

## **GOUT AND DIET**

Gout is a particularly painful inflammatory condition that occurs in a significant number of adult men and women in Australia; and is increasing in incidence. Gout is related to high uric acid levels in the blood and whilst genetic factors are influential, diet can play an important role in its development. The relationship between gout and overindulgence in food and alcohol, as well as obesity, dates back to ancient times. The current increasing incidence of gout has been linked to our society's increasing incidence of obesity. Obesity (particularly abdominal obesity) and hypertension may be causal factors, due to an association between high uric acid levels, glucose intolerance/insulin resistance (and the consequent development of Type 2 Diabetes), high cholesterol levels and cardiovascular disease. It is therefore important to address dietary and lifestyle measures in relation to these diseases for the long-term prevention of gout. For short-term prevention of acute gout attacks, consideration of particular dietary components and dietary manipulation may save you much pain!

### **DIETARY RISK FACTORS**

High protein intake and purine-rich foods have long been considered to be risk factors for the onset of gout attacks. Recent research reveals that it is more likely to specifically be high levels of meat and seafood proteins that are to blame. Total protein intake does not seem to influence the onset of acute gout attacks, nor does a high consumption of purine rich vegetables.

Consumption of meat and seafood should be kept to a moderate level. A general guide is to have a serving of lean meat smaller than the palm of your hand. A regular serving of meat or seafood is considered to be 65g to 100g; therefore aim for a smaller serving than this amount, no more than once, or occasionally twice per day, if you are prone to gout.

Alcohol in any form raises uric acid levels but beer is particularly harmful and should be avoided in those with a history of gout. Moderation in the consumption of other alcoholic beverages is essential although moderate amounts of wine are less likely to precipitate gout than other alcoholic beverages.

Dietary fructose, particularly in the form of high fructose corn syrups (sometimes used to sweeten soft drinks and sports drinks) will increase uric acid levels. The consumption of sugar-sweetened soft drinks is also strongly linked with an increased risk of gout.

Drinking plenty of water is definitely preferable for many reasons. A low hydration status is a risk factor, promoting uric acid crystal formation in the joints, so be sure to be consuming adequate water. The best guide to knowing if you are drinking enough water is the colour of your urine – aim for almost clear throughout the day. While some health professionals advocate 2 litres of fluid per day, the amount your body requires depends greatly on factors such as environmental temperature, activity levels and perspiration rate.

### **PROTECTIVE FOODS**

Consumption of high levels of low-fat dairy products has been shown in studies to be protective against the development of gout, along with many other health benefits. Diets containing higher levels of vitamin C are also associated with a lower incidence of gout and seem to be protective against the development of gout by directly lowering uric acid levels. Some research has shown cherries, or more specifically the anthocyanins in cherries, which are responsible for their rich red colour, may be protective against gout through a reduction of plasma uric acid levels and inflammatory markers. Another reason to be eating a wide variety of fruits in your diet!!

## ***we know what matters***

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<b>Foods and drinks to limit</b>	<b>Protective foods</b>
Red meat	Low fat milk
Organ meats	Low fat yoghurt
Wild game	Fruits
Seafood, especially shellfish	Vegetables
Alcohol, particularly beer	Vegetable protein food sources eg legumes
Fructose sweetened drinks	

### **HOW YOU CAN HELP TO MANAGE YOUR GOUT**

- Do enjoy plenty of low-fat milk and yoghurt and other low fat dairy products.
- Also enjoy plenty of fruit and vegetables, particularly those high in vitamin C.
- Do aim to maintain a healthy body weight and avoid obesity along with its related disease states, such as hypertension, high cholesterol and metabolic syndrome which are all linked to gout.
- Lose weight if necessary. For helpful advice you may wish to refer to the weight loss article on the capital chemist website at <http://www.capitalchemist.com.au/resource/249>.

So, if you suffer from gout you may benefit greatly by limiting consumption of meat, seafood and alcohol to moderate amounts only. *For example*, one lean steak, less than the size of the palm of your hand, along with plenty of fresh vegetables and accompanied by one small glass of wine may mean the difference between an extremely painful gout attack or not. Conversely, a large steak accompanied by a large serving of shellfish, washed down with several beers can be bad news for gout sufferers.

***For the prevention and management of gout; lifestyle and dietary measures need to be considered, with particular attention to maintaining a healthy body weight.***

References: Choi et al 2004 'Intake of purine-rich foods, protein and dairy products' *Arthritis and Rheumatism* vol 52(1). Schlesinger 2005 'Dietary factors and hyperuricaemia' *Curr Pharm Des* 11(32). Lee et al 2006 'Recent Developments in diet and gout' *Curr Opin Rheumatol* 18(2). Choi et al 2004 'Purine rich food, dairy & protein intake' *NEJM* 350. Wortmann 2002 'Gout and hyperuricemia' *Curr Opin in Rheumatology* vol 14(3). Gout Causes. <http://www.dietaryfiberfood.com/purine-food.php>. McGill N 2009 'Treatment of Gout' *Geriatric Medicine* vol 3.