



HESSINGTON HEALTH NEWSLETTER

HIGH URIC ACID & GOUT



WHAT IS GOUT?

Gout is a form of arthritis that causes sudden, severe attacks of pain, swelling, and inflammation in the joints. It differs significantly from other types of arthritis such as rheumatoid arthritis and osteoarthritis. The pain from a gout attack can be excruciating and typically affects one joint at a time, often starting with the big toe.

WHAT CAUSES GOUT?

Gout is caused by a high level of uric acid in the blood. Uric acid is a waste product normally dissolved in the blood and passed out through the urine and stools. However, in gout patients, the uric acid levels build up, sometimes becoming so high that tiny, sharp urate crystals form. These crystals accumulate in the joints, leading to the inflammation and intense pain characteristic of gout attacks.

It's important to note that not everyone with high uric acid levels develops gout, and occasionally, gout can occur in people with normal uric acid levels. However, the higher the uric acid level, the greater the risk of developing gout.

WHY DOES URIC ACID BUILD UP?

Several factors can disrupt the balance of uric acid production and elimination, leading to a build up. In most gout patients, the kidneys do not eliminate enough uric acid. This is not typically due to a major kidney malfunction but rather a subtle inefficiency. Here are some common causes:

- 1. Alcohol Consumption:** Excessive drinking can increase uric acid levels.
- 2. Medications:** Some medications, like diuretics (water tablets), aspirin, and certain chemotherapy drugs, can raise uric acid levels.
- 3. Medical Conditions:** Certain conditions like severe psoriasis, some blood disorders, obesity, high blood pressure, kidney damage, diabetes, and others can increase the risk of gout.
- 4. Genetic Factors:** Some people have inherited enzyme defects that affect uric acid metabolism.





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SYMPTOMS OF GOUT

Gout typically occurs in sudden attacks, often starting at night. The symptoms develop quickly and include:

- Severe joint pain, commonly in the big toe, but it can affect any joint.
- Swelling and redness around the affected joint.
- The skin over the joint may appear shiny and feel warm.
- Walking or even light pressure on the joint can be extremely painful.



DIAGNOSING GOUT

Gout is usually diagnosed based on symptoms and a high level of uric acid in the blood. If there's uncertainty, a doctor may take a sample of fluid from the affected joint to look for urate crystals under a microscope.

A normal uric acid level is $<363 \mu\text{mol/L}$. You have been provided this leaflet as your reading sits outside this range.

IS GOUT SERIOUS?

While a gout attack is very painful, it is generally not dangerous. However, repeated attacks can lead to joint damage. In rare cases, urate crystals can also form kidney stones or cause kidney damage. Sometimes, crystals form lumps (tophi) under the skin, which are usually harmless but can become bothersome.

TREATING GOUT

DURING AN ATTACK

- **Rest and Elevation:** Rest the affected joint and elevate it to reduce swelling.
- **Ice Packs:** Apply ice packs to reduce pain and inflammation.
- **Anti-inflammatory Painkillers:** Drugs like diclofenac, indomethacin, and naproxen can quickly relieve gout pain.
- **Alternative Medications:** Colchicine and steroids may be used if anti-inflammatory painkillers are unsuitable.

PREVENTION

- **Lifestyle Changes:** Losing weight, reducing alcohol intake, staying hydrated, and avoiding high-fructose drinks can help.
- **Medications:**
 - **Allopurinol:** Lowers uric acid levels to prevent attacks. It's usually taken daily and monitored through blood tests.
 - **Other Medications:** For those who cannot take allopurinol, options like febuxostat, probenecid, and benzbromarone are available.
- **Diet:** Adopting a low purine diet



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WHICH FOODS TO LIMIT?

AVOID	LIMIT	CAN HAVE
<p>Organ meats (offal) high in purines, e.g. liver, kidney, heart, sweetbreads</p> <p>High fructose corn syrup - sweetened fizzy drinks or other beverages / foods</p> <p>Alcohol >2 units/day for men >1 unit/day for women</p> <p>Any alcohol during periods of frequent gout attacks or poorly controlled</p>	<p>Serving sizes of:</p> <ul style="list-style-type: none"> ■ Beef, lamb, pork ■ Seafood with high purine content, e.g. sardines, shellfish (crab, mussels, shrimp) anchovies, fish roe, mackerel, sprats, whitebait <p>Game (pheasant, rabbit, venison)</p> <p>Serving of naturally sweetened fruit juice</p> <p>Table sugar, sweetened beverages and desserts</p> <p>Table salt, sauces, gravies</p> <p>Meat- and yeast extracts (marmite, Bovril)</p> <p>Quorn</p> <p>Alcohol, especially beer, but also wine and spirits</p>	<p>Low-fat or non-fat dairy products (milk, cheese, yoghurt)</p> <p>Vegetables (purine-rich vegetables do not need to be avoided)</p> <p>Eggs Cereals / grains / starches (e.g. bread, pasta, rice, potatoes)</p>



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