

# Gout

Gout is a common **type of arthritis** that occurs when an excessive amount of **uric acid** in the blood, tissues and urine crystallizes in the joints. People who have gout are unable to break down and excrete uric acid, a byproduct of digesting certain foods. It usually comes on suddenly, and can last from a few hours to several days. It can cause extremely sore toes or other areas of the foot, and because it frequently manifests itself in the big toe, it is also known as "**gouty big toe**". Another name is "gouty arthritis". Gout can also appear in an ear, heel of the hand, small hand joints, ankles, knees, elbows, or wrists with inflammation, swelling and intense pain from the buildup of uric acid crystals. Uric acid is the end product of the metabolism of a class of chemicals known as **purines**. In people with gout, the body does not have enough of the digestive enzyme **uricase**, and, as a result, uric acid builds up and crystallizes. Left uncontrolled, excessive excretion of uric acid in the urine can lead to the development of painful **kidney stones**, kidney disease, and even kidney failure.

Gout is associated with **high blood pressure, kidney disease, diabetes, atherosclerosis**, and uric acid **kidney stones**.

It is estimated that up to 2 million people have gout. Between 75-90% of gout sufferers are middle-aged males and **25% have family members with it**. In women, uric acid starts building up after menopause, quite possibly due to the drop in estrogen.

## Traditional Treatment

Traditional treatment is high doses of NSAIDS or indomethacin to kill the pain, anti-inflammatories, and drugs, such as **allopurinol**, that inhibit formation of uric acid. Allopurinol, however, has some serious side effects, such as skin eruptions, liver toxicity, inflammation of the blood vessels, and possible weakening of kidney function by forcing the kidneys to work too hard to excrete the uric acid. If you have kidney problems and use this drug, be sure to be carefully monitored. Another drug that is used is **colchicine**, but it, too, has serious side effects, including numbness in the hands and feet, abdominal pain, nausea, vomiting, weakness, hair loss, and abnormal bleeding or bruising. Cortisone is used for acute attacks, but should not be used for extended periods.

A new gout drug, **febuxostat**, which is awaiting FDA approval (2005), has proven to be very beneficial in reducing urate levels. 81% of patients taking the drug had healthy urate levels of less than 6 mg/dl, compared with only 39% who took 300 mg per day of allopurinol, the most widely prescribed gout drug.

Your doctor can diagnose whether or not you have gout either through a blood test or by taking some fluid from an affected joint and analyzing it for urate crystals.

## Causes

Gout is caused by high blood levels of **uric acid** that crystallize and form painful deposits in the joints. Traditional thinking tells us that gout is the result of excessive amounts of **alcohol, protein, heavy foods, coffee** and **soft drinks** in your diet. These foods cause uric acid levels to rise. Other foods that increase uric acid are **anchovies, asparagus, legumes, mushrooms, meat, organ meat**, and **shellfish**. Reduction in consumption of these foods is very often successful in reducing or eliminating gout.

While gout is a **hereditary metabolic disorder** in some people, usually something else actually causes uric acid levels to rise and trigger gout attacks. With approximately **one million people** suffering from gout, it is certainly a fairly common ailment. However, with understanding of its causes you can eliminate those painful attacks.

**Food allergies** may lead to gout. When people who are sensitive to certain foods eliminate them from their diet many find that their gout goes away, too.

Gout is more common in **overweight** people. Nearly half of the people with gout are at least 15% above their recommended weight. As mentioned below, dieting can trigger gout attacks.

Some other causes:

- Stress raises uric acid levels
- Surgery
- Injury
- **Candida** or use of antibiotics
- Vitamin deficiency, especially B5, A and E
- **Chemotherapy** - uric acid is released in extreme amounts due to the cellular destruction.
- **Hypothyroidism** is often involved with gout. See our [Thyroid](#) section for more information.
- A drop in **barometric pressure** may trigger an attack.
- **Kidney failure** may make it more difficult to rid the body of uric acid, thereby triggering gout.
- Diseases such as leukemia, multiple myeloma and psoriasis are associated with gout.

While traditional thinking is that certain foods cause gout, recent research, however, indicates that **lead poisoning** may be another possible cause. The lead poisoning makes the aldosterone system insensitive to potassium concentration and increases the potassium content of the blood. A potassium deficiency can increase urate levels in the blood. Aldosterone is a hormone secreted by the adrenal cortex (part of the adrenal gland) that is important in the control of blood pressure and the regulation of sodium and potassium concentration. It would be very interesting for us to know how many people with gout have high blood pressure. To test for lead poisoning you can either have a hair analysis or a heavy metals blood test done. Possibly the best way to test lead levels is to have an EDTA mobilization test done. If the results indicate that you are high in lead (or other heavy metals) a heavy metals detoxification clay bath may be helpful.

There are **other causes** for potassium loss that may trigger gout:

- Fasting
- Surgery
- **Diuretics** - lead to reduced sodium and potassium. Other short-term effects may include increases in cholesterol and glucose levels and biochemical changes that affect the levels of magnesium and calcium in the body. They may also increase uric acid levels, triggering gout. This effect is especially important for people who use diuretics continually for either dieting or hypertension.

**To correct the lack of potassium** (the recommended intake is 3,500 mg, but it is safe to take considerably more) take supplements or eat foods high in potassium, such as baked potato, with skin (844), 1 cup cooked spinach (838), 1/2 cup dried peaches (784), 1/2 medium avocado (604), 1 cup cantaloupe (494), 1/2 cup boiled lima beans (478), medium banana (451), 1 cup orange juice (436), 15 raw baby carrots (420), 1 cup of skim milk (406), 1 cup nonfat yogurt (390), 1/2 cup non-salted tomato sauce (350), 4 oz. lean hamburger (349), 1/2 cup canned kidney beans (329), yams, dried prunes, etc. If you eat enough of these fruits and vegetables you will not need to take a potassium supplement. Potassium makes the acid crystals go into solution so they can be eliminated.

## Some Possible Causes of Elevated Uric Acid Levels

**Medication** Diuretics used for weight loss or heart disease, insulin, some antibiotics, medication for rheumatoid arthritis, or an overdose of B vitamins can cause uric acid levels to rise. Diuretics reduce sodium, magnesium, calcium and potassium (among other things) levels. If you need to use a diuretic, see our natural herbal products for ones with fewer side effects. One customer reported getting gout when he took beta-blockers for his high blood pressure.

**Poor kidney function** When kidneys are not functioning at optimum levels, they lose their ability to excrete uric acid from the body. This situation may be due to various kidney problems or over-consumption of alcohol. When alcohol is metabolized, lactic acid is produced, which hinders uric acid excretion by the kidneys.

**Dieting** Severe dieting or fasting can cause excess lactic acid, which hinders uric acid excretion by the kidneys. Crash and severe calorie restriction diets shock your metabolism and can trigger a gout attack. Dieting may also cause a loss of potassium, which can increase urate levels in the blood. As mentioned above, some dieters also use diuretics to speed the process, and they can rob the body of potassium and other minerals, triggering a gout attack. It seems to be a vicious circle! However, a proper diet that is done slowly is recommended because losing weight will reduce serum levels of uric acid.

**Diet** Traditional thinking tells us that gout is the result of excessive amounts of alcohol, protein, heavy foods, coffee and soft drinks in your diet. Certain foods contain high levels of purine which can cause uric acid levels to rise. Purine is a protein substance that is transformed into uric acid during digestion. Reduction in consumption of these foods is very often successful in reducing or eliminating gout.

A **potassium deficiency** can increase urate levels in the blood. This is very important, and ways to correct it are discussed above and under the *diuretics* section.

## Foods and Other Things to Avoid

- Meat: organ meats, offal, meat extracts, veal, bacon, sweetbreads, meat gravies and broths, consommé/bullion
- Poultry: turkey, goose
- Seafood: salmon, mackerel, trout, cod, herring, sardines, anchovies, mussels, crab, shrimp
- Vegetables: peas, beans, lentils, asparagus, mushrooms, cooked spinach, rhubarb, cauliflower
- Yeast products: baked goods, beer
- Alcohol - it increases the production of uric acid and inhibits its excretion by the kidneys
- Coffee - it accelerates the breakdown of protein into uric acid
- All fried foods - they cause a depletion of vitamin E, which can cause uric acid to rise
- Cream and ice cream
- Rich desserts
- Spices
- Pastries

- Simple sugars, simple carbohydrates and saturated fats - they increase your body's production of uric acid and impair your kidneys' ability to get rid of it. Eliminate fructose (found in food and drinks, like sodas)
- White flour
- Aspirin can raise uric acid levels. If you need to use pain killers, only use ones with ibuprofen.
- Oatmeal
- Whole grains
- Caffeine - it impairs kidney function, which is needed to get uric acid out of the body.

## Prevention

- One of the best ways to prevent gout is to drink at least 6-8 eight ounce glasses of **water**, fresh juices or herb tea daily, especially at the first signs of gout. This will keep your urine diluted and will help your body excrete uric acid and prevent crystals from forming.
- Eat foods high in **potassium**, [as mentioned above](#).
- Eating generous amounts of other **fruits and vegetables** helps keep uric acid crystals in solution.
- Take the flavonoid **quercetin** - [see below under Folk Remedies](#). This should be part of your permanent gout-prevention diet.
- Having **sex** prevents men from getting gout. It seems that increased sexual activity reduces uric acid levels in fertile men.
- **Lemon juice** prevents gout attacks by stimulating the formation of calcium carbonate in the body. Calcium carbonate neutralizes acids in the body, including uric acid that triggers gout attacks. After each meal drink the juice of one freshly squeezed lemon in a glass of lukewarm water. To get more juice out of the lemon, bring it to room temperature, then roll it around on the counter with the palm of your hand.
- Taking 1/2 teaspoon of **baking soda** with meals will prevent gout attacks. This will help alkalize the body.
- Keep the leg elevated.
- A **high fiber** diet also aids in the elimination of uric acid by absorbing bile acids formed in the liver. These bile acids can act as a precursor to uric acid.

## Supplements

Low-purine diets are low in vitamins B, E and other antioxidants, so supplementation will be necessary to prevent damage from free radicals that can intensify gouty problems.

**B complex** One to three 50 mg tablets of the complete B complex daily, plus 500 mg of pantothenic acid (B5) in divided doses to assist the body's conversion of uric acid into harmless compounds.

**Bromelain** 500 mg twice daily as an anti-inflammatory.

**Fish oil** Take 2 grams of fish oil capsules 2x a day to reduce the chances of gouty inflammation.

**L-glutamine** 500 mg four times daily on an empty stomach - is an antacid.

**L-glutathione** 500 mg twice daily on an empty stomach - increases renal cleansing of uric acid.

**L-glycine** 500 mg four times daily between meals - acts as an antacid.

**L-methionine** 250 mg twice daily on an empty stomach - detoxifies purines.

**Magnesium citrate** 400 mg three times a day - an antispasmodic to relieve pain.

**Shark cartilage** used on a daily basis of 3-6 capsules/day can make the pain disappear and allow you to eat previously forbidden foods within one week without experiencing pain in the affected joint. After approximately one month of continuous use, you may stop taking the cartilage until the pain reoccurs. At this point you will probably only need to take the cartilage (3-6 capsules) for a week or two. You may continue this on/off cycle as needed. Your uric acid level *may* return to normal, but even if it doesn't, the pain will go away.

**Tissue salts** To prevent the formation of uric acid crystals, take two tablets of 6X *Silicea* three times a day. During a gout attack, increase the dosage to three tablets and add an equal amount of Nat. Phos. and Nat. Sulph.

**Vitamin C** 1,000 mg per hour at the very outset of a gout attack, then reduce to 500-3,000 mg daily for maintenance. Vitamin C helps lower serum uric acid levels.

**Vitamin E** Low-purine diets are low in vitamin E and fried foods deplete it, so supplementation will be necessary as a deficiency can contribute to the formation of excess uric acid. Begin with 100 IU of natural vitamin E, and slowly increase to 6-800 IU daily.

## Acupressure

- Press just below the center of the nose toward the upper lip.
- Press and massage between the ball of the foot and the bottom of the big toe on each foot; then on the left foot only, stimulate a point halfway between the base of the little toe and the heel pad.
- Press inward and upward on the underside of the protuberance at the base of the skull.
- On both hands, press and massage a point on the inside of the pad at the base of the thumb directly beneath the index finger; then on the left palm only, stimulate a point halfway between the base of the little finger and the wrist.

## Remedies

### Folk

**Alfalfa** is a good source of minerals and other nutrients that help reduce serum uric acid.

**Apple cider vinegar (ACV)** Add some rose hips to vinegar and boil; dab on affected area. You may need to apply this mixture several times a day for a few weeks. The vinegar changes the blood pH so that the crystals will go into solution and be excreted.

- Mix two teaspoons each of apple cider vinegar and raw honey in a glass of water and drink at mealtime.
- Soak the foot in a mixture of 1/2 cup of ACV and three cups of hot water.

**Bilberry** is high in anthocyanosides and flavonoids, which are helpful in overcoming gout.

**Black cherry juice** Get some natural, concentrated black cherry juice and drink several tablespoons of the concentrate daily. You should expect relief in 48 hours.

**Black cohosh** moderates blood acidity.

**Blueberries** are high in anti-inflammatory compounds called anthocyanins, which help ease the pain of gout.

**Buchu tea** helps dissolve and flush out uric acid crystals.

**Castor oil packs** Soak a piece of white flannel in warm castor oil, wring it out and place over the affected area; cover with plastic wrap and apply a heating pad. Do this for one hour twice daily.

**Cayenne pepper** Boil one tablespoon of pepper in 1 cup of vinegar and 1 cup of water and dab onto the painful joint.

- Mix cayenne with enough wintergreen oil to make a paste and apply to the affected area.

**Celery seeds** These seeds are quite effective in relieving gout by eliminating uric acid from the body. According to James Duke, Ph.D., a medical botanist formerly with the U.S. Department of Agriculture, celery seeds contain about twenty different anti-inflammatory agents. Although there is little scientific research on celery seeds, according to Kerry Bone, a leading expert on herbal remedies in Australia, "it (sic) works brilliantly in patients." Recommended dosage is 500 mg (standardized to 450 mg of celery seed extract) 2x daily. **Note:** This remedy is not to be used by **pregnant women** because of its diuretic effect and the fact that it can encourage uterine contractions, or those with **kidney disease** because of its potential diuretic effect and that the plant's oils can worsen kidney inflammation.

- Cook a tablespoon of celery seeds in two cups of water until they are soft; strain and drink 1/2 cup four times a day.

**Charcoal** Take 1/2 -1 teaspoon of activated charcoal daily.

- Make a poultice using 1/2 cup of activated charcoal, 3 tablespoons of ground flaxseed and warm water to draw out the toxins.

**Cherries** If you are lucky enough to have fresh cherries, eating 6-8 cherries daily will relieve the symptoms of gout. This remedy was reported in 1950 by Dr. Ludwig W. Blau who cured his own gout. Frozen and canned cherries may also be used. When you feel an attack coming on, eat 20-30 cherries immediately. Cherries are rich in compounds that prevent the destruction of collagen, which the body uses to form connective tissue. The connective tissue is damaged by gout. Cherries also have an enzyme that neutralizes uric acid and are high in anthocyanins which have high antioxidant properties as well as anti-inflammatory action. For greatest effectiveness eat them between meals.

**Devil's claw** reduces uric acid levels and is a natural cleansing agent for toxic impurities. Take 400 mg of the dried extract 3x a day for as long as desired.

**DMSO** (dimethylsulfoxide) is very effective in relieving pain and swelling caused by inflammation. It helps dissolve crystalline deposits.

**Garlic** Eat several cloves of raw garlic daily. Mince the garlic and add it to black cherry juice for a potent remedy.

**Ginger** Put 1/3 cup of ground ginger (buy in bulk to keep the cost down) in a bathtub of water and soak for 30 minutes. This will cause you to sweat (a good thing) which will help eliminate the uric acid from

your tissues. When you are finished the bath be sure to rinse off thoroughly, as the ginger can cause skin irritation if it dries on your skin.

**Grapes** are high in alkalines which lessen the acidity of uric acid and aid in its elimination from the body.

**Hawthorn** is high in anthocyanosides and flavonoids, which are helpful in overcoming gout.

**Hydrangea** is an anti-inflammatory.

**Ice** Apply an ice pack for ten minutes, then alternate with a moist hot-towel compress, to soothe and numb the pain.

**Mullein** Soak mullein leaves in a hot vinegar/water mixture. Pack the leaves on the affected area.

**Nettle** contains alkaloids which neutralize uric acid.

**Parsley** acts as a natural diuretic.

**Quercetin** The flavonoid quercetin inhibits uric acid production in a similar fashion to commonly prescribed drugs for gout. Take 1000 mg of quercetin along with 1,000-1,500 mg of the enzyme bromelain (to enhance absorption) two to three times daily between meals. Bromelain also help reduce the inflammation.

**Red clover** has traditionally been one of the standard remedies for gout, as well as removing toxins from the body, and treating psoriasis, eczema, and hot flashes. Studies have shown that red clover may thin the blood, so it should not be used by patients who are also taking an anticoagulant medication. While red clover is high in isoflavones, the reason it is helpful in treating gout has not been studied.

**Saffron** neutralizes uric acid buildup.

**Spearmint** Make a poultice of spearmint leaves and wrap the affected area.

**Strawberries** Eating a cup of strawberries with each meal should bring quick relief. They neutralize uric acid.

**Yarrow** Make a tea by using equal parts of yarrow and stinging nettles; strain, cool and drink several cups a day.