Diet and haemodialysis

This leaflet is for patients with kidney disease who are receiving haemodialysis treatment. If you have any further questions, please contact us using the details below and on the back page.

What is haemodialysis?

Haemodialysis is a process of removing waste products and excess fluid which build up in the body when the kidneys have stopped or almost stopped working. The dialysis machine cleans the blood and takes over the function of the kidney. Following the right diet can help to reduce the amount of waste products that build up in the body between dialysis sessions.

How can a dietitian help?

A renal dietitian will advise you on your diet and fluid intake. This advice may include information about:

- maintaining a healthy weight
- eating with a poor appetite
- protein in your diet
- potassium in your diet
- phosphate in your diet
- your fluid allowance.

Please do not hesitate to contact us for advice at any time.

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<th>Your renal dietitian is:</th>
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<tr>
<td>Tel:</td>
<td>020 7188 4128</td>
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Maintaining a healthy weight

It is important to maintain a healthy weight when you have kidney disease. The Body Mass Index (BMI) tells you if you are underweight, a healthy weight, overweight or obese. Your ‘dry weight’ is used to calculate your BMI. It is your normal weight without any extra fluid in your body. Your dry weight is usually your weight after dialysis. Your dietitian will discuss the best weight range for you.
What is your BMI?
Losing weight and having a poor appetite

Patients on dialysis may lose weight without meaning to, because of:

- poor appetite
- taste changes and/or nausea (feeling sick) due to the build up of waste products in the blood
- missing meals
- protein and vitamin losses from the dialysis process.

Losing a lot of weight can result in malnutrition. If you are malnourished, you are more likely to become unwell and you may have to come into hospital more often. You may also feel tired, have poor wound healing and less muscle strength.

Your dietitian may advise you on:

- small frequent meals and/or snacks
- adding extra energy and protein to your food and drinks
- taking oral nutritional supplements.

If your appetite is poor try eating a small meal or snack such as a sandwich.

Becoming overweight

Try to keep a healthy weight. Being very overweight (obese) can increase your risk of, or worsen high blood pressure, cardiovascular disease and diabetes.

To help you keep a healthy weight, your dietitian may contact you if:

- your BMI is greater than 30kg/m²
- you have recently gained a large amount of flesh weight (not fluid weight).

Your dietitian may advise you on:

- having a balanced diet
- avoiding high energy food and drinks
- exercising regularly
How to get help with managing your weight:

Renal patients with a BMI greater than 30kg/m\(^2\) can attend the Supported Change in Activity Levels and Eating (SCALE) clinic. This year long programme is held at Guy’s Hospital. (Please ask for a copy of our SCALE leaflet).

Appointments are monthly for six months, with a follow up at nine and twelve months. At each visit a dietitian and physiotherapist will provide advice and support to help you reach your weight loss goal.

Please contact your renal dietitian if you are interested in attending SCALE.

Protein

Protein is needed by the body for growth and repair. If your diet is low in protein, you are at risk of losing muscle strength and becoming weaker. This increases your risk of malnutrition.

A small amount of protein is lost during a dialysis session. Therefore, dialysis patients need to eat more protein. **Aim to eat protein foods at least twice a day.**

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<thead>
<tr>
<th>Animal Protein</th>
<th>Vegetable Protein</th>
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<tbody>
<tr>
<td>Meat</td>
<td>Beans</td>
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<td>Poultry</td>
<td>Lentils</td>
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<td>Fish</td>
<td>Chickpeas</td>
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<td>Eggs</td>
<td>Tofu</td>
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<td>Milk</td>
<td>Quorn™</td>
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<tr>
<td>Cheese</td>
<td>Soya products</td>
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<tr>
<td>Yoghurt</td>
<td>Nuts</td>
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<td></td>
<td>Seeds</td>
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</table>

Some high protein foods are also high in phosphate. There is no need to limit high phosphate foods unless instructed to by your dietitian. More information about phosphate is on page six.

These foods are high in protein – aim to eat protein foods twice a day.
Potassium

Potassium is a mineral that is needed for nerves and muscles to work. It is found in many foods and drinks. Healthy kidneys control the level of potassium in your blood. When your kidneys no longer work the excess potassium in your blood can be removed by dialysis, but you may also need to reduce the amount of potassium in your diet. A high level of potassium in your blood can be dangerous as it can cause an abnormal heart beat.

High potassium levels may be caused by:

- eating too many potassium-rich food and drinks
- constipation
- uncontrolled blood glucose levels (if you are diabetic)
- medications containing potassium
- poor blood flow rate during dialysis

Every month, the level of potassium in your blood is checked. If necessary, your dietitian will advise you on how to follow a low potassium diet. Not everyone on dialysis needs a low potassium diet. Your dietitian will advise you on what is best for you.

These foods are high in potassium – eating too many potassium rich foods can cause high potassium levels in your blood.
Phosphate

Phosphate is a mineral needed to keep bones strong and healthy. It is found in some foods and drinks, mostly dairy products, eggs, oily fish, nuts and cola drinks. Healthy kidneys control the level of phosphate in your blood. When your kidneys no longer work, the phosphate in your blood can build up. Some of the phosphate is removed by dialysis.

In the short term, a high level of phosphate can cause itchy skin and eyes, aching muscles and painful bones. If your phosphate level is high for a long time, it can make your bones weak (and they may break more easily). The phosphate can also build up in your blood vessels, joints and muscles, causing them to harden.

Every month the level of phosphate in your blood is monitored. If necessary, your dietitian may advise you on how to follow a low phosphate diet. **Not everyone on dialysis needs a low phosphate diet. Your dietitian will advise you on what is best for you.**

These foods are high in phosphate – if the phosphate level in your blood is high you may need to follow a low phosphate diet.

You may also need to take a phosphate binder. These are medicines that help to decrease the phosphate levels in your blood. Phosphate binders bind with the phosphate in food. The phosphate is then taken out of the body when you open your bowels. Many different phosphate binders are available and your doctor will prescribe the most suitable for you.

Phosphate binders need to be taken around mealtimes. Your doctor, dietitian or pharmacist will give you specific advice on how and when to take the one that you have been prescribed. Please make sure that you take the full dose of phosphate binder that has been prescribed for you.
**Fluid**

As kidneys fail, they cannot control the amount of fluid in your body. If you drink more liquid than you pass out in your urine, the extra fluid stays in your body. This is known as fluid overload. It can cause swelling in your body and shortness of breath. In the long term, this can damage your heart.

Once you start dialysis it is likely that you will need advice on how to reduce the amount of fluid you drink each day. The amount you can drink depends on how much urine you pass in 24 hours. Therefore you may be asked to measure the urine you pass over 24 hours. The amount you can drink is often referred to as your fluid allowance.

**Fluid allowance = previous day’s urine output (measured in ml) + 500ml**

Your fluid allowance = _________________ml per day

Useful conversions:

<table>
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<tr>
<th>One litre = 1000ml</th>
<th>Half a litre = 500ml</th>
<th>One pint = 600ml</th>
<th>Half a pint = 300ml</th>
<th>¼ pint = 150ml</th>
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It can be hard to keep to a fluid allowance. Your dietitian can suggest some ways to control your thirst, including reducing salt in your diet.

**Salt**

Eating too much salt can raise your blood pressure and make you feel thirsty. This makes it difficult to control the amount you drink. Reducing the amount of salt in your diet will make this much easier.

You should reduce your salt intake by:

- not adding salt to your food in cooking and at the table
- using herbs to flavour dishes instead of salt
- eating less salty, processed foods such as tinned/packet soup, processed meat and ready meals
- choosing ‘no added salt’ and ‘reduced salt’ foods and sauces
- do not use salt substitutes such as LoSalt™ or Solo™ as they contain potassium.

**Your taste buds will adjust within a few weeks!**

**Contact us**

If you have any questions or concerns, please contact the nutrition and dietetics department on 020 7188 4128 (Monday to Friday, 9am to 5pm). If we are unable to take your call, please leave us a message and we will call you back.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets
Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)
To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:
t: 020 7188 8801  e: pals@gstt.nhs.uk

Language Support Services
If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.
t: 020 7188 8815  fax: 020 7188 5953

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
w: www.nhs.uk

Become a member of your local hospitals, and help shape our future
Membership is free and it is completely up to you how much you get involved. To become a member of our Foundation Trust, you need to be 18 years of age or over, live in Lambeth, Southwark, Lewisham, Wandsworth or Westminster or have been a patient at either hospital in the last five years. To join:
t: 0848 143 4017  e: members@gstt.nhs.uk  w: www.guysandstthomas.nhs.uk