

# What Is Gout?

## *Fast Facts: An Easy-to-Read Series of Publications for the Public*

Gout is one of the most painful forms of arthritis. It occurs when too much uric acid builds up in the body. The buildup of uric acid can lead to:

- Sharp uric acid crystal deposits in joints, often in the big toe
- Deposits of uric acid (called tophi) that look like lumps under the skin
- Kidney stones from uric acid crystals in the kidneys.

For many people, the first attack of gout occurs in the big toe. Often, the attack wakes a person from sleep. The toe is very sore, red, warm, and swollen.

Gout can cause:

- Pain
- Swelling
- Redness
- Heat
- Stiffness in joints.

In addition to the big toe, gout can affect the:

- Insteps
- Ankles
- Heels
- Knees
- Wrists
- Fingers
- Elbows.

A gout attack can be brought on by stressful events, alcohol or drugs, or another illness. Early attacks usually get better within 3 to 10 days, even without treatment. The next attack may not occur for months or even years.

### **What Causes Gout?**

Gout is caused by the buildup of too much uric acid in the body. Uric acid comes from the breakdown of substances called purines. Purines are found in all of your body's tissues. They are also in many foods, such as liver, dried beans and peas, and anchovies.

U.S. Department of Health  
and Human Services  
Public Health Service

National Institute of  
Arthritis  
and Musculoskeletal and  
Skin Diseases  
National Institutes of Health  
1 AMS Circle  
Bethesda, MD 20892-3675

Phone: 301-495-4484  
Toll free: 877-22-NIAMS  
TTY: 301-565-2966  
Fax: 301-718-6366  
Email:  
NIAMSinfo@mail.nih.gov  
Website:  
www.niams.nih.gov



Normally, uric acid dissolves in the blood. It passes through the kidneys and out of the body in urine. But uric acid can build up in the blood when:

- The body increases the amount of uric acid it makes.
- The kidneys do not get rid of enough uric acid.
- A person eats too many foods high in purines.

When uric acid levels in the blood are high, it is called hyperuricemia. Most people with hyperuricemia do not develop gout. But if excess uric acid crystals form in the body, gout can develop.

You are more likely to have gout if you:

- Have family members with the disease
- Are a man
- Are overweight
- Drink too much alcohol
- Eat too many foods rich in purines
- Have an enzyme defect that makes it hard for the body to break down purines
- Are exposed to lead in the environment
- Have had an organ transplant
- Use some medicines such as diuretics, aspirin, cyclosporine, or levodopa
- Take the vitamin niacin.

### **How Is Gout Diagnosed?**

Your doctor will ask about your symptoms, medical history, and family history of gout. Signs and symptoms of gout include:

- Hyperuricemia (high level of uric acid in the blood)
- Uric acid crystals in joint fluid
- More than one attack of acute arthritis
- Arthritis that develops in 1 day, producing a swollen, red, and warm joint
- Attack of arthritis in only one joint, usually the toe, ankle, or knee.

To confirm a diagnosis of gout, your doctor may draw a sample of fluid from an inflamed joint to look for crystals associated with gout.

### **How Is Gout Treated?**

Doctors use medicines to treat an acute attack of gout, including:

- Nonsteroidal anti-inflammatory drugs (NSAIDs)
- Corticosteroids, such as prednisone
- Colchicine, which works best when taken within the first 12 hours of an acute attack.

Sometimes doctors prescribe NSAIDs or colchicine in small daily doses to prevent future attacks. There are also medicines that lower the level of uric acid in the blood.

**What Can People With Gout Do to Stay Healthy?**

Some things that you can do to stay healthy are:

- Take the medicines your doctor prescribes as directed.
- Tell your doctor about all the medicines and vitamins you take.
- Plan followup visits with your doctor.
- Maintain a healthy, balanced diet. Avoid foods that are high in purines, and drink plenty of water.
- Exercise regularly and maintain a healthy body weight. Ask your doctor about how to lose weight safely. Fast or extreme weight loss can increase uric acid levels in the blood.

**What Research Is Being Done on Gout?**

Scientists are studying:

- Which NSAIDs are the most effective treatments for gout
- Optimal dosages of medications for gout
- New medicines that safely lower uric acid in the blood and reduce symptoms
- New therapies that block a chemical called tumor necrosis factor
- Enzymes that break down purines in the body
- The role of foods and certain vitamins
- The role of genetics and environmental factors
- The interactions of cells involved in acute gout attacks.

Scientists are also studying the role of genetics and environmental factors in hyperuricemia and gout.

**For More Information About Gout and Other Related Conditions:**

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)  
Information Clearinghouse  
National Institutes of Health  
1 AMS Circle  
Bethesda, MD 20892-3675  
Phone: 301-495-4484  
Toll free: 877-22-NIAMS (226-4267)  
TTY: 301-565-2966  
Fax: 301-718-6366  
Email: NIAMSinfo@mail.nih.gov  
Website: www.niams.nih.gov

The information in this fact sheet was summarized in easy-to-read format from information in a more detailed NIAMS publication. To order the Gout Q&A full-text version, please contact the NIAMS using the contact information above. To view the complete text or to order online, visit [www.niams.nih.gov](http://www.niams.nih.gov).

**For Your Information**

This publication may contain information about medications used to treat the health condition discussed here. When this publication was printed, we included the most up-to-date (accurate) information available. Occasionally, new information on medication is released.

For updates and for any questions about any medications you are taking, please contact the U.S. Food and Drug Administration (FDA) toll free at 888-INFO-FDA (888-463-6332) or visit its website at [www.fda.gov](http://www.fda.gov). For additional information on specific medications, visit Drugs@FDA at [www.accessdata.fda.gov/scripts/cder/drugsatfda](http://www.accessdata.fda.gov/scripts/cder/drugsatfda). Drugs@FDA is a searchable catalog of FDA-approved drug products.