Dietary advice for kidney stone formers

Urology department
What are kidney stones?
Most people have two kidneys which clean the blood. They filter out water and waste products and make urine. Urine normally contains minerals and salts. If these minerals and salts become out of balance, kidney stones may form in one or both kidneys.

Kidney stones are fairly common. They are often painless when in the kidney but can cause severe pain if they pass out of the kidney to the bladder.

What can I do to prevent a recurrence of a kidney stone?
About half of the people who have a kidney stone will develop another one within ten years. Stone may form from a variety of minerals and salts. The following suggestions give general advice which will be helpful to the majority of patients. Your doctor may give you extra advice if your stone is of a rarer variety.

Drink plenty of fluid
Drinking plenty of fluid is the most important aspect of preventing stone formation. By not drinking fluid the urine becomes more concentrated and stones are more likely to form.

You should aim to keep your urine colourless throughout the day. This normally means that you should drink two to three litres (four to six pints) of fluid each day (eg. water, squash), unless your doctor advises otherwise.

If you live or work in a hot environment you should drink even more. Try to limit your intake of tea, coffee and alcoholic drinks.

Calcium intake
In the past, patients were advised to reduce intake of calcium-rich foods such as milk, cheese and yoghurt. Recent research has revealed that this is unnecessary and that it is actually beneficial to have a normal to moderately high intake of calcium-rich foods.

Cut down on your salt intake
A high salt intake can increase your risk of stone formation. Try not to add salt to your food at the table. Avoid high-salt tinned, packaged and processed foods (eg. salted crisps, tinned meats, smoked fish and certain processed ready meals).

**Eat a moderate amount of animal protein**
A high intake of animal protein appears to increase the risk of stone formation. You should therefore avoid large portions of meat, fish and eggs.

**Other foods**
Some foods contain a chemical called oxalate. Eating very large amounts of oxalate-rich food increases the risk of stone formation, for some people. Such foods include chocolate, nuts, cocoa, black tea, strawberries, Rhubarb, celery, spinach, beetroot and parsley. You do not need to remove these foods from your diet, simply reduce your intake if you eat these foods in excess.

**Summary**
In summary, increasing fluid intake is the most important measure to prevent recurrent stone formation for most people. You should eat a balanced diet with decreased animal protein and salt and no specific reduction of calcium or oxalate-rich foods.

If you require further information, please contact your doctor.
If you would like this leaflet in another format or in a different language, please ask a member of staff.

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