The Link Between Fructose and Gout

by LANA BARHUM

Understanding the Correlation Between Fructose and Gout

Gout is a very painful form of inflammatory arthritis and its most common symptom is pain in the big toe, but gout can affect any of your joints.

Gout affects 8.3 million Americans or 3.9 percent of the American population, according to the Center for Disease Control and Prevention. Men are more commonly affected than their female counterparts.

The main cause of gout is too much uric acid build up in the blood, called hyperuricemia. When there is too much uric acid, it turns into crystals and those crystals end up in and around your joints.

Risk factors for gout are obesity, a diet high in meat and seafood, sugary beverage consumption, certain medical conditions and medications, a family history of gout, age and sex, and recent trauma or surgery. Gout occurs more often in men because women usually have lower uric acid levels, but women who have already gone through menopause have an increased risk.

Gout also increases your risk for high blood pressure, chronic kidney disease, kidney stones, and an advanced form of gout characteristic of skin nodules called tophi.

Tophi is the result of urate crystals forming under the skin in several areas, including the fingers, hands, elbows, or the back of the ankles. While these skin nodules are not painful, they can become tender and inflamed during gout attacks.

Increase in Gout Over Past Few Decades

You may know the best diet for gout is one low in meat (especially organ meat) and seafood, but animal proteins are not the only things that increase your risk for gout and cause inflammation in people who already have gout.

Fructose — found in sugary drinks and fruits — also increases the production of uric acid. There is a strong correlation between fructose and gout.

The consumption of fructose in the United States has increased considerably since the introduction of high fructose corn syrup in the late 1960s. This has resulted in the increased prevalence of gout over the past few decades.

What the Research Tells Us About Fructose and Gout

Newer research links fructose to high levels of uric acid, including one study out of Harvard Medical School in Boston, Massachusetts. The study finds the consumption of fructose-sweetened soft drinks, fruits, and fruit juices were associated with an increased risk of gout in males.

In a second study on fructose and gout out of the University School of Medicine in Boston, Massachusetts and Harvard Medical School in Boston, Massachusetts, researchers found that fructose-rich beverages also increase uric acid levels in women and potentially increase their risk for gout. However, because incidences of gout are lower in women, these results are likely more modest than they would be in their male counterparts.

What Is Fructose?

Fructose is a naturally occurring sugar in fruits and honey. High fructose corn syrup is a man-made sweetener derived from corn and composed of at least 55 percent fructose and 42 percent glucose according to the American Society for Clinical Nutrition.

When your body breaks down fructose, purines (chemical compounds) are released. These chemical compounds produce uric acid, a process happening within minutes of drinking high fructose drinks.

Researchers have also linked gout and fruit juice consumption. The Harvard Medical School study found that men who drank two or more glasses of fruit juice per day were twice as likely to get gout compared to other men who drank less than one glass per day.

Weight and Gout

Sugary drinks and foods also contribute to obesity, which is a risk factor for gout. If you are overweight, your body produces more uric acid but your kidneys will not remove it quickly enough.

If you are overweight, losing weight can help you to lower uric acid levels in your body and minimize the amount of gout flares you have. In fact, numerous studies show that being overweight doubles your risk for gout.

One study out of Massachusetts General Hospital in Boston, Massachusetts reported that men who lost weight had significantly lower incidents of gout flares and lower levels of uric acid.

Controlling Gout Risk

Due to this link between fructose and gout, limiting your intake of sugary foods and beverages is one way of lowering your risk. If you already have gout, then you should try to avoid high fructose foods and beverages and anything containing added syrups and sugars.

Fruit and fruit juice are the exception— you shouldn't eliminate them completely from your diet. Fruit is high in nutritional value, but don't consume too much, and watch portion sizes when it comes to fruit juice because it is more concentrated in fructose.

Gout may be a lifelong problem but you can still manage flares. If you can control your uric acid levels, you can control gout symptoms.

You should talk to your doctor about medications, such as allopurinol, that help the body to reduce uric acid production. There are also medications to help your kidneys remove more uric acid.

Take your medications as prescribed and keep taking them even though you feel better. Watch out for foods that increase uric acid, including meat, seafood, alcohol, and those fructose containing drinks and foods and drink plenty of water to help remove uric acid from your body.