Eating well for your kidneys

Information for patients
This booklet answers common questions about eating well for your kidneys. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse, dietitian or doctor.

**I have been told that I have kidney disease. What does this mean?**
This means that your kidneys are not working as well as they should be to help keep you healthy.

Your kidneys normally remove waste products and extra fluid from your blood. These waste products and fluid come from the foods that you eat and liquids that you drink.

If you have kidney disease the kidney is less able to remove these waste products and they can remain or build up in the blood. Sometimes, early kidney disease may progress to more advanced kidney disease. If you follow your doctor's advice carefully, you may be able to slow this down.

Kidney function is measured by your glomerular filtration rate (GFR). Doctors use this to determine your current kidney function. Talk to your doctor if you need more information on this.

Your doctor may want you to see a dietitian who has expert knowledge about diet. The main goal of this is to keep you healthy. It may also help to slow down the loss
of kidney function, keeping your kidneys working for longer.

**Achieving good nutrition**
Eating a balanced diet is important for everybody, but particularly when you have kidney disease.

**Quick tips for eating well:**
- Eat regular meals – do not skip breakfast!
- Eat to be a healthy weight.
- Eat fruit and vegetables every day.
- Base your meals around starchy foods (bread, cereals, rice, pasta and potatoes).
- Eat less salt.

**A balanced diet**
A balanced diet contains a variety of foods from the five different food groups. This is important to make sure you get enough energy (calories) and protein from food, as well as essential vitamins and minerals. The five food groups are:
- bread, cereals and potatoes
- fruit and vegetables
- meat, fish and alternatives
- milk and dairy foods
- fatty and sugary foods.
Try to maintain a healthy weight
It is important that you maintain a healthy weight when you have kidney disease. Your body mass index (BMI) will indicate a suitable weight for your height (see chart below).

What if I am losing weight?
Sometimes having kidney disease can affect your appetite. If you have lost your appetite or you are rapidly losing weight, please tell your doctor and ask to speak to a dietitian.
What if I am overweight?
Eating more calories than you use will result in weight gain. Even a small amount of weight loss will help to protect your heart and kidneys, help control your blood pressure and may prevent or help to control diabetes.

There are lots of things you can do to control your weight such as:

- **Eat regular, planned meals and try not to snack on high-energy foods between meals.**
- **Eat fewer foods that are high in fat and sugar.**
- **Choose lower fat cooking methods such as grilling, baking and boiling.**
- **Eat plenty of fruit and vegetables.**
- **Eat more filling foods such as bread, pasta and rice.**
- **Shop from a list and avoid shopping when you’re hungry.**
- **Exercise regularly.**

A steady weight loss of about half to one kilogram (1-2lb) per week is the safest way to lose weight. If you need more help, speak with your GP.
Body mass index chart

The chart illustrates the relationship between weight and height to determine body mass index (BMI). The categories range from underweight to clinically obese. The chart uses weight in kilograms and stones, as well as height in feet and inches and meters.
What is the big deal about salt?
Too much salt in the diet is linked to high blood pressure and can also make your body retain water. Salt will make you thirstier and, therefore, can make following a fluid restriction more difficult.

Try these suggestions to reduce salt in your diet:

1. Do not add salt at the table:
   - Remember tomato ketchup, brown sauce and soy sauce are also very high in salt and should only be used in small amounts, e.g. an individual sachet portion.
   - Pepper, vinegar, herbs and spices can be used to add flavour to food.
   - Your taste buds will quickly adapt to using less salt on your food.
   - You will find after about a month, food will start to taste much better.

2. Cook without salt or stock cubes:
There are lots of ways to add flavour to your cooking without using salt or stock cubes. See the table below for alternative flavouring to salt. Some ideas include:

   - Marinating meat and fish in advance to give them more flavour, eg use garlic, onions, lemon.
• Adding a small amount of red wine to stews and casseroles, and white wine to risottos and sauces for chicken.

• Using different types of onion, eg red, white, spring onions, shallots.

• **Tip!** Try not to add salt automatically when you are cooking or about to eat. People often only use salt out of habit.

3. **Cut down on manufactured and processed foods:**

• Try using fresh or frozen meat, fish and vegetables, rather than pre-prepared dishes or ready meals whenever possible.

• If buying tinned vegetables, choose those labelled ‘no added salt’ or ‘reduced salt’.

• Avoid eating salty foods such as soups, ham, bacon, tinned meats, sausages, crisps, beef burgers, meat pies, smoked fish, ready meals and also restaurant and takeaway foods.

**Warning:** Do not use salt substitutes, eg Losalt, as they contain potassium chloride. These products are not suitable for people with kidney problems as they may increase potassium levels.
Understanding food labels: Check the label!
About three quarters of the salt we eat is hidden in processed foods. Checking food labels is a useful tool to work out how much salt you are eating.

On the back of most foods you will find a table showing how much salt is in the product per 100g. Use the following table as a guide.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Salt Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>More than 1.5g of salt per 100g (or 0.6g sodium)</td>
</tr>
<tr>
<td>Medium</td>
<td>Between 0.3g and 1.5g per 100g (or 0.1g sodium)</td>
</tr>
<tr>
<td>Low</td>
<td>0.3g salt or less per 100g (or 0.1g sodium)</td>
</tr>
</tbody>
</table>
### Sauces and flavourings
(Keep bottled sauces to one tablespoon per day)

<table>
<thead>
<tr>
<th>Try to avoid</th>
<th>Suitable alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• all varieties of salt, eg table salt, pink Himalayan, sea salt</td>
<td>• all fresh, dried and frozen herbs (add fresh herbs towards the end of cooking to retain flavour)</td>
</tr>
<tr>
<td>• stock cubes/Maggi cubes</td>
<td>• all spices</td>
</tr>
<tr>
<td>• monosodium glutamate (MSG)</td>
<td>• chilli/chilli powder</td>
</tr>
<tr>
<td>• bouillon cubes</td>
<td>• pepper</td>
</tr>
<tr>
<td></td>
<td>• mustard powder</td>
</tr>
<tr>
<td>• taramasalata</td>
<td>• houmous</td>
</tr>
<tr>
<td>• raita</td>
<td>• guacamole</td>
</tr>
<tr>
<td>• pickles</td>
<td>• salsa</td>
</tr>
<tr>
<td></td>
<td>• tzatziki</td>
</tr>
<tr>
<td>• readymade curry sauce</td>
<td>• homemade sauces and dips</td>
</tr>
<tr>
<td>• readymade pasta/tomato sauce</td>
<td>• vinegar</td>
</tr>
<tr>
<td>• curry paste</td>
<td>• wine</td>
</tr>
<tr>
<td></td>
<td>• lemon juice</td>
</tr>
<tr>
<td>• tabasco sauce</td>
<td>• apple sauce</td>
</tr>
<tr>
<td>• soy sauce</td>
<td>• barbeque sauce</td>
</tr>
<tr>
<td>• fish sauce</td>
<td>• cranberry sauce</td>
</tr>
<tr>
<td>• oyster sauce</td>
<td>• horse radish</td>
</tr>
<tr>
<td></td>
<td>• homemade mint sauce</td>
</tr>
<tr>
<td>• brown sauce</td>
<td>• relish – corn or tomato</td>
</tr>
<tr>
<td>• mayonnaise</td>
<td>• sour cream and chive dip</td>
</tr>
<tr>
<td>• mustard</td>
<td></td>
</tr>
<tr>
<td>• tomato sauce, ketchup, chutney</td>
<td></td>
</tr>
<tr>
<td>• salad cream</td>
<td></td>
</tr>
<tr>
<td>• tartar sauce</td>
<td></td>
</tr>
<tr>
<td>• instant gravy</td>
<td></td>
</tr>
<tr>
<td>• pesto</td>
<td></td>
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</tbody>
</table>
Exercise for everyone
Regular exercise is beneficial to people with kidney disease, regardless of age or physical ability. It may be a daunting thought but regular exercise has lots of benefits, such as general good health and well-being, improving blood pressure, diabetes blood sugar control, keeping your heart and muscles strong and healthy, and helping to control your weight.

So, what is stopping you?
Ideally, exercise should be incorporated into your daily routine and with time will become easy and enjoyable. Try walking further instead of taking the bus, or climb the stairs instead of using the lift at work. Try to involve all the family.

What is the best exercise to choose?
Regular, low-intensity exercise within your own capabilities is best. If it has been a while since you have been active, build up slowly from 5 minutes to 30 minutes at a time. Try to aim for three to five sessions of activity per week. Try endurance exercise such as brisk walking, cycling, dancing or swimming. Exercises which are good for improving flexibility and mobility are bowls, pilates, T’ai Chi or yoga. Please check with your GP or doctor before starting exercise.

Tip! Remember, you do not have to push yourself too hard to see the benefits of exercise – it just has to be regular.
Alcohol in moderation
If you normally drink alcohol, this is something that you probably want to know about. Alcohol in moderation is the key for most people.

What is the general recommended alcohol intake?
14 units per week for women and men.

‘One unit’ is the same as half a pint of beer or lager (or less if it is strong beer or lager), one small glass of wine or one pub measure of spirit. Try to spread your drinking over at least three days if you have 14 units in a week. Don’t save up all of your units for one day.

Is there any limit on alcohol with kidney disease?
Only if you have been advised to follow a low potassium diet or limit your fluid intake. Certain types of alcohol contain more potassium than others. If you are following a potassium restriction, ask your dietitian for more details about the type and quantity of alcohol you can have.

Alcohol contains a lot of energy so excessive alcohol intake might result in unnecessary weight gain.

Finally... if you are taking medication and are unsure as to whether you can drink alcohol – always check with your doctor.
A rough guide to protein
Protein from food is needed for growth, repair of muscle and tissues, and fighting infection. Healthy kidneys get rid of the waste product of protein – urea – in the urine. When your kidneys are not working well, the level of urea in the blood can rise and this may make you feel unwell.

How can I eat the right amount of protein?

<table>
<thead>
<tr>
<th>Foods that contain protein</th>
<th>How much should I have?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat: beef, lamb, pork</td>
<td>As a guide, these should be eaten twice a day, e.g. at a main meal and one snack meal (lighter meal).</td>
</tr>
<tr>
<td>Poultry: chicken, turkey</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td>Pulses: lentils, beans,</td>
<td></td>
</tr>
<tr>
<td>chickpeas</td>
<td></td>
</tr>
<tr>
<td>Vegetable protein: Quorn,</td>
<td></td>
</tr>
<tr>
<td>soya, tofu</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>About ¾ of a pint or 400mls per day</td>
</tr>
<tr>
<td>Eggs</td>
<td>3-4 per week</td>
</tr>
<tr>
<td>Cheese, yoghurt, milk</td>
<td>Twice a week</td>
</tr>
<tr>
<td>pudding</td>
<td></td>
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</tbody>
</table>
Diabetes
If you have kidney problems and diabetes, the information here still applies to you!

Even if you are told you may need to make alterations to your diet to help your kidneys, a healthy diet for your diabetes is still very important.

It is also important that you follow the advice given by the doctors and the diabetes nurses to help control your blood sugar levels.
The following sections are for those who are attending specialist kidney clinics

Your blood phosphate and potassium levels will be checked regularly.

The Renal Association target blood levels for phosphate are 0.8 - 1.5mmol/l. The target blood levels for potassium are 3.5 - 5.5mmol/l.

If your levels are higher than these levels then you will need to be referred to a specialist renal dietitian.

A word about phosphate
Phosphate is a mineral that helps to keep your bones and teeth healthy. When your kidneys are not working efficiently the level of phosphate in your blood can begin to rise. Itchy skin and red eyes tend to be a problem in the advanced stages of kidney disease and this is due to raised phosphate levels.

Where does phosphate come from?
Phosphate is present in many foods, for example:

- some dairy products
- nuts
- processed meats, offal
- eggs
- oily fish, eg mackerel, sardines
- shellfish, eg prawns, scampi
Do I need to follow a strict low phosphate diet?
No. If you eat the foods in this list regularly then it might be a good idea to try to eat them less often. If you need to follow a low phosphate diet, your doctor should refer you to a renal dietitian who can give you specific advice regarding your diet.

What if my doctor has asked me to take phosphate binders?
To help control the phosphate in your blood, you may need to take medicines called phosphate binders, for example Calcichew® and Renagel®. Your kidney healthcare team will tell you if you need them and how to take them.

A few words about potassium
Potassium is a mineral that keeps your heartbeat regular and your muscles working. Your kidneys normally remove extra potassium from your blood, but if they do not work well potassium levels in your blood can rise.

Where does potassium come from?
Potassium is found in certain foods but there are many reasons for a high blood potassium level e.g. medications and uncontrolled sugar levels if you are diabetic. Ideally these should be investigated before you need to restrict the amount of potassium from your diet.

You only need to cut down on the potassium in your diet
if a doctor or dietitian tells you to, and your blood level is less than 5.5 mmol/L and non-dietary causes have been investigated.

**What should I do if I am told I need to follow a low potassium diet?**
Your doctor should refer you to see a dietitian who can advise you about a low potassium diet.

**Where can I find more information?**

**Useful websites**
www.kidneycareuk.org
www.kidneyresearch.org
www.kidney.org.uk

**The library**
Many good books have been published for renal patients, their families and carers. These cover a wide variety of topics, including diet. There are also renal recipe books available, for example eating well with kidney disease.

**A dietitian**
Kidney dietitians that work mainly with people who have kidney disease can offer more detailed advice on any of the topics mentioned in this booklet. We can tailor this advice to your personal needs, and take into account cultural or religious requirements.
If you have any feedback on this leaflet or for a list of references for it, please email: rf.communications@nhs.net

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please ask a member of staff.

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Version number: 2
Approval date: March 2018
Review date: March 2020
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