

## Dietary Management of Gout

Gout is a form of inflammatory arthritis that is caused by deposition of uric acid crystals in the joints. Uric acid is formed from the breakdown of purine, a compound commonly found in food. It can also result in the formation of kidney stones due to the eliminatory function of the kidney.

### Increase fluid intake

Increasing fluids in the diet, primarily water, is essential for decreasing the risk of crystal deposition. A large fluid intake allows uric acid to remain soluble and promotes excretion, thereby decreasing likelihood of crystallizing. A fluid intake (primarily water) of 2-3 litres a day is recommended.

### Limit purine-rich foods

It appears that foods rich in purine can trigger an attack of gout, due to their breakdown to uric acid. Therefore, it is recommended that foods rich in purines be avoided. The following foods are rich in purines:

- Meat: particularly red & organ meats
- Seafood: particularly shellfish & small fish - mackerel, sardines, & anchovies.
- Yeast containing foods: beer, vegemite.

It would appear that vegetables containing high-purine levels do not contribute to increased uric acid levels. This may be due to other compounds in the vegetables that help to excrete uric acid. These vegetables include: spinach, asparagus, mushrooms, cauliflower, nuts & seeds.

### Increase folate-rich foods

Folate inhibits the enzyme responsible for the conversion of purine to uric acid. Therefore, incorporating foods rich in folate can help to prevent attacks of gout. Foods rich in folate include:

- Green leafy vegetables: cabbage, spinach
- Broccoli
- Asparagus
- Broccoli
- Sprouts
- Mushrooms
- Legumes
- Nuts



### Eat low-moderate GI foods

There is a strong association between insulin resistance and elevated uric acid levels. Therefore, it is beneficial to limit high-GI foods and increase low/moderate-GI foods.

## Dairy

It appears dairy products are associated with a lower risk of gout. This may be due to components in dairy products that help to reduce uric acid levels. It is suggested that an intake of 1-2 servings of dairy products a day is appropriate for gout sufferers.

## Protein

All animal protein contains purines and therefore, should not be over-consumed. Total protein intake should not exceed Australian recommended intakes. The approximate guidelines for daily protein intake (measured in grams per kilogram of bodyweight) is as follows:

- 0.75g/kg for adult women
- 0.84g/kg for adult men



Animal proteins that are particularly high in purines include beef, pork, lamb, organ meats, shellfish, anchovies, sardines and mackerel.

## Limit alcohol

Alcohol inhibits the body's ability to excrete uric acid, therefore, it increases the development of gout. It is important to limit the amount of alcohol you consume. The type of alcohol may be influential as well. Beer and spirits have a higher associated risk than wine.

## Limit fructose

Fructose increases the production of uric acid; therefore it is important to limit foods high in fructose. Foods high in fructose include:

**Fruit:**

Apple, pear, guava, honeydew melon, mango, pawpaw/papaya, quince, watermelon

**Honey**

**Major sweetening ingredient:**

High-fructose corn syrup (HFCS), Corn syrup solids, Fructose, Fruit juice concentrate.

## Maintain a healthy weight

Being overweight increases the risk of gout. Therefore, it is advised to maintain a healthy weight through diet and exercise to reduce the risk of gout. If overweight, it is important to lose weight gradually as 'crash' dieting or fasting can increase uric acid levels, triggering a gout attack.

## Cherries

There is some evidence of symptomatic relief of gout from the consumption of 250g of cherries daily.