Dietary Triggers for Gout

Alcohol

• Converts to glucose, triggering uric acid production

Purines

- Found in all human and animal tissues
- Breakdown of purines drives hyperuricemia, which leads to gout
- Intake from animal-protein—based foods increases purine levels

Sugars

- Drive ATP catabolism that increases uric acid production
- Excessive intake from sweetened beverages, canned fruits, and sweet desserts drives hyperuricemia, which leads to gout

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Foods to Avoid: **#1 Alcohol**

- Gout has long been associated with heavy alcohol consumption; however, even moderate drinking increases the relative risk of gout
- Beer is associated with the highest risk and wine with the lowest



Foods to Avoid: **#2 Sugar-sweetened Beverages**

High consumption of dietary sweeteners used in common beverages has been shown to increase serum urate levels

- High-fructose corn syrup is used in many juice beverages and soft drinks
- Honey-sweetened beverages include many teas



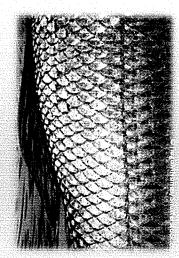
Foods to Avoid: **#3 Purine-rich Meats and Poultry**

- High intake of purine-rich foods increases risk of recurrent gout attacks by nearly 5 times
- Red meats, such as beef, veal, and lamb, are highest in purines
- Wild game such as turkey and duck is highest in purines among poultry and should be avoided
- · In particular, organ meats, such as liver, heart, and kidney, have high concentrations of purine and should be eliminated from the diet



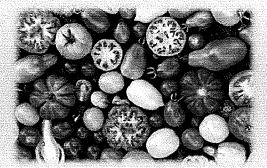
Foods to Avoid: #4 Fish and Shellfish

- Some types of fish are particularly high in purine and should be avoided, including haddock, anchovies, tuna, herring, codfish, and trout
- High-purine shellfish, such as mussels and scallops, should also be completely avoided



Foods to Avoid: **#5 Tomatoes?**

- A study of gout triggers reported an increase in serum urate levels with each weekly serving of tomatoes
- The study found 2 potential chemical sources in tomatoes that could increase plasma uric acid levels: phenolic acids and glutamate
- Because of the small amounts of these components (3-5 mg phenolic acid and 140 mg of glutamate), they were deemed by the authors as "possible triggers"



How does your blood level measure up to your blood bank account?

Gout is a medical problem that was known hundreds of years ago and also to this day as the "Rich Man's Disease or the Disease of Kings". This is because gout has the reputation of being caused by the overindulgence of rich, fatty, and creamy foods, as well as, red meats and expensive shell fish while washing them all down with extreme volumes of beer and wine. So why do some people get gout and some not? The theories continue to abound, but genetics appear to have a key role.

The symptoms start usually with a sudden onset of an extremely painful joint that is red, hot and swollen. Most commonly the big toe, but any joint can be affected. It would not be unusual for this problem to awaken one from sleep and have difficulty walking due to the pain. The joint becomes so sensitive, having the bed sheet or the shoe touching the foot is intolerable.

Gout is the result of the body not being able to process the dietary breakdown of purines turning to uric acid, as well as, the metabolism of alcohol and sugary beverages that increase the production of uric acid. This elevation of uric acid in the blood then circulates and settles in the joints causing this painful joint syndrome.

High uric acid levels in the blood are usually > 6mg/dl in women and > 7mg/dl in men.

What are the dietary triggers of Gout?

Alcohol– in large consumption, alcohol is a known trigger, however even moderate amounts may increase the risk in people prone to gout. Beer is the highest risk and wine appears to be the lowest.

Sugar— sweetened Beverages- high consumption of dietary sweeteners used in common beverages has been known to increase blood uric acid level. Juices with high fructose corn syrup and soft drinks are also known triggers. Natural honey sweetened beverages included in many teas also may increase the uric acid level.

Purine Rich Meats– High intake of purine rich meats may increase a gout attack by 5 times the normal. Red meats- beef, veal, lamb are the highest. Wild game – turkey and duck should also be limited in the diet. Organ meats, like liver, heart and kidney also have elevated levels of purine and can trigger a gout attack.

Fish and Shellfish— Haddock, anchovies, tuna, herring, codfish and trout are all high purine non shell fish that should be avoided with increased risk or prior diagnosis of gout. Mussels and scallops are the highest shell fish to trigger gout, but shrimp, crab and lobster should also be limited.

Tomatoes— This fruit, although a food always mislabeled as a vegetable, has now been labeled a "possible trigger" for gout due to the phenolic acid and glutamate in the tomatoes which then may increase uric acid levels. So over indulgence in tomatoes may also be an avoidable trigger for that chronic gout suffers.

What is the treatment of gout?

I don't have to be a doctor to give this antidote!

Avoid the TRIGGERS! Alcohol, sugary beverages, red meats, shell fish and some non shell fish, and tomatoes.

For those patients who are unable to comply with dietary treatment the use of colchicine, NSAIDS, prednisone, and allopurinol are the most common treatment options. Cherry juice, drinking more water to keep the body hydrated, rest of the joint, and weight loss are all touted to help prevent uric acid build up in the blood stream and prevent gout attacks.

So as we approach this holiday season and may be treating ourselves to the Trigger List Foods and Beverages- Beware of the King's Disease and watch your dietary bank account! This is not a "No pain no gain" eating plan. You will pay for your indulgent choices. Choose wisely! Happy Holidays! Dr. Lee Ann