minerals in your blood and other body fluids that carry an electric charge.

Electrolytes affect how your body functions in many ways, including:

- The amount of water in your body
- The acidity of your blood (pH)
- Your nerve and muscle function
- Other important processes

You lose electrolytes when you sweat. You must replace them by drinking fluids that contain electrolytes. Water does not contain electrolytes.

Common electrolytes include:

- Calcium
- Chloride
- Magnesium
- Phosphorus
- Potassium
- Sodium

Electrolytes can be acids, bases, or salts. They can be measured by different blood tests. Each electrolyte can be measured separately, such as:

- Ionized calcium
- Serum calcium
- Serum chloride
- Serum magnesium
- Serum phosphorus
- Serum potassium
- Serum sodium

Note: Serum is the part of blood that doesn't contain cells.

Sodium, potassium, chloride, and calcium levels can also be measured as part of a basic metabolic panel. A more complete test, called comprehensive metabolic panel, can test for these and several more chemicals.

The electrolytes - urine test measures electrolytes in urine. It tests the levels of calcium, chloride, potassium, sodium, and other electrolytes.

## References

Hamm LL, DuBose TD. Disorders of acid-base balance. In: Yu ASL, Chertow GM, Luyckx VA, Marsden PA, Skorecki K, Taal MW, eds. *Brenner and Rector's The Kidney*. 11th ed. Philadelphia, PA: Elsevier; 2020:chap 16.

Oh MS, Briefel G, Pincus MR. Evaluation of renal function, water, electrolytes, and acid-base balance. In: McPherson RA, Pincus MR, eds. *Henry's Clinical Diagnosis and Management by Laboratory Methods*. 24th ed. Philadelphia, PA: Elsevier; 2022:chap 15.

## Review Date 11/19/2023

Updated by: Jacob Berman, MD, MPH, Clinical Assistant Professor of Medicine, Division of General Internal Medicine, University of Washington School of Medicine, Seattle, WA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

### Learn how to cite this page



Health Content  
Provider  
06/01/2028

A.D.A.M., Inc. is accredited by URAC, for Health Content Provider ([www.urac.org](http://www.urac.org)). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#), and [privacy policy](#).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only – they do not constitute endorsements of those other sites. No warranty of any kind, either expressed or implied, is made as to the accuracy, reliability, timeliness, or correctness of any translations made by a third-party service of the information provided herein into any other language. © 1997-2025 A.D.A.M., a business unit of Ebix, Inc. Any duplication or distribution of the information contained herein is strictly prohibited.



National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894 U.S. Department of Health and Human Services

National Institutes of Health