

Information on Diet and Fluids for Patients with Urinary Stone Disease

The passing of a kidney stone can be one of the most painful and unpleasant experiences that you may have. Often there is no obvious predisposing medical cause for the formation of the stone and therefore no specific treatment to stop you suffering another one. Your chance of forming a further stone after your first is 20 – 50%. Many patients are understandably very keen to know if there is anything that they can do to avoid another attack.

What should you drink and how much?

It is probably the volume of fluid drunk that is important and water is of course cheap and safe. The aim is to drink sufficient fluid to ensure that your urine is dilute and therefore less likely to allow crystallization of a stone. Whether your local mains water is hard or soft does not influence your risk of further stones. Clearly it is difficult to determine exactly how much fluid one should drink to meet the required urine output. A useful rule of thumb is the colour of the urine. You should aim for a very light coloured or nearly clear urine (champagne coloured) at all times throughout the day and any darkening (towards the colour of Lucozade) should be a trigger for you to drink more fluid. Be particularly careful in situations where you may become dehydrated i.e. exercise, hot weather, long flights, in air-conditioned rooms, hot offices and factories.

Mineral Water. Many people now buy mineral water which is probably no better than mains tap water in avoiding further stones. However, it may be nicer to drink. The addition of squash or cordial to make tap water more palatable is OK.

Beer and Wine. Drinking alcohol to excess should be avoided, however, the intakes of small volumes of beer and wine may in fact help to decrease the risk of further stones! It is a good habit to drink water along with the alcohol to reduce the dehydrating effect of the alcohol.

Coffee (decaf. or caffeinated) and Tea. Moderate consumption of tea and coffee is not associated with an increased risk of stone formation. However, black tea does contain a high concentration of oxalate and is to be avoided if possible.

Fruit Juices. These are encouraged as part of healthy diet, however excessive intake may be associated with an increased chance of stone formation.

What about diet?

Most kidney stones contain calcium but you should NOT stop eating dairy products. There is no evidence that eating dairy products increase the likelihood of stone formation. In fact, it is recommended that a good amount of calcium should be consumed and cutting out dairy produce may increase the risk of further stones forming.

Trying to improve calcium intake with calcium tablets, however, is to be avoided.

Are there foods I should avoid?

Oxalate is found in most kidney stones and overindulgence in foods that are rich in this substance should be avoided. There is, however, no evidence to suggest that cutting out these foods altogether is in anyway beneficial.

Foods with high oxalate content include:

Strawberries	Chocolate
Rhubarb	Nuts
Beetroot	Okra (Lady's Fingers or Bhindi)
Spinach	Black Tea

Summary

We hope that this information has addressed some of the questions you may have about avoiding kidney stone disease in the future. The overall message is moderation in diet and most importantly of encouragement in the drinking of good volumes of fluids each and every day, especially in hot weather.

These principles are summed up in the 'Common sense diet'

- Drink sufficient fluid to keep the urine dilute (more than 2 litres per day)
- Avoid excessive intake of food containing oxalate 5 to 7 servings of meat per week (never 2 in one day)
- Avoid a low calcium diet and consume calcium containing foods such as dairy produce with meals
- Lower salt intake (i.e. avoid adding extra salt to food)
- Increase consumption of vegetables, vegetable fibre and fruit