Gout.com

purine *(n.)* A double-ringed, crystalline organic base, CHN, not known to occur naturally, from which is derived the nitrogen bases adenine and guanine, as well as uric acid as a metabolic end product.

purine *(n.)* Any of a group of organic compounds structurally related to purine, particularly adenine and guanine, and also caffeine, uric acid, theobromine, and theophylline.

The Role of Uric Acid

Painful gout attacks result from inflammation caused by deposits of needle-like crystals in connective tissue and/or in the fluid that cushions the joint (the synovial fluid). The crystals are made up of uric acid, a waste product produced during the natural breakdown of purines. Purines are part of all our body's cells as well as in many foods we eat.

Uric acid is carried through the bloodstream to the kidneys. Your kidneys eliminate it from the body mostly through urine. However, if the body produces too much uric acid or if the kidneys don't eliminate enough of it, uric acid will build up in the blood. This condition is called *hyperuricemia*. Most people with hyperuricemia (high levels of uric acid in the blood) never get gout. But, if uric acid crystals form, a painful gout attack can occur at any time.

TheJournal of the American Dietetic Association (2009) Nutrition Care Manual recommends the following:

Acute Attack:

1) Consume at least 8-16 cups of fluid/day (half of which is water)
2) Abstain from alcohol
3) Limit animal foods (Eat moderate protein; lowfat or nonfat dairy and eggs are OK, and limit meat, fish and poultry to 4-6 oz/day)

During Remission:

1) Consume at least 8-16 cups of fluid/day (half of which is water)
2) Abstain from alcohol
3) Follow a well balanced eating plan (consume animal foods as tolerable)
4) Maintain a desirable body weight.
5) Avoid fasting or high protein diets.

Items to Avoid

If your healthcare provider has recommended reducing high-purine foods in your diet, you may find the following guidelines helpful:

- Limit your consumption of certain types of meat. Meat items that are particularly high in purines include beef, pork, lamb, and “organ meats” (such as liver, kidney, and brain), as well as meat extracts and gravies.
- Reduce or eliminate alcohol consumption, especially beer.
- Reduce your use of oatmeal, dried beans, peas, lentils, spinach, asparagus, cauliflower, and mushrooms.
- High consumption of seafood is associated with an increased risk of gout. Specific types of seafood found to be associated with higher levels of uric acid include: anchovies, sardines, roe (fish eggs), herring, mussels, codfish, scallops, trout, and haddock.

Gout Friendly Foods

Though many people misunderstand the role of diet in gout, there are some well-established, research-based guidelines that may be helpful:

- Drink plenty of liquid daily to avoid dehydration.
- Talk to your healthcare provider about adding low-fat dairy products to your diet. Eating more of these dairy products is associated with a decreased risk of gout.
- Additional low-purine choices include carbonated beverages, coffee, cereals, chocolate, fruits, breads, grains, pasta, rice, olives, cheese, eggs, milk products, sugar, tomatoes, and some types of green vegetables.

One food that gets a lot of attention on the Internet is **cherry juice**—there's a lot of talk about cherries but not much medically based proof that eating cherries or drinking cherry juice helps gout symptoms. One recent medical report involving 10 healthy women suggests that cherries may help lower uric acid levels, but the connection has not been verified by a controlled clinical study.

Make sure you discuss your whole health picture with your healthcare provider. Each person is different, and each person's gout deserves individual attention. Also, be sure to talk to your healthcare provider about **every** medication you are taking—including prescription drugs, aspirin and other medications you may buy at the drug store or supermarket, herbs, natural supplements, vitamins, and anything else that you take to affect your health.