

# URIC ACID



## What is high uric acid level?

Uric acid is a waste product found in blood. It's created when the body breaks down chemicals called purines. Most uric acid dissolves in the blood, passes through the kidneys and leaves the body in urine. Food and drinks high in purines also increase the level of uric acid. These include:

- Seafood (especially salmon, shrimp, lobster and sardines)
- Red meat
- Organ meats like liver
- Food and drinks with high fructose corn syrup, and alcohol (especially beer, including non-alcoholic beer)

If too much uric acid stays in the body, a condition called hyperuricemia will occur. Hyperuricemia can cause crystals of uric acid (or urate) to form. These crystals can settle in the joints and cause gout, a form of arthritis that can be very painful. They can also settle in the kidneys and form [kidney stones](#).

If untreated, high uric acid levels may eventually lead to permanent bone, joint and tissue damage, kidney disease and heart disease. Research has also shown a link between high uric acid levels and type 2 [diabetes](#), high blood pressure, and fatty liver disease.

When we urinate, our bodies eliminate liquid waste consisting of water and salt as well as the chemicals urea and uric acid. Most uric acid is produced naturally in the body; the rest is converted from substances in certain foods, called purines. If uric acid levels are too high, they can cause a condition known as hyperuricemia, a risk factor for both [gout](#) and kidney disease.<sup>1</sup>

### **Causes and Risk Factors**

Aging and being male put you at a higher risk of developing hyperuricemia. In studies from the U.S. and New Zealand, people of African, Maori, or Filipino ancestry are at higher risk than people of European ancestry.<sup>3</sup>

Other risk factors include:<sup>4</sup>

- Renal insufficiency
- Metabolic syndrome—a disorder that involves obesity, abnormal blood pressure, dysglycemia (blood sugar disorders), dyslipidemia (lipid disorders)
- A diet that is high in alcohol, purines, protein, and carbohydrates
- Medications, including thiazides, loop diuretics, and low-dose aspirin
- Niacin
- Acidosis
- [Chemotherapy](#)
- Diabetes
- [Hypoparathyroidism](#)
- Psoriasis
- Lead poisoning
- [Polycythemia vera](#)
- Toxemia related to pregnancy
- [Tumor lysis syndrome](#)
- Genetic predisposition

## How are high uric acid and gout diagnosed?

A blood sample is taken and tested to determine the level of uric acid. If you pass a kidney stone or have one surgically removed, the stone itself might be tested to see if it is a uric acid stone or a stone of a different type. Finding an elevated blood uric acid level is NOT the same as diagnosing gouty arthritis. To diagnose definite [gout](#), the uric acid crystals must be seen in the fluid taken from a swollen joint or seen by special imaging of the bones and joints (ultrasound, X-ray or CAT scan).

