

# GOUT

Gout is a form of arthritis that causes sudden and severe joint pain, swelling, and redness, often affecting the big toe, due to the accumulation of uric acid crystals in the joints, leading to inflammation.

## POSSIBLE CONTRIBUTING FACTORS



High levels of uric acid (called hyperuricemia) can be caused by:

- Fructose and other sugars in the diet
- Insulin resistance
- Excessive alcohol consumption, all types, not just beer and liquor as was once thought
- NAFLD or non-alcoholic fatty liver disease
- High protein diets, especially purine rich proteins like organ meats, dark meat, pork, soy & shellfish
- Higher leptin levels, as found in obese people
- Certain medications, such as diuretics and chronic aspirin use (even low dose)
- Low estrogen: men face greater risk than premenopausal women, but it increases post-menopause
- Dehydration: not only a direct contributor, but can also result in falsely elevated levels on a lab test
- Kidney dysfunction leading to decreased uric acid clearance in urine

## LIFESTYLE & DIETARY RECOMMENDATIONS



- Stay hydrated; uric acid levels become more concentrated with dehydration
- Cut out all forms of sweeteners, especially fructose
- Eat a low-glycemic diet: limit starchy carbs to ½ cup cooked grains and 1 cup root vegetables daily, and 1-2 low fructose whole fruits per day
- Focus on a whole foods VPF diet with quality proteins, vegetables & healthy fats
- Avoid alcohol
- Reduce animal protein (especially purine) consumption until root cause is addressed
- Consume more potassium rich vegetables: spinach, sweet potato, beets, potatoes (with skin), squash...
- Consume more vitamin C rich vegetables: red peppers, Brussel sprouts, broccoli, cabbage, kale...
- Consume cherries to reduce uric acid & inhibit xanthine oxidase which converts purines into uric acid

## SUPPLEMENT CONSIDERATIONS



- Vitamin C (increases the excretion of uric acid in the urine)
- Quercetin (shown to reduce uric acid)
- Potassium
- Uric acid combo formula (ex. Pure Encapsulations Uric Acid Formula)

For pain and inflammation during a flare:

- Curcumin 1000 mg twice a day (ensure it's a highly bioavailable form such as Meriva phytosome complex)
- Tart cherry extract 2-3 times a day
- Potassium citrate twice a day to help alkalize urine
- Fresh lemon juice in water throughout the day (hydration helps to dilute urine and reduce uric acid concentration)