Dietary advice for stone formers: frequently-asked questions

How much do I need to drink?

Drinking enough fluid is the most important aspect of preventing stone formation and will reduce your risk of stone formation by almost one third. Not drinking enough fluid can make you urine concentrated and make stones more likely to form.

Aim to drink 2-3 litres (4-6 pints) of fluid each day (e.g. water, squash, or fizzy drinks). You should aim to keep your urine colourless throughout the day; this equates to a urine output of at least 2 litres (4 pints) per day. In patients with cystine stones, however, an output of 3.5 litres per day is required.

Tea, coffee & alcohol can be consumed in moderation but the majority of your fluid intake should be as above.

In addition, it is helpful to try and drink 1 or 2 glasses of water before going to bed and on rising in the morning.

Should I restrict my protein intake?

Yes. A high intake of animal protein appears to increase the risk of stone formation. Avoid large portions of meat, fish, eggs, cheese and milk. Aim for 4 of the following exchanges each day:

- 50-75g red meat, fish or chicken
- 2 eggs
- ½ pint of milk
● 50g cheese  
● 120g yogurt (1 small pot)

2 of the 4 exchanges should be milk, cheese or yogurt to ensure an adequate intake of calcium.

You can replace protein with starchy foods (e.g. bread, potatoes, pasta, fruit & vegetables) to fill you up.

Reducing your protein intake also increases the amount of citrate you excrete in your urine; citrate is a known inhibitor of stone formation.

Example menu plan:  
Breakfast: 2 eggs scrambled on toast  
Lunch: Sandwich with 50g cheddar cheese and salad. 1 apple  
Dinner: 1 small chicken breast (approx 75g), new potatoes, vegetables. Fruit salad

**Should I restrict the amount of salt I take?**

Yes. A high salt intake can contribute to calcium stone formation. Do not add salt to your food at the table but use pepper, herbs, spices or vinegar as alternative flavourings. You can, however, add a small amount of salt during cooking.

Foods which contain less than 0.4g (40mg) of sodium per serving are low-salt choices and you should aim to keep your salt intake down to these levels.

Avoid high-salt, tinned, packet and processed foods (e.g. soups, salted crisps or nuts, tinned meats, meat paste, smoked fish and fish paste).

**Should I take vitamin supplements?**

Most vitamins are harmless but do not take Vitamin D preparations, including fish oils and multivitamin preparations since they increase calcium absorption.
Avoid Vitamin C supplements because they can increase the excretion of oxalate in your urine.

SUMMARY
A normal calcium, low-salt, low-protein, dietary regime can reduce your risk of stone formation by a half. Keeping your urine colourless may reduce the risk by a further one third.

Who can I contact for more help or information?

**Oncology Nurses**
- Uro-Oncology Nurse Specialist
  01223 586748
- Bladder cancer Nurse Practitioner (haematuria, chemotherapy & BCG)
  01223 274608
- Prostate cancer Nurse Practitioner
  01223 274608

**Non-Oncology Nurses**
- Urology Nurse Practitioner (incontinence, urodynamics, catheter patients)
  01223 274608 or 586748

**Patient Advice & Liaison Centre (PALS)**
- Telephone
  +44 (0)1223 216756 or 257257
  +44 (0)1223 274432 or 274431
- PatientLine
  *801 (from patient bedside telephones only)
- E mail
  pals@addenbrookes.nhs.uk
- Mail
  PALS, Box No 53
  Addenbrooke's Hospital
  Hills Road, Cambridge, CB2 2QQ

**Chaplaincy and Multi-Faith Community**
- Telephone
  +44 (0)1223 217769
- E mail
  derek.fraser@addenbrookes.nhs.uk
- Mail
  The Chaplaincy, Box No 105
  Addenbrooke's Hospital
  Hills Road, Cambridge, CB2 2QQ
Dietary advice for stone formers

MINICOM System ("type" system for the hard of hearing)
- Telephone
  +44 (0)1223 274604

Access Office (travel, parking & security information)
- Telephone
  +44 (0)1223 586969

Other information
This patient information leaflet provides input from specialists, the British Association of Urological Surgeons, the Department of Health and evidence-based sources as a supplement to any advice you may already have been given by your GP. Alternative treatments can be discussed in more detail with your urologist or Specialist Nurse.

How can I get information in alternative formats?

Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk

Polish Informacje te można otrzymać w innych językach, w wersji dużym drukiem lub audio. Zamówienia prosimy składać pod numerem: 01223 216032 lub wysyłając e-mail: patient.information@addenbrookes.nhs.uk

Portuguese Se precisar desta informação num outro idioma, em impressão de letras grandes ou formato áudio por favor telefone para o 01223 216032 ou envie uma mensagem para: patient.information@addenbrookes.nhs.uk

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Turkish Bu bilgiyi diğer dillerde veya büyük baskı beldeyi ya da sesli formatta isterse niz lütfen su numaradan kontak kurun: 01223 216032 veya asagidaki adrese e-posta gönderin: patient.information@addenbrookes.nhs.uk

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