Kidney disease is called a ‘silent disease’ as there are often no warning signs. You can lose up to 90 per cent of your kidney function before getting any symptoms. The first signs may be itching, feeling breathless, nausea and vomiting, bad breath, and a metallic taste in your mouth. For more information see the fact sheet All about chronic kidney disease.

Control your blood pressure
High blood pressure can cause kidney disease and kidney disease can cause high blood pressure. Controlling your blood pressure can involve:
• making changes to your diet
• having regular blood pressure checks
• your doctor might give you some medications
Managing your blood pressure will not only protect your kidneys, but it will also protect your heart and brain, reducing the risk of a heart attack or a stroke. For more information see the Blood pressure and chronic kidney disease fact sheet.

Stop smoking
If you don’t smoke, don’t start. If you do, quit! This is the most important habit to change to reduce your risk of kidney disease. People who smoke are three times more likely to have reduced kidney function, and have a four to five times greater risk of a heart attack and stroke.

Tips to help you quit:
• Call the Quitline on 13 7848, or contact your local community services directory or health centre for a referral to a stop smoking program
• Surround yourself with people who are non-smokers if you can
• Talking to your doctor has been shown to improve quit rates
• Find healthy activities you enjoy to replace smoking, such as walking, sport, meditation or yoga.

Manage your diabetes
If you have diabetes keeping your sugar level under control is an important way of protecting your kidneys. Yearly checks of your kidney function and careful control of your blood sugars will slow down any damage to your kidneys. For more information see the fact sheet Diabetic kidney disease.
Seek advice from an accredited practising dietitian

A dietitian can also help you choose foods that will keep you healthy without overloading your kidneys.

Potassium is a mineral found in many foods which help your nerves and muscles work. Healthy kidneys remove extra potassium from your blood. If your kidneys are damaged, your potassium level can rise and affect your heartbeat. Your dietitian will help you choose foods with the right amount of potassium for you.

Protein builds, repairs and maintains your body tissues and fights infections. It is found in meat, fish, legumes and dairy products. When your body breaks down protein, a waste called urea is formed. As your kidneys fail, urea can build up in your blood and cause side effects like tiredness, nausea, headaches and a bad taste in your mouth. Your dietitian can help you choose foods with the right amount of protein for you.

For more information see the Nutrition and kidney failure fact sheet.

Achieve and maintain a healthy body weight

It is important to maintain a healthy weight. A healthy diet should include a good variety of nutritious foods and you should watch your serving size. A good balance between exercise and food intake is important for good health.

Your body mass index (BMI) is one way to work out your weight range. A healthy BMI for an adult is between 20 and 25. Having a BMI greater than 25 increases your risk of developing kidney disease, diabetes and high blood pressure. A BMI calculator and more information can be found online at http://healthyweight.health.gov.au/wps/portal/Home/helping-hand/bmi

Extreme (fad) diets with very little food or those that exclude some healthy foods are not recommended for maintaining a healthy body weight. More information on fad diets can be found here http://daa.asn.au/for-the-public/smart-eating-for-you/nutrition-a-z/fad-diets/

Healthy eating tips include:

- Eat lots of fruit, vegetables, legumes, and wholegrain bread and rice
- Eat some lean meat, such as chicken and fish, at least once a week
- Cut back on snack foods with high levels of saturated fat, sugar or salt. Healthy alternatives include fresh fruit, low-fat yoghurt (check for added sugar) and unsalted nuts
- Limit take-away and fast food meals as an occasional treat
- Add flavour to meals by using things like lemon or lime juice, onion, garlic, chilli, pepper, herbs and spices instead of salt.

Visit your doctor or a dietitian for advice on nutrition and your ideal weight.

The Nutrition Information panel on a food label can help you choose healthier foods:

- Always look at the per 100g column as serving sizes will vary

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Per Serving</th>
<th>Per 100g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>608 kJ</td>
<td>205 kJ</td>
</tr>
<tr>
<td>Protein</td>
<td>4.2 g</td>
<td>2.8 g</td>
</tr>
<tr>
<td>Fat, Total</td>
<td>7.4 g</td>
<td>4.9 g</td>
</tr>
<tr>
<td>Carbohydrate, Total</td>
<td>18.6 g</td>
<td>12.4 g</td>
</tr>
<tr>
<td>Sodium</td>
<td>90 mg</td>
<td>60 mg</td>
</tr>
<tr>
<td>Calcium</td>
<td>300 mg (38%)</td>
<td>200 mg</td>
</tr>
</tbody>
</table>

The ingredients list - if fat, added sugar or added salt are in the first three ingredients, it may not be the best choice.

Health Star Rating

Some packaging also includes the Health Star rating on the front of the packet. The more stars, the healthier the choice when compared to a similar food. It is not useful to compare different food types, for example cheese and cereal.

Remember, some of the healthiest foods may be unlabelled (e.g. fresh fruit and vegetables, nuts, lentils, beans, fresh meat and fish).
**Enjoy some exercise**

The benefits of regular exercise are wide-reaching. Not only can it help to reduce and maintain weight, it can also reduce the risk of developing heart disease, diabetes, and kidney disease. You only need to exercise for 30 minutes on at least five days of the week to reap the benefits. And you don’t have to sweat it out at the gym - a brisk walk is great.

Tips to get more exercise:
- Break up your 30 minutes of exercise into 3 x 10-minute sessions if time is limited
- Get off the bus one or two stops earlier and walk the rest of the way, walk to the shop instead of driving there, and take the stairs instead of the lift or escalator
- Choose exercise that you enjoy
- Invite a friend to exercise with you or join an exercise group - not only will you lose track of time as you exercise, you’ll also help to motivate and encourage each other
- Simple daily activities such as mowing the lawn, or walking around the shopping centre
- If you have small children, find or start a pram-pushers’ walking club. Contact your early childhood centre, or local council’s community services department to find out if there’s a club in your area.

**Limit alcohol intake**

Excessive alcohol intake can lead to heart disease and high blood pressure, increasing the risk of kidney disease.

Tips to cut down on your alcohol intake:
- Ask for ice with your drinks - when the ice melts it will water down the alcohol
- Have a glass of water after each alcoholic drink

**Soft drinks** should be limited as they are high in sugar and can lead to kidney disease, high blood pressure and diabetes. Diet soft drinks are lower in sugar, but can be acidic and damage your teeth. Also watch out for ‘energy drinks’ which are high in sugar and caffeine.

**Use medications as prescribed**

If you are on medications for your blood pressure or your diabetes, always take them exactly as prescribed by your doctor.

There are two other medications that you may start using as your kidney disease progresses:
- **Phosphate Binders** - There are different types of phosphate binders which might use calcium or magnesium as the main “binder” to trap phosphate before it is absorbed into your bloodstream. Your doctor will tell you which one is the most suitable one for you.
- **Erythropoetin (EPO)** - A hormone produced by your kidneys that tells your body to make red blood cells. Red blood cells carry oxygen around your body, allowing you to be active. When your kidneys fail they reduce the EPO they make. Usually EPO is given as an injection and you can be taught to do this yourself.

**Watch what you drink**

As your kidney disease progresses, fluid may build up in your body which can cause swollen ankles, hands or stomach, breathlessness and high blood pressure. You may need to limit the amount of fluid you drink or have in your food each day. Your doctor may prescribe a tablet called a diuretic to help your kidneys pass more water. An Accredited Practising Dietitian can advise if you need to reduce your fluid intake.

<table>
<thead>
<tr>
<th>600ml cola</th>
<th>=</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 tsp sugar</td>
<td></td>
</tr>
</tbody>
</table>

**Soft drinks** should be limited as they are high in sugar and can lead to kidney disease, high blood pressure and diabetes. Diet soft drinks are lower in sugar, but can be acidic and damage your teeth. Also watch out for ‘energy drinks’ which are high in sugar and caffeine.
General well being

It is normal to feel different emotions at different stages of kidney disease. You might feel disbelief, grief, frustration, despair, fear, lack of control, and even depression.

To help yourself, you can talk to a friend, relative or health professional. Social workers and psychologists can help you to find solutions to problems that are worrying you.

If you are concerned that you have depression, ask yourself:

- Do I regularly struggle to get out of bed and do daily activities?
- Do I feel as if I am surrounded by a black cloud?
- Do I cry regularly?
- Do I get angry easily for no reason?
- Have I stopped paying attention to how I look?
- Am I eating for comfort or refusing to eat at all?
- Do I consider harming myself?

If you answered yes to one or more of these questions, talk to your doctor and work out which treatment is best for you.

Depression is an illness affecting 1 in 5 people with chronic kidney disease, and 1 in 3 people on dialysis. For immediate help, you can contact beyondblue - 1300 224 636.

Infections

Kidney failure can increase your chances of getting infections. If you have diabetes, your risk is even higher. It is important to see your doctor if you have any symptoms such as fever, pain, aches and feeling generally unwell.

Flu vaccination

A flu vaccine (Fluvax) is usually suggested for people with kidney disease. However, some dialysis and transplant medications may reduce its effectiveness. It is important to talk to your kidney specialist or doctor about getting your vaccine.

Treatment options if your kidneys fail completely

You may never need dialysis or a kidney transplant for your kidney disease. However, if you do, it is important to learn about treatment options to help you to decide what will be the best for you.

A nurse at your renal (kidney) unit will usually coordinate education sessions. These might include:

- Meeting with a nurse in the renal unit of your local hospital
- Support and education groups with renal nurses, other patients, social workers and dietitians

Once you have found out as much as you can, it is YOUR decision, but you will always have professional guidance and support.

Treatment options include:

- transplantation
- home dialysis: peritoneal dialysis or home haemodialysis
- unit based haemodialysis
- non-dialysis supportive care

For more information about treatment options, see the Kidney failure treatment options fact sheet.
How to manage your health

Managing your own health can improve the quality of your physical and mental health. You may like to use a folder with plastic sleeves to keep records of your appointments, test results and medications. This way you will be able to see any changes in your blood pressure, blood tests and urine tests. You could also use some graph paper to plot your test results (see example).

Some medications and medical procedures are not recommended if you have kidney disease. It is important that you tell health professionals that you have kidney disease - do not assume that they already know.

This fact sheet provides a brief outline on things to consider if you have been diagnosed with kidney disease. For more information, see the booklets My Kidneys, My Health and Living with Kidney Failure, both published by Kidney Health Australia.

Example: eGFR 45

My eGFR Results

THINGS TO REMEMBER

- It is normal to experience a range of emotions when you live with kidney disease. Seek help by talking to a friend, relative, or health professional.
- Make sure your diet, fluids, exercise and medications are monitored regularly with your health care team.
- Find out as much as you can about possible future treatment options to help you decide what is best for you.

What does that word mean?

**Blood pressure** - The pressure of the blood in the arteries as it is pumped around the body by the heart. See hypertension.

**Chronic kidney disease (CKD)** - A term used widely to describe kidney damage or reduced kidney function (irrespective of the cause) that persists for more than three months. Sometimes CKD leads to kidney failure, which requires dialysis or a kidney transplant to keep you alive.

**Diabetes** - A chronic disease caused by problems with the production and/or action of insulin in the body which helps control blood sugar levels.

**Dialysis** - A treatment for kidney failure that removes waste products and excess fluid from the blood by filtering the blood through a special membrane. There are two types of dialysis; haemodialysis and peritoneal dialysis.

**Dietitian (Accredited Practicing Dietitian or APD)** - Can provide you with expert individual nutrition advice or medical nutrition therapy on a range of health conditions. Renal dietitians are dietitians experienced in kidney disease who can help you develop an eating plan needed as part of the management of kidney disease.

**Diuretic** - Any substance that increases the production of urine.
Erythropoietin (EPO) - A body chemical (hormone) mainly made by the kidneys that causes the bone marrow to make red blood cells. A lack of this hormone can cause anaemia.

Fluid retention - When your body does not get rid of enough liquid (water). This can cause swollen or puffy ankles, face or hands, or shortness of breath. Also known as oedema.

Heart attack - When a blood clot blocks one of the arteries that supply blood to the heart muscle.

Hypertension - High blood pressure. High blood pressure can cause chronic kidney disease and chronic kidney disease can cause high blood pressure.

Kidney transplant - When a healthy kidney is taken from a person and surgically placed into someone with kidney failure. The kidney can come from a living or deceased donor. It is important to remember that a transplant is a treatment not a cure for kidney disease.

Phosphate - A mineral that, together with calcium, keeps your bones strong and healthy. Too much phosphate causes itching and pain in the joints, such as the knees, elbows and ankles. When the kidneys are not functioning properly, high levels of phosphate accumulate in the blood.

Phosphate binder - If your phosphate level is too high, you may be prescribed medicine called phosphate binders. They combine with phosphate in your intestines so it can pass out of your body with the faeces (poo). It is important to take phosphate binders with your meals and snacks.

Potassium - An essential mineral that helps nerve endings and muscles to work. Potassium is usually removed by healthy kidneys. If your level of potassium is too high or too low, it can cause an irregular heartbeat. Very high potassium levels may cause the heart to stop.

Protein - A nutrient that you get from food that builds, repairs and maintains body tissue. It also helps to fight infections and heal wounds.

Renal - Another word for kidneys.

Stroke - When blood supply to the brain is interrupted. When brain cells do not get enough blood supply, they die. A stroke is a life threatening emergency.

   Facial weakness - check their face. Has their mouth drooped?

   Arm weakness - can they lift both arms?

   Speech difficulty - is their speech slurred? Do they understand you?

   Time - is critical. If you see any of these signs, call 000 straight away.

Urine - The name for excess fluid and waste products that are removed from the body by the kidneys. Commonly called wee.

Ureter - The tube that connects your kidneys to your bladder.

Urethra - The tube that takes urine out of your body from your bladder.

For more information about kidney or urinary health, please contact our free call Kidney Health Information Service (KHIS) on 1800 454 363. Or visit our website kidney.org.au to access free health literature.

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or Health Professional's advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person's experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.