

NAIROBI ARTHRITIS CLINIC

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GOUT, PAIN AND NUTRITION

Gout is such a painful experience and very common, especially among the people who eat too much meat and alcohol (the nyama choma culture, very bad habit).

What causes Gout?

The pain and swelling of gout are caused by uric acid crystals that form in the joint. This is usually from intake of foods with high concentration of purine. Uric acid is a waste product of purine metabolism. It is dissolved in the blood and excreted through the kidneys into the urine. In people with gout, the uric acid level increases and uric acid crystals are deposited in joints and other tissues. These needle shaped crystals trigger an immune response that produces intense local inflammation with severe pain, tenderness and swelling especially of the lower limbs commonly the big toe.

Increase of serum uric acid over several years lead to a build up of uric acid crystals in the joint(s) and surrounding tissues. These form deposits that are at times apparent as firm lumps under the skin. These lumps are often found in or near severely affected joints, on or near the elbow, over the fingers, the ureters and in the bladder. They can cause an increase of blood pressure thereby putting you are risk of having a kidney problem and this can make your life a nightmare. Kidney stones form when the uric acid concentration in the urine is too high - this is caused by low water intake, diuretics, and overly acidic urine. In most cases - 90% - the culprits of this problem may be a diet rich in purines, lifestyle, and metabolic alterations due to obesity. Inherited conditions only account for 10% of the known causes.

In a nutshell gout is a condition caused by a high concentration of uric acid in the blood. The most effective way to treat gout is by the correct use of prescribed medication and proper dietary follow up.

Dietary Management

- Reduce intake of proteins, especially red meat. As indicated in the table overleaf eat only a palm size of these not more than 3 times a week. When Uric acid levels are very high abstain from red meat and control the amount of white meat intake.
- See the list of items to avoid on column 3 of the table overleaf.
- Take foods rich in Vitamin C. Vitamin C increases urinary excretion of Uric acid. Enhanced excretion of uric acid from the body helps lower uric acid levels. Citrus fruits like Lemons, lime, Oranges, Tangerines, Mangoes and pineapples and lesser citrate fruits like grapes, grape fruits, apples and bananas are very rich in Vitamin C.
- Reduce your intake of Vitamin B complex. Vitamin B increases enzyme production and also breaks down the uric acid. Low intake of this vitamin imply a reduction in the levels of uric acid. Consult your doctor, dietician or physician to ascertain the best form of this complex for you - avoid over the counter supplements.
- Drink plenty of non alcoholic fluids. This included water, fruit juices and tea. For plain water ensure you

take at least 8 glasses in a day. Increase of fluid intake dilutes the urine and promote excretion of uric acid through continuous flushing of the kidneys.

- For hypersensitive patients (those with high blood pressure) and those with a family history, regularly have your uric acid levels monitored as high uric acid levels may cause the blood pressure to spiral out of control.

DIETARY GUIDELINES FOR GOUT

The following guidelines apply during an acute attack:

Avoid all foods high in purines as indicated in the table, because purines are later broken down into uric acid in the body. Avoid all foods in group 3, limit foods in group 2 and eat foods mainly from group 1.

GROUP 1 (Unrestricted)	GROUP 2 (60g meat or 1/2 cup vegetable 5 times per week)	GROUP 3 (Avoid)
White bread; Crackers, cereals and cereal products, cakes, cookies, Mealie bread, Noodles, Macaroni, Rice, Popcorn, Cheese, Eggs, Milk, Milk products, Fruits, Vegetables (except those in group 2 and 3). Nuts, Olives, Herbs, Salt, Pickles, Cream, butter, Margarine, Oil, White sauce, Puddings, Custard, Ice Cream, Sugar, Chocolates, Carbonated beverages.	Whole - Wheat bread, Mutton, Beef, Pork, Game meat, Chicken, Goose, Duck, Turkey. Fish (except that in group 3), Shell fish, Chicken soup, soup containing meat, Asparagus, Mushrooms, Spinach, Dried beans and peas, Lentils, Oatmeal.	Anchovies, Sardines, Mussels, Roe, Herring, Mackerel, Heart, Kidney, Liver, Brains, Minced meat, Meat extracts (e.g. Bovril, Marmite, Fray Gravy, Consomme, Broth, Bouillon, Yeast (including beer).

The following guidelines apply at all times:

- ❖ Avoid alcohol
- ❖ Eat a diet high in carbohydrate (e.g. Bread, Cereals, Rice and Pasta) and low in fat. Reduce fat intake by avoiding fried foods, removing all visible fat from meat before cooking, removing the skin from chicken before cooking, using skim milk and low fat dairy products, not adding oil, margarine or mayonnaise to vegetables, spreading margarine thinly on bread.
- ❖ Adequate fluid intake (8 - 10 glasses of water per day) is important, if fluid is not restricted for any other reason.
- ❖ Maintain ideal body weight, or lose weight if you are over weight.
- ❖ Eat regular meals and do not fast.