



What is Gout?

Gout is a form of arthritis that comes from inflamed joints due to an excess of uric acid, which forms crystals in the joints, particularly in the big toe. It is more common in males, but women can also have gout. It is extremely painful, and the area may be swollen and red, and is often worse in cold weather. Onset is often at night.

What causes gout?

Several things. You could be unlucky and have inherited a tendency to gout from your family as there are several genetic defects which can cause it. But excess alcohol intake, excess red meat or shellfish intake, major oxidant stress, side effects from medications or obesity can also cause it. Then there's lead toxicity (eg. from lead crystal glasses or environmental pollution) which can cause a type of gout and this decreases excretion of urate.

Enzyme defects such as Lesch-Nyhan syndrome and glycogen storage disease can also cause gout. People with psoriasis metabolise purines differently and can have elevated levels.



Tell me more about the uric acid crystals.

They're made up of monosodium urate monohydrate, and they can also form round the kidneys, tendons and bone. Too much iron (often from red meats, particularly offal) can be part of the problem. There is also involvement of the eyes in gout – scleritis or conjunctivitis can result from urate crystals in the eye.

Someone mentioned purines in connection with gout. What is that?

Purines are protein breakdown products and are very widespread in our bodies. When purines break down in our bodies, uric acid is formed, and this is normal. It is when we eat foods which are extremely high in purines – like kidneys, liver, brains, sardines and anchovies – that we end up with too much. Then our kidneys have to try to deal with the overload, so deterioration of the kidneys in older people may lead to gout in the absence of other risk factors.



Is it just purines that are the problem?

Other things which can inhibit the breakdown of uric acid are medications like diuretics, aspirin, cyclosporines, warfarin and alcohol. Fructose (fruit sugar) doesn't help either. Then there can be other things like low copper levels, or molybdenum and sulphur binding to copper in the kidneys. Or you could have high levels of an enzyme called Xanthine oxidase which converts xanthine to uric acid, increasing the problem.

If you have gout, is it a risk factor for anything else?

Yes it is. Heart and kidney disease are associated with excess levels of uric acid.

What about the inflammation?

Any inflammation is a protective mechanism. Increased levels of white blood cells called leukotrienes and neutrophils cause swelling and pain which makes you take notice of the problem and act protectively to minimise the damage. But inflammation is painful and restricts movement. It increases oxidative stress and leads to other diseases, so it needs to be minimised.



How do doctors treat gout?

They use a range of medications. One of the most common is colchicine, which reduces the inflammation, but does not affect uric acid levels, and it has many side effects. Non-steroidal anti-inflammatories (NSAIDs) are also used, and these can have a detrimental effect on the integrity of the bowel if used for very long. Steroids are sometimes injected into the joint, but are contraindicated in case of infection.



What would a naturopath do that's different?

Firstly we'd try to find the cause to eliminate the problem. That isn't always possible, so firstly we'd look at reducing the inflammation by natural means. Quercetin is an excellent antioxidant, and it inhibits xanthine oxidase, as well as inhibiting the white blood cells around the gout. It's good to take this with bromelain (the enzyme in pineapples) between meals.

We'd also look at the diet overall to see how many foods or drinks may be high in purines or promote gout, then suggest alternatives. A diet high in animal proteins, alcohol and processed foods is likely to be unhelpful to healing. There are herbs like Devil's claw which reduce inflammation, but all herbs should be dispensed by a practitioner and your doctor should also be told of herbal treatments in case they conflict with your other medications. We'd also look at lifestyle choices to see if they could be improved.

Are there any supplements that I shouldn't take?

Vitamin C can increase iron absorption, particularly if taken with meals, so that is one common supplement that should not be prescribed in this case. Likewise iron supplements are not needed, and vitamin B3 (niacin) is also better not taken as it competes with urate for excretion.



Well, what are some of the things I can do?

Several things listed below, but you should also be guided by a qualified practitioner. Don't self-medicate as your only strategy, as you may do more harm than good. Do not ignore gout. Treatment is definitely necessary.

- * Fish oils, particularly EPA, inhibits the inflammatory leukotrienes, and lowers inflammation in general. Folic acid (vitamin B9) is also good for this.
- * Drink plenty of water to keep urine diluted (unless you have severe kidney disease and high water intake is contraindicated).
- * Reduce your weight because this reduces serum urate.
- * An alkaline diet – plenty of plant foods – is good to balance the acidity in your system.
- * Eliminate all high-purine foods, alcohol, coffee and combine plant proteins (eg. seeds & nuts, grains & pulses) to meet your protein needs.
- * Eat cherries, hawthorn berries, blueberries and all blue-purple foods, or drink those juices. They are very high in antioxidants, they inhibit inflammation and help healing. Ginger and turmeric in cooking have great benefits too.
- * Vitamin E is good for gout because it's an antioxidant, inhibits leukotriene production and is also good for your cardiovascular system.
- * Green tea is excellent because of its polyphenol content.
- * If you have elevated iron levels, give blood every year.
- * Have a hair mineral analysis test to check for elevated heavy metals, particularly iron, and see a practitioner about reducing this problem if found.
- * Keep the gout-affected area warm as it helps dissolve the uric acid crystals, and avoid getting your feet cold at any time.

