

[Print this page](#)[Close this window](#)

Medical Encyclopedia: Uric acid

URL of this page: <http://www.nlm.nih.gov/medlineplus/ency/article/003476.htm>

Definition

This is a test to measure the amount of uric acid in the blood.

How the test is performed

Blood is drawn from a vein or a capillary. The laboratory centrifuges the blood to separate the serum from the cells and the uric acid test is done on the serum.

How to prepare for the test

Fast for 4 hours before the test. Your medical provider may also advise you to discontinue drugs that may affect the test.

Drugs that can increase uric acid measurements include alcohol, ascorbic acid, aspirin, caffeine, cisplatin, diazoxide, diuretics, epinephrine, ethambutol, levodopa, methyldopa, nicotinic acid, phenothiazines, and theophylline.

Drugs that can decrease uric acid measurements include allopurinol, high-dose aspirin, azathioprine, clofibrate, corticosteroids, estrogens, glucose infusion, guaifenesin, mannitol, probenecid, and warfarin.

Why the test is performed

This test is performed to detect elevated uric acid levels. Increased levels of uric acid can cause gout.

Uric acid is the end product of purine metabolism (purines are building blocks of RNA and DNA). Most uric acid produced in the body is excreted by the kidneys. An overproduction of uric acid occurs when there is excessive breakdown of cells, which contain purines, or an inability of the kidneys to excrete uric acid.

Normal Values

Normal values fall between 3.0 and 7.0 mg/dL.

Note: Normal values may vary slightly from laboratory to laboratory.

What abnormal results mean

Greater-than-normal levels of uric acid (hyperuricemia) may indicate:

- Acidosis
- Alcoholism

- Diabetes
- Gout
- Hypoparathyroidism
- Lead poisoning
- Leukemia
- Nephrolithiasis
- Polycythemia vera
- Renal failure
- Toxemia of pregnancy
- Purine-rich diet
- Severe exercise

Lower-than-normal levels of uric acid may indicate:

- Fanconi's syndrome
- Wilson's disease
- SIADH
- Low purine diet

Additional conditions under which the test may be performed:

- Chronic gouty arthritis
- Injury of the kidney and ureter

Update Date: 6/1/2005

Updated by: Aniket R. Sidhaye, M.D., Division of Endocrinology and Metabolism, Johns Hopkins University School of Medicine, Baltimore, MD. Review provided by VeriMed Healthcare Network.



A.D.A.M., Inc. is accredited by URAC, also known as the American Accreditation HealthCare Commission (www.urac.org). URAC's [accreditation program](#) is the first of its kind, requiring compliance with 53 standards of quality and accountability, verified by independent audit. 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 process](#). A.D.A.M. is also a founding member of Hi-Ethics (www.hiethics.com) and subscribes to the principles of the Health on the Net Foundation (www.hon.ch).

The information provided should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed physician should be consulted for diagnosis and treatment of any and all medical conditions. Call 911 for all medical emergencies. Adam makes no representation or warranty regarding the accuracy, reliability, completeness, currentness, or timeliness of the content, text or graphics. Links to other sites are provided for information only -- they do not constitute endorsements of those other sites. Copyright 2005, A.D.A.M., Inc. Any duplication or distribution of the information contained herein is strictly prohibited.