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# WHAT IS GOUT?

Gout is a common type of arthritis (joint inflammation). It causes sudden bouts of pain and swelling, usually in just one or two joints (the ball of the foot is commonly involved), and which, left untreated, last from days to weeks. These bouts of acute gouty arthritis are also called gout attacks.

Gout affects men (middle-aged generally) much more often than women. Gout is closely linked with the body's level of uric acid – a normal breakdown product of digesting certain foods. High uric acid levels and gout attacks can be treated by your doctor.

### URIC ACID

Uric acid is a natural byproduct of the body's metabolism of foods rich in chemicals called purines, and it is made by the body as well. Normally, excess uric acid in the blood is transferred by the kidneys into the urine, and removed from the body. However, people with gout either produce too much uric acid or their kidneys are unable to dispose of it sufficiently, so it accumulates in the body. When uric acid accumulates it can form tiny needle-shaped crystals in the joints – this causes inflammation and pain.

Sometimes people can have high levels of uric acid in the blood (hyperuricaemia) but have no joint pain, and other people who have gout attacks can have near-normal uric acid levels. Accumulation of uric acid may also cause kidney problems, and this is another important reason for controlling uric acid levels with medications.

# ACUTE GOUTY ARTHRITIS (GOUT ATTACKS)

When uric acid crystals form in a joint they cause a painful arthritis called a gout attack. This often occurs overnight and within 12 to 24 hours there is severe pain, which usually lasts five to 10 days, but can continue for weeks. The pain is accompanied by joint inflammation (it appears red and swollen, and feels hot and extremely sensitive even to light touch). Gout commonly strikes the big toe where it joins the ball of the foot, but other joints can be affected, including the instep, ankle, knee, kneecap, wrist, tip of the elbow and fingers. It can also cause inflammation of the tendons and the fat pads of the feet.

# CHRONIC (LONG TERM) GOUT

After one gout attack you may not have another for months or years, but if your uric acid levels remain high the chances increase, and chronic gout is also more likely. In chronic gout the affected joints are persistently painful and the uric acid crystal deposits result in joint damage which can stiffen and limit joint motion. The larger deposits can form tophi (chalky white nodules under the skin covering the joints and, sometimes, around the outer ear).

#### AM I AT RISK OF DEVELOPING GOUT?

The strongest predictor for gout is a high unic acid level. Heredity can influence the body's handling of unic acid. This means being predisposed to high unic acid levels and gout tends to run in some families. In about 90% of cases, gout affects men aged over 40 years and women after the menopause.

Gout is also strongly associated with being overweight and having high blood pressure. Certain medications (eg, water tablets, or diuretics, for high blood pressure or heart failure), existing kidney problems and some other diseases, high alcohol intake and a diet too rich in purines can also raise uric acid levels, and trigger gout.

# Testing

Your doctor can diagnose gout based on your symptoms, blood tests showing high levels of uric acid and, most reliably, the presence of urate crystals in any joint fluid (if this has been obtained). In chronic gout, x-rays can show damage to cartilage and bones caused by tophi.



# This resource provided to you by Dr. Grabiel Ng

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# HOW CAN I AVOID A GOUT ATTACK?

If you are predisposed to high uric acid levels, or have had a gout attack before, there are changes you can make to reduce the risk of an attack.

- avoid or restrict foods high in purines (eg, liver, kidneys, tongue, sardines, anchovies, shellfish, fish roe, peas, lentils, beans and food extracts like marmite and vegemite)
- avoid eating large amounts of red meat
- drink alcohol in moderation (two drinks per day or less), and do not overeat or starve
- drink plenty of nonalcoholic fluids (at least five glasses a day) – dehydration can be a trigger for an attack of gout
- keep a healthy body weight (talk to your doctor if you are overweight because unsupervised weight loss may also cause gout)
- ask your doctor whether you need to change any medications you take for other health problems.

# MEDICATIONS TO LOWER URIC ACID LEVELS

If your uric acid level remains high and attacks continue or become more frequent, your doctor will usually recommend long term use of the drugs allopurinol (this lowers uric acid production) or probenecid (this helps the kidneys remove uric acid). These drugs will not relieve your pain immediately but it is important to keep taking them as advised (even when feeling well) because the benefits of controlling your uric acid levels will occur over years. Drugs for reducing uric acid levels must be taken as advised by your doctor as side effects may occur – your doctor will explain all of this to you.

High unic acid levels and recurrent gout are often associated with high blood pressure, which also needs to be checked and treated as required. This combination of health problems can cause kidney damage if they are not controlled with supervision from your doctor.

# SELF-CARE DURING GOUT ATTACKS

- seek help from your doctor as early as possible, take any medications prescribed by your doctor and continue taking them for as long as advised
- rest and try to keep the weight of any bedclothes off the painful joint
- try using ice or a heat pack on the joint (stop if the pain worsens)
- maintain an adequate fluid intake (at least five glasses per day), and avoid alcohol

#### FURTHER INFORMATION AND SUPPORT

Talk to your doctor, and a dietitian can give further help with your diet. Arthritis New Zealand Inc. also offers support and advice. Check the phone book for details of your local division, or their website www.arthritis.org.nz

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#### TREATING A GOUT ATTACK

You may not always be able to avoid gout attacks, but medications and self-care can help reduce your symptoms. A nonsteroidal anti-inflammatory drug (NSAID) can be very effective as a pain reliever but, to gain the best results, the dose should be adequate and the drug taken at the first sign of an attack. Hence, medical advice must be sought early. With effective treatment the pain and inflammation can be controlled within 12 to 24 hours and treatment discontinued after a few days.

Other drugs such as colchicine, or corticosteroids (given as tablets or by injection into the joint), can also be used for a short period to control gout. People with gout pain should avoid medications containing aspirin as these can make gout worse. Drugs used for gout attacks have no effect on reducing uric acid levels.