Understanding What Causes Gout for Better Treatment and Prevention

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What Causes Gout?

A gout attack may seem to appear out of nowhere, but the truth is, this condition is caused by several things that have been happening to your body for a long period of time. Some are even born with it!

In this article, we will discuss the many causes of gout. Some of them are obvious while some may surprise you! Gout opens you to a world of mystery where you have to figure out precisely what's causing you those dreaded flares.

Before we talk about the causes, let's first define gout. It's a chronic disease caused by high levels of uric acid in the blood. It starts as hyperuricemia, but over time it can lead to gout.

Uric acid naturally forms in the body after consuming purines found in food. The kidneys eliminate this, but when the kidneys aren't working properly, a buildup happens to cause a painful flare in your joints particularly the big toe.

The Many Causes of Gout

The triggers for gout can be classified into three categories: health triggers, medical triggers, and lifestyle triggers.

Genetics

If you have a family history of gout, you may be more likely to develop gout later in life. If you are African American or an Asian Pacific Islander, you are at more risk for gout.

While it's true that lifestyle changes can have a great impact on your health, there is not much you can do to prevent gout if it's already in your genes. You can rejoice to know that this disease was not self-inflicted. This is a comforting thought considering that most gout sufferers put a lot of blame on themselves for having this condition.

For religiously healthy people out there, this may seem like bad news but fear not because your genes don't have to dictate what health conditions you will develop later on life. In fact, only five percent of all diseases are caused by our genes.

If you are already leading a healthy lifestyle, you are on the right track to protecting yourself from developing gout. You may not be able to control your genetic makeup, but you can still control the environment you are exposed to.

Your Gender

Only five percent of gout sufferers are women while the rest are men. This is why gout is considered a male disease. If you are an adult male between the ages 30 to 50 then you are at risk for gout. Men produce more uric

acid than women making them more at risk for gout. In rare cases, women will develop gout after menopause as uric acid levels tend to rise during this time.

Fructose consumption also affects men and women differently. High fructose intake doesn't have much of a significant impact on women's uric acid levels as it does on men. The culprit? Estrogen. This hormone helps the kidneys remove the uric acid in the body.

Women produce more estrogen than men, but after hitting 50, production of this hormone drastically decreases making women more susceptible to gout. The effect of sugar on premenopausal women becomes almost the same as men's as their kidneys don't have much support from estrogen.

Hormone replacement therapy is something women can do to prevent their risk for gout. However, this option is not available to men. Too much of estrogen in males can cause a hormonal imbalance leading to erectile dysfunction, infertility, and breast tissue growth.

Kidney Problems

This is a disease that's most commonly associated with gout. Having kidney problems means you aren't able to efficiently get rid of waste in the body. As a result, you will experience high levels of uric acid in the blood leading to gout symptoms.

Detecting kidney disease in its early stages is hard. Having gout could be a sign that you may have kidney problems. If gout runs in your family, make sure to have yourself tested for this condition to avoid complications. Something as small as kidney stones, if left untreated, can lead to an infection, or worse, damage.

Diabetes

Next to kidney diseases is diabetes which is a lack of insulin production or response to insulin. Studies have shown that insulin resistance plays a role in gout development. If you have hyperuricemia, your insulin resistance might worsen. Both contribute to making each other worse.

Most diabetics experience poor blood circulation in the limbs, making it easy for uric acid to build up in joints around that area. You'll need to control your blood sugar to maintain low uric acid. This means lowering your fructose intake, which is another cause of gout (but more on that later).

Next page: More potential causes of gout.

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Cardiovascular Disease

High blood pressure is the primary condition related to gout in this area. In fact, 70 percent of people who have gout also have high blood pressure. There are already several studies that prove the association between the two.

A few studies found that by doing a diet designed to lower blood pressure, the level of uric acid in the blood decreased as well.

They implemented the DASH diet which consists mostly of fruits, veggies, low-fat dairy, and low amount of fats, particularly the saturated kind.

Metabolic Syndrome

Metabolic syndrome is a combination of conditions including high blood pressure, high blood sugar, high

cholesterol, and high body fat. All these together can increase your risk for heart problems, stroke, and diabetes.

Sugar plays a huge role in this condition. It’s no surprise why sugar affects gout just as bad. It takes a lot of bad habits for your health to get this bad which means it’ll also require a lot of work to bring it back to normal condition. This means adopting a low-sugar diet and exercising regularly.

Sleep Apnea

If you find yourself snoring excessively at night, you may be more at risk for gout. Sleep apnea is a disorder where breathing stops and starts during sleep. The reason why this is bad is that you're not getting enough oxygen in your sleep causing you to feel tired and fatigued the next morning. Unsurprisingly, sleep apnea is more common in men that it is in women.

Not only does sleep apnea increase your risk for gout, but it can also lead to high blood pressure, heart disease, kidney disease, liver problems, and stroke. People who have hyperuricemia are also more likely to suffer from sleep apnea.

Other related conditions include:

- Hypothyroidism
- Psoriasis
- Hemolytic anemia
- Some cancers
- Some genetic disorders

Certain Medications

Certain types of medications used during uric acid-lowering treatment may trigger your gout.

There are also certain medications that elevate uric acid levels:

- Diuretics/water pills are used to treat high blood pressure by ridding the body of excess salt and water, but it has a terrible side effect for gout sufferers.
- Beta-blockers help reduce blood pressure helps the heart to beat more slowly.
- Calcium channel blockers help relax the blood vessels and elevate the supply of blood and oxygen to the heart.
- ACE inhibitors treat hypertension and congestive heart failure.
- Angiotensin II receptor blockers help lower blood pressure.
- Niacin treats high cholesterol.
- Anti-rejection medicine. If you have undergone an organ transplant, you will be required to take medication such as this. However, it does increase your risk for kidney dysfunction which hinders your ability to excrete uric acid from the blood.
- Levodopa treats Parkinson’s patients.
- Baby aspirin can trigger gout. Aspirin is a salicylate that decreases substances in your body and although. It helps to thin the blood, and it can elevate uric acid levels in the blood.
- Chemotherapy drugs.

Make sure to inform your doctor about your gout condition before starting on a new medicine for the conditions mentioned above.

Chemotherapy and Surgery

Recent trauma from a surgery can increase your risk for gout as uric acid tends to build up around injured joints. If you have leukemia or have undergone chemo, you may also be at risk for a gout attack. Cells also tend to break down easily during your first round of chemotherapy causing uric acid build up.

You want to avoid overexerting yourself during this physically stressful time. Limit movement and exercise and get as much rest as needed. The last thing you want is a gout flare at a time when you should be healing.

Next page: Other lifestyle factors that may cause gout.

What Causes Gout?

Weight

Next to being male, being overweight is the second biggest risk for developing gout.

Maintaining a healthy weight is important for managing gout. If you are overweight or obese, now's the time to start that diet and exercise regimen. This helps to reduce uric acid and metabolic waste product in the body.

So, what does weight have to do with risk? Well, obesity has been linked to high blood pressure, kidney disease, and diabetes. These comorbidities are all linked to higher production of uric acid and less efficiency in excreting them.

Also, people who are obese tend to consume fructose excessively, particularly the super unhealthy kind called high fructose corn syrup. These chronic toxins wreak havoc on the body limiting its ability to remove uric acid. By being overweight, not only do you increase your risk for developing gout, but you're also likely to experience frequent attacks.

Obesity is not something that happens in an instant. It's an accumulation of unhealthy habits done for an extended period of time. This can make losing weight very hard. Just as you gained weight gradually, you should also be losing weight gradually. Rapid weight loss can be a cause for gout attacks. You want to set realistic goals and adjust them accordingly until you reach a normal healthy weight.

High Purine Food

Uric acid is a result of purines breaking down in the body. Naturally, when you consume too much of it, your uric acid levels rise resulting in a possible gout attack. You want to control the amount of high-purine foods you eat. This includes certain seafood, red meat, organ meats, sugary drinks, processed junk food, and alcohol.

But what about fruits and vegetables? Don't they have purines too? Yes.

Certain produce such as asparagus, spinach, cauliflower, apples, and pears are high purines, but their benefits often trump the uric acid factor. Purines were not made equal at all. It's more beneficial to eat plant purines than to avoid them altogether.

Red meat, organ meats and certain kinds of seafood, however, are a different story. Dr. Choi's research found that animal purines have a more negative impact on gout compared to plant purines.

As much as possible, you want to limit your consumption of these items to a few times each month:

- Liver
- Brains
- Beef kidneys
- Mincemeat
- Game meats
- Foods high in saturated fats
- Scallops
- Shellfish
- Sardines

- Anchovies
- Herring
- Mackerel
- Food and drinks with high fructose corn syrup
- Gravy
- Sweetbreads
- Yeasty foods
- Beer

Gout is a metabolic condition that makes it hard for the body to process uric acid. Therefore, you should limit your consumption of purine-rich foods.

The common denominator in these foods is that they are very high in protein, which when metabolized can produce ammonia, urea, and waste products. This takes more work for the kidneys to flush out uric acid compared to carbs.

Alcohol Consumption

Alcohol has long been a suspected factor for gout. In recent decades, they confirmed that alcohol does indeed affect one's risk for this disease. Alcohol, especially beer, is known to be very high in purines. This takes a toll on your kidneys as it requires more work to filter out alcohol. Instead of excreting uric acid, it works to rid the body of alcohol leaving excess uric acid to build up in your joints. Also, alcohol raises nucleotides which turn into more uric acid.

If you find yourself drinking alcohol excessively, now might be the best time to talk to a physician. They might even have you evaluated for alcohol addiction in which case, and you will need to work with an addiction specialist who can help you take the right steps to quit drinking alcohol.

Even if you only drink moderately, you should still be paying close attention to your symptoms. Individual gout sufferers who reward themselves for being "good" find themselves in agony from a gout flare the day after celebrating with a glass of beer. Young people are not safe either. Beer, being their go-to drink, can lead to gout when consumed in high amounts.

Of course, everyone is different. For some, it takes days of consistent alcohol consumption before they experience an attack while others are unfortunate that one pint affects them. Learn how much alcohol affects your gout and keep your consumption under that amount. And don't forget to drink water in between pints! Drinking causes dehydration which is another gout risk.

It also helps to look at what is in your alcohol. Some manufacturers add high fructose corn syrup, coloring, and other harmful chemicals to their products.

Next page: Diet risk factors of gout.

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Sugar Consumption

Sugar drinks and treats are other risk factors for gout. We want to put a lot of emphasis on this because these days, you can't leave the supermarket without having some type of processed sugar food in your cart. It's scary how prevalent sugar is in our society today. What was once a rich man's disease is now a poor man's disease too. This is because sugary food is often the cheapest that's available to the poor.

Recent studies have found that there is indeed a connection between sugar and gout. Fructose, particularly the artificial kind, breaks down and turns into uric acid which can cause painful crystals to build up in the joints.

Also, excessive sugar consumption can lead to weight gain and obesity as fructose turns into fat easily. And as mentioned earlier, being obese means, you have more uric acid and it limits your body's ability to process it efficiently.

Does this mean you should abandon sugar completely? No. There are still healthy sugars found in fruits that you consume. These are okay for your gout and should be part of a healthy diet. However, artificial sugar is the biggest culprit and should be limited in your diet.

Dehydration

Not drinking enough water can cause a gout flare because it makes uric acid denser. Water not only serves as a great lubricant for your joints, but it also dilutes the uric acid in the blood. It makes it easy for the kidneys to excrete uric acid helping you to avoid those gout attacks.

Dehydration will do your gout no good at all, so make it a point to drink eight 8-ounce glasses of water each day. If you find the amount too intimidating, try to spread the intake throughout the day. You'll know you're drinking enough water when your urine is pale yellow and odor-free. Meat eaters should pay special attention since it takes seven times as much water for the kidneys to detoxify compared to carbs.

Aside from fighting dehydration, water can help you lose that excess weight. Drink a glass of water before a meal so you feel fuller than you are making you less likely to binge. Also, don't forget to rehydrate after an intense workout!

People who drink water frequently find that their risk for gout flare decreases compared to those who only drank one glass of water a day.

Diet and Fasting

Following a healthy diet is highly recommended for gout sufferers; however, the wrong kind can lead you straight to the ER due to a painful gout flare. Be careful with the type of diet you are following and don't fall for trends. It helps to speak with a dietician so they can work on a plan that works with your health goals.

Fasting is one such trend that's getting increasingly popular. While the practice of fasting does have its benefits such as mental clarity and weight loss, it might pose a risk for those suffering a chronic condition. Gout is considered a chronic condition.

What fasting does is produce ketone bodies and lactic acid which impact the kidneys excretion of uric acid. It also leads to dehydration which can elevate uric acid in the blood.

You are better off following a healthy diet consisting of 80 percent veggies, fruits, legumes, whole grain foods, 10 percent protein, and 10 percent fat. The problem isn't really that you're overeating but that you're eating the wrong kinds of food. It takes a while to adjust to a new gout-friendly diet, but small changes built up over time can do wonders to your health.

Lead Exposure

People who are exposed to lead may be at risk for gout. Dr. Krishnan of Stanford University School of Medicine found an association between the two.

Lead in the blood with a concentration of 80 mcg per deciliter can mean that you have hyperuricemia or gout. A job in mining, smelting, and battery manufacturing puts you at more risk for developing gout. If you are a smoker, you are guaranteed to have high levels of lead in your blood so better quit now.

In order to minimize exposure to lead, it's important to wear a mask and do the work in a well-ventilated space.

In Conclusion

Figuring out the causes for your gout is half the battle. Once you find out the reasons behind those painful flares, it’s time to apply the appropriate steps to prevent it from happening in the again. We hope this extensive guide helped you figure out the true cause for your gout attacks.