Prevent a Gout Attack!

Gout affects a lot more than the big toe. It can impact your health in other ways too. Learn what you can do to prevent it and its complications.

Save Yourself Severe Pain from Kidney Stones
Hot weather increases the risk for kidney stones. This summer has produced some record breaking heat. What steps can you take to reduce your risk for kidney stones?

**FOOD COURT**

The Anti-Diabetic Fruit

Cucumber Ships

Inspirational Story
Norah’s Symptoms of Crohn’s Disease Are 100% Better
A friend introduced me to Wildwood Lifestyle Center. I came to find relief from Crohn's disease, and the heart palpitations that I had been dealing with.

Before coming to Wildwood I had not been following a healthy diet. The whole-food plant based diet served during my stay at Wildwood was superb. I learned a lot from the daily lectures, and the cooking classes taught me how to prepare nutritious meals and eat a well-balanced diet. I never used to walk, but Wildwood taught me the importance of digestive walks after meals. We had a very good exercise program. The hydrotherapy treatments were wonderful and left me feeling good.

During my stay here at Wildwood I noticed that the palpitations decreased. The Crohn's Disease improved in just 11 days. I know it will take more time, but some of the symptoms I had with Crohn's Disease are 100% better!

My experience at Wildwood Lifestyle Center was nourishing to body, mind and soul!
Prevent a Gout Attack!

By: Alberta Cook, ASN and Elizabeth J. Hall

What is Gout?

Gout is the most prevalent form of inflammatory arthritis and afflicts 8 million Americans. Unfortunately gout is associated with several chronic diseases and impaired quality of life. Elevation of serum uric acid (UA) levels, hyperuricemia, is an essential prerequisite for the development of gout. As blood uric acid levels rise and the physiological saturation threshold for uric acid is exceeded in body fluids, the formation and deposition of uric acid crystals occurs in and around joints. These crystals then trigger an immune response and inflammation.

How common is gout?

The number of people suffering from gout attacks has increased in recent years. Epidemiological evidence from New Zealand, the USA, the UK, and China suggests that gout is becoming more prevalent. The findings of three similarly-conducted successive surveys from New Zealand show an increase in the prevalence of gout. During the years between 1977 and 1996 the incidence of gout more than doubled. It increased from 20.2 to 45.9 per 100,000 people.

What are the symptoms?

Gout may manifest itself as an acute attack of severe pain and inflammation affecting peripheral joints, most commonly the big toe and finger. The buildup of sharp uric acid crystals can lead to pain, swelling, redness, heat, and stiffness and may affect finger, elbow, knee, heel, ankle, and wrist joints. It is perhaps the most painful type of arthritis. Deposits of uric acid (called tophi) can also form lumps under the skin. Then, too, kidney stones can form in the kidneys from uric acid crystals. Acute attacks of gout may be accompanied by low-grade fever, chills, and malaise. The majority of patients experience a second acute gout attack within 1 year of the first episode. A gout attack can be brought on by stressful events, alcohol, drugs, or another illness.

Where does uric acid come from?

Uric acid comes from the breakdown of substances called purines. Purines are found in all of your body's tissues. They are also in many foods, such as liver, dried beans and peas, and anchovies. Normally, uric acid dissolves in...
the blood. It passes through the kidneys and out of the body in urine. But uric acid can build up in the blood when the body increases the amount of uric acid it makes, or the kidneys do not get rid of enough uric acid, or if a person eats too many foods high in purines. If uric acid stays chronically elevated, uric acid crystals may form in joints, triggering inflammation, and gout consequently develops. Not everyone who has elevated uric acid inflammation will develop gout.

What other problems are associated with high levels of uric acid?

We do need a certain amount of uric acid. It is actually an antioxidant. Uric acid has excellent antioxidant capacity, and it can be responsible for as much as 2/3 of total plasma antioxidant capacity.\(^4\) When the level of uric acid is chronically elevated though, problems like gout and kidney stones increase. Normal values for serum uric acid run between 3.5 and 7.2 mg/dL. Uric acid values higher than 7.0 mg/dl are a risk factor for the development of gout. Not everybody with elevated uric acid will develop gout. Probably, most individuals with any chronic degenerative disease such as obesity, diabetes, kidney disease would be wise to have their uric acid level tested. Why?

Elevated uric acid is also seen as a prognosticator of kidney disease, diabetes mellitus, metabolic syndrome, cardiovascular disease, and inflammation.\(^5\) Hyperuricemia increase is seen in 16% of all causes of mortality and 39% of total cardiovascular disease.\(^6,\)\(^7\) Either an excessive production of uric acid or a reduced clearance of uric acid, or both, cause the uric acid levels to rise.

How serious is gout?

Individuals with gout frequently have other concurrent chronic conditions such as hypertension, chronic kidney disease, cardiovascular disease, obesity, diabetes, and hyperlipidemia, all of which have significant, adverse impact on public health. Elevated levels of uric acid may be a factor in these co-existent diseases. Chronic kidney disease contributes to the progression of hyperuricemia and/or gout. The evidence that gout and hyperuricemia contribute to the pathogenesis of their comorbidities creates greater urgency for appropriate gout management.\(^8\) Accumulating evidence points to elevated UA as an independent risk factor for kidney dysfunction.\(^9\) Whether or not hyperuricemia is a cause or effect for decline in kidney function remains to be seen. However, it would be prudent for anyone who has had gout to adopt a wise lifestyle regimen to reduce his risk for deterioration of his kidneys.

What are the risk factors for gout?

Men are more prone to getting gout than are premenopausal women. Your genetics can increase the possibility of gout attacks also. If a member of your family is afflicted then you may also experience the same.

- **Medical Conditions:** Diabetes, kidney disease, injury to a joint, infection, and rapid weight loss may increase one’s risk for gouty arthritis. Metabolic syndrome (MetS) is characterized by at least three of the following: obesity, high glucose and triglycerides (blood fats), low HDL, hypertension, and inflammation. The production of uric acid is often increased and its excretion is decreased in individuals with MetS. An elevated level of triglycerides itself has been linked to a new synthesis of purines which accelerate UA production. Increased UA has been seen in individuals with insulin resistance. In this condition, the cells do not respond efficiently to insulin. Elevated blood fats are also commonly seen in individuals who have insulin resistance.

- **Beverages:** Consumption of sweetened sodas and drinks. Fructose, especially high fructose corn syrup, has been linked to increase risk for gout. Fructose leads to more production of uric acid.\(^10\) Juice lovers, listen up. Consuming orange juice can also increase one's risk.\(^11\) However, fructose as it is packaged as fresh fruit, poses no harm because it is loaded with fiber and beneficial phytochemicals. Moderate, regular, or heavy use of alcohol, especially beer, has been linked to increase risk for gout. Beer intake is an independent factor for elevated uric acid as it is rich in high-quality purine. Alcohol consumption increases uric acid production and
interferes with the removal of uric acid from the body.

- **Culprit Medications**: The regular use of aspirin and the vitamin niacin increase the risk for gout. Diuretics are important medications that increase the output of urine and help hypertension, congestive heart failure, and edema. They also reduce uric acid excretion through the kidneys.

### What dietary factors increase the risk of gout?

A plant-based diet is ideal. Most meats are high in purines. Some of the highest are organ meats, poultry, shell fish, sardines, red meat, seafood, and wild game. Beer is also very high in purines. A twelve year study of 47,000 men conducted by Hyon Choi, MD, compared the effects of dietary intake of purine-rich foods in relation to the risk of having gout attacks. He reported that higher levels of meat and seafood consumption are associated with an increased risk of gout, whereas a higher level of consumption of dairy products is associated with a decreased risk of gout. Consumption of purine-rich vegetables was not associated with gout.12

The 1993-1998 Singapore Chinese Health Study examined 63,257 Chinese adults, ages 45-74, and explored the impact of diet on the risk for developing gout. The researchers found that, after adjusting for potential confounding factors, total protein intake, mainly contributed by poultry, fish, and shellfish, was associated with an increased risk of gout, while dietary intakes of soy and legumes were associated with a reduced risk of gout. In this particular study red meat, eggs, dairy products, grains, nuts and seeds were not associated with an increased risk. Those who consumed legumes had 17% less risk of the developing gout.13

### What is gout-prevention nutrition?

Studies have shown that vegetables high in purines do not increase the risk of gout or recurring gout attacks.14 A healthy diet based on lots of fruits and vegetables can include high-purine vegetables, such as asparagus, spinach, peas, cauliflower, or mushrooms. You can also eat beans or lentils, which are moderately high in purines, but are also a good source of protein.15 It is recommended that individuals with hyperuricemia should not ingest a large amount of purine-rich food (for instance, veal, bacon, kid meat, mutton, turkey, pork, duck, goose, etc.) and limit fish and meat intake.16

Fiber and high consumption of vitamin C-rich foods may help to protect us from gout.17 Vitamin-C intake shows an inverse relation with uric acid.

### What are the treatment options?

Early attacks usually get better within 3 to 10 days, even without treatment. Typically, a health care provider would prescribe nonsteroidal anti-inflammatory drugs (if there are no contraindications) which are usually sold over-the-counter. Colchicine is a medication that is designed to decrease uric acid deposits in the joints; however, it has serious side effects. Also, avoid alcohol and foods that trigger the attacks.

### What about cherries for gout?

Studies show that cherry consumption may lower uric acid levels. Cherries combat inflammation. A study of 100 patients with recurrent gout taking 15ml/day of cherry juice concentrate for 4-6 months also revealed decreases in markers of inflammation. Greater than 50% reduction was also seen in the number of acute gout attacks for 92% of treated patients.18 So cherries are worth a try.

### Hydrotherapy for Gout

A contrast foot bath can help relieve gout. You will need two buckets (galvanized are the best), a container of ice, a pitcher of hot water, a few towels, and bath thermometer. Fill one tub about 1/3 full of water, 102 to 106 degrees
Fahrenheit. Fill the second bucket 1/3 full of cold water with some ice. Soak your feet in hot water for 3 minutes. Then place your feet in cold water for 30 seconds. Repeat three times. Add hot water to the foot bath periodically and make the tub of cold water colder each time you place your feet in it. In other words, you want a sharp contrast. As a final step, plunge your feet in warm water. Please note: if you have diabetes, poor sensation, atherosclerosis in the extremities (peripheral vascular disease), or an open sore, you must consult with a doctor before trying a contrast bath.

**Are there any herbs that could help gout?**

Ginger has a strong anti-inflammatory effect on joints and can be regarded as a useful tool for the treatment of acute gouty arthritis.\(^1\) However, if one is taking a medicine, it is essential consult with your pharmacist first before using ginger. Individuals with bleeding disorders should not use it.

One interesting observation in conclusion: The same lifestyle measures that help to prevent gout attacks are in many aspects the same that help to protect your kidneys and your heart.

**The information in this article is general and educational in nature and does not substitute for appropriate medical evaluation, counseling, and treatment.**

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4. Roddy, ibid.
6. De Oliveira, ibid.


Save Yourself Severe Pain from Kidney Stones

by: Alberta Cook, AS and Elizabeth J. Hall

The incidence and prevalence of kidney stones is increasing globally. These increases are seen across gender, race, and age. In the United States 2 million adults were diagnosed as having a kidney stone in 2000. Once an individual has formed a stone, the likelihood of recurrence is 50 percent or greater at five years and up to 80 percent at 10 years. Kidney stones can produce one of the most severe pains that can be experienced especially if large stones block the flow of urine. More than one in ten people will develop a kidney stone sometime in their lives. Will you be among them? How can you reduce your risk?

Signs and Symptoms

You might not even know you have a kidney stone until it moves inside the kidney or passes into a ureter. Ureters are two tubes that connect the kidneys to the bladder. At that point, according to the Mayo Clinic, these signs and symptoms may occur:

- Severe pain in the side and back, below the ribs
- Pain that spreads to the lower abdomen and groin
- Pain that comes in waves and fluctuates in intensity
- Pain on urination
- Pink, red or brown urine
- Cloudy or foul-smelling urine
- Nausea and vomiting
- Persistent urge to urinate
- Urinating more often than usual
- Fever and chills if an infection is present

Please note: The location of pain caused by a kidney stone may change as the stone moves through your urinary tract.
Signs of More Trouble to Come

As previously mentioned, one kidney stone substantially increases the risk for another one. One study found that even after adjusting for cardiovascular risk factors, individuals with kidney stones were 19% more likely to develop coronary artery disease and were 40% more likely to have a stroke when compared with patients who did not have kidney stones. Individuals who have had a kidney stone may be twice as likely have kidney failure later.

Are you at risk?

- Common risk factors include the following:
  - Dehydration
  - Personal history or family history of kidney stones
  - Elevated uric acid/history of gout
  - Obstruction to the flow of urine
  - Diabetes or its precursor, insulin resistance, can increase the risk for kidney stones composed of uric acid.
  - Hypertension
  - Obesity doubles the risk for development of kidney stones.
  - Elevated calcium. If calcium is elevated, the parathyroid hormone needs to be checked.
  - Inflammatory bowel disease or intestinal bypass surgery

What are kidney stones made of?

Calcium oxalate, a naturally occurring substance found in food, makes up the composition of most kidney stones. Less common stones are struvite stones that can form due to a urinary tract infection. Uric acid stones may result from not drinking enough water or eating a high-protein diet. There are other rare-occurring stones as well.

Drink sufficient water (not just any fluid).

Dehydration is the most common cause for kidney stones. Since adequate water intake reduces one’s risk for urinary tract infection, it follows that sufficient water intake reduces one’s risk for struvite stones. Drink enough water to keep your urine clear or straw-colored. If you are taking medicine or a vitamin pill, the color of your urine may not be a reliable sign of adequate hydration. In that case drink 2 liters of water throughout the day (preferably not at meal time) unless otherwise directed by your doctor.

Tea for two? Perhaps Not

Iced tea is a popular drink in the summer time, however an urologist from Loyola University Medical Center warns that tea can contribute to painful kidney stones. High concentrations of oxalate, a key ingredient of tea, leads to the formation of kidney stones. During the summer especially, people can become dehydrated from sweating. Dehydration, combined with increased iced tea consumption, raises the risk of kidney stones, especially in people already at risk. Also, “for persons having a tendency to form the most common type of kidney stones, iced tea is one of the worst things to drink,” says Dr. John Milner, assistant professor at Chicago Stritch School of Medicine. Green tea has less oxalate than black tea.

Coke, Anyone?

We should also mention that soft drinks and sweetened beverages are linked to increased kidney stone formation.
One analysis found that people who drank just one-sugar cola per day had a 23% higher risk for kidney stone formation compared to those individuals who had a maximum of one per week. High fructose corn syrup not only can damage the liver but can increase the uric acid level. Colas, rich in phosphates, can increase stone formation. Sodas have also been linked to increased kidney damage and kidney failure.

**Move those bones to squelch those stones!**

Physical activity is proving to be an important element in reducing kidney stones. According to a study published in the Journal of the American Society of Nephrology, the records of thousands of postmenopausal women were evaluated to see if energy intake and energy expenditure related to kidney stone formation. Dr. Sorensen, from the University of Washington School of Medicine, said, "Even small amounts of exercise may decrease the risk of kidney stones—it does not need to be marathons, as the intensity of the exercise does not seem to matter."

Even three hours of average walking (2-3 miles per hour), or four hours of light gardening, or one hour of moderate jogging (6 mph) per a week can make a difference. Physical activity was associated to a 31% decreased risk of developing kidney stones. Also, the research team discovered that consuming more than 2200 calories per day increased the risk of developing kidney stones by up to 42%. For overall good health, Dr. Sorensen concluded by advising people to be aware of their calorie intake, watch their weight, and do some exercise at least several hours a week.

Since recurrent kidney stones may increase the risk for kidney disease and consequently kidney failure in time, regular moderate exercise will protect the kidneys. In another study Dr. Robinson-Cohen said, "It is demonstrated that even small amounts of physical activity, such as walking 60 minutes per week, might slow the rate of kidney disease progression. Physical inactivity is emerging as one of the few risk factors for kidney disease progression that is amenable to intervention." Moderate exercise such as walking is superior to running which decreases the amount of blood flowing from the heart to the kidneys to 1%.

**What you eat makes a difference.**

**Limit the animal protein.** A high protein diet increases the chance of developing kidney stones and other renal diseases. This diet greatly reduces urinary citrate which keeps calcium salts from crystallizing. Consuming an excessive amount of animal protein makes the urine more acidic increasing urinary calcium. These physiological processes promote the formation of calcium forming stones. Dr. Virginia Aparicio, the chief contributor of the study, warns that the negative effects of the high-protein diets on the kidneys also depend on the presence or absence of other dietary nutrients. "Eating large amounts of fruits and vegetables reduces the risk of kidney stones forming—probably due to their high potassium and magnesium content, which compensates for the acidity of the high-protein diet."

There is another point to consider: Meats and other animal proteins contain purines which form uric acid and thereby increasing kidney stones composed of uric acid.

**Be sure to get enough calcium and magnesium from your food.** You might think that since calcium is involved in the formation of two types of kidney stones, you really need to restrict it. However, calcium from food does not increase one’s risk for calcium oxalate stones because calcium in the intestines binds to oxalate from food and prevents it from entering the blood stream, and consequently the urinary tract.

Broccoli, kale, and turnips greens provide good amounts of calcium and magnesium but are reasonably low in oxalate. While spinach, Swiss chard, and beet greens do provide calcium and magnesium, they are high in oxalate and should not be regularly consumed by anyone prone to kidney stones. Since citrate helps to protect from kidney stones, calcium citrate is a better choice if you must have a calcium supplement. Be aware that a magnesium or potassium deficiency and high animal protein intake can reduce citrate levels. Greens, legumes, and whole grains
provide magnesium. A variety of fruits and vegetables provide ample potassium as long as one is not on a diuretic.

**Reduce your sodium and salt intake.** Excessive sodium increases the risk for both calcium oxalate stones and calcium phosphate stones. Why? Excessive sodium intake increases the loss of calcium through the urine. High calcium can combine with oxalate and phosphate in urine to form stones. Although we need some sodium for the nervous system to work, most of us exceed the US daily requirement of the 2300 milligrams of sodium per day. Salt, processed foods, canned soups, luncheon meats, aged cheese, pickles, and even puddings are high in sodium. Be sure to read labels. Please note if you have pre-hypertension, hypertension, or diabetes, aim at a daily intake of 1500 milligrams of sodium unless otherwise directed by your physician.

**Limit the oxalate** since calcium oxalate stones are the most common kidney stones. Oxalate is found in a variety of food so you cannot avoid it totally. Studies suggest that oxalate provides some anti-cancer activity. The following foods can increase the amount of oxalate in urine: spinach, rhubarb, okra, sweet potatoes, elderberry, and figs. Beer, black tea, rosehips tea are especially high in oxalates. Nuts have substantial amounts too.

**Watch your acid level.** Substitute plant proteins for high purine foods (organ meats, herring, mackerel, and red meat). Generally, saturated fats lower the body’s ability to eliminate uric acid. Since alcohol interferes with the elimination of uric acid, it is better not to include it in your diet.

**Treatment for kidney stones**

Many kidney stones will pass within 48 hours if a person drinks enough water. Moist heat applied over the kidneys can ease the pain. One essential caveat here: heat applications are contraindicated if bleeding is present, in acute inflammation, and in kidney cancer. In cases of diabetes and neuropathy, it must be wisely and skillfully applied. A 5mm stone has a 20% chance of passing naturally whereas a 4mm stone has 80% chance of passing without specific treatment. Sometimes medications can facilitate the passage of kidney stones. If the kidney stone is too large, shock waves can break a large stone into smaller pieces that can pass easily through the urinary system. Surgical removal is sometimes necessarily. If you suspect a kidney stone, please see your physician.

**Conclusion**

You can see that it is much better to prevent a kidney stone than to treat one. Prevention saves you pain, money, and helps to preserve your kidneys. No matter how sophisticated medication may become, nothing beats following an overall healthy lifestyle to prevent disease and discomfort. We certainly can conclude that drinking six to eight glasses of water a day is paramount to maintaining healthy kidneys. Pure water is free of harmful chemicals, caffeine, sugar, sugar substitutes, or acids added by manufacturers such as phosphoric acid, which jeopardizes the health of your bones. Exercise, keeping your weight in the recommended range for your height, and eating a well-balanced vegetarian diet may very well keep you from experiencing the horrible pain of kidney stones. Therefore, make the changes that are necessary and you will be happy with the results.

**This article provides general health information and is not intended to diagnose or treat kidneys stone or substitute for medical consultation.**

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By Elizabeth Hall

More than 100 million Americans have prediabetes or diabetes. You have heard the old adage, “An apple a day keeps the doctor away”. But for those who have these two conditions, a cup of berries might help to reduce their visits to the doctors. Why?

Since berries are rich in soluble fiber and score low on the glycemic index, they are an ideal fruit to consume for individuals with diabetes.

Compounds in bilberries have proven their antidiabetic potential in various studies by several different mechanisms. These compounds increase insulin secretion, reduce insulin resistance, and improve beta-cell regeneration.\(^1\)

Beta-cells in the pancreas produce insulin, a hormone that facilitates the entry of glucose into the cells.

Berries are loaded with anti-oxidant and anti-inflammatory compounds, anthocyanins, and flavonoids. Berries also reduce the natural inflammation that occurs after consuming a high fat, high carb diet in overweight individuals. Oxidation, inflammation, sticky platelets, and reduced ability of the blood vessels to dilate, all contribute to diabetic complications such as atherosclerosis, deep vein thrombosis, and neuropathy.\(^2\)

Blueberries are especially helpful because they contain two more special compounds: resveratrol and pterostilbene. Resveratrol helps to protect diabetic individuals from the many complications of diabetes while other studies show that pterostilbene itself produced a substantial decrease in plasma glucose levels and glycated hemoglobin (hemoglobin A1c).\(^3\) This test provides the average of your glucose levels for the last six to twelve week period. When the blood sugar (glucose) is too high, it builds up in the blood and combines with the hemoglobin, becoming “glycated”. Elevated hemoglobin A1c increases the risk for diabetic complications. Additionally, blueberries, if consumed daily, may exert anti-obesity activity.\(^4\)

Diabetes assaults the brain cells and kidneys. Fisetin, a naturally-occurring flavonoid found most abundantly in strawberries, helps to protect brain and kidney cells from these assaults.\(^5\)

Since the antioxidant compounds in berries are preserved by freezing, berries can be consumed throughout the year.

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References:


Cucumber Chips (Fresh Sweet Pickles)

Junior

½ cup apple juice concentrate
2 tablespoons lemon juice
2 cloves garlic, crushed
1 tablespoon honey
1½ teaspoons salt
½ teaspoon dill weed
½ teaspoon onion powder
1 medium cucumber

1. Place all ingredients except cucumber in a large skillet and bring to a boil. Meanwhile, slice the cucumber in whole, round slices, skin included. Add to the boiling juice, cover, and bring to a boil. Remove cover and stir, then cover again and leave on heat for about 30 seconds more. Don’t overcook.
2. Remove form heat and let sit uncovered for 5 minutes. Place in a covered storage container and chill for several hours or overnight.
3. Drain off the liquid and use chilled Cucumber Chips in burgers and sandwiches.

Tip: Liquid can be made into a delicious salad dressing. Just place in blender with ½ cup raw cashew nuts or 2 tablespoons sesame tahini. Blend smooth. Good on tossed salad or as a dressing for coleslaw.

From the Seven Secrets Cookbook.