Fact sheet

Life with a Single Kidney

Most people are born with two kidneys. They are located under the ribs, near the middle of your back. Each kidney is about the size of your fist and weighs around 150 grams. Around 1 in every 750 people is born with a single kidney. This is called renal agenesis. It is more common in males, and the left kidney is more likely to be missing.

Sometimes a kidney is removed because there is a blockage, a tumour, or damage caused by an accident. The operation to remove a kidney is called a nephrectomy. People with a kidney transplant and live kidney donors also have only one working kidney.

How is kidney function affected?

If you are born with one kidney or lose a kidney, your remaining kidney gets bigger and heavier. Your remaining kidney works harder and provides up to 75 per cent of normal kidney function rather than the 50 per cent you might expect.

If you have a single kidney from birth or early childhood, you may experience a slight drop in kidney function, usually after about 25 years. If you have a kidney removed later in life, you are unlikely to have kidney problems, particularly in the first few years after your kidney is removed. Having a single kidney does not affect your life-span.

One kidney can still provide up to 75 percent of normal kidney function.
How will my remaining kidney function be checked?

Your doctor should check the function of your kidney regularly using the following tests:

- **Blood test for glomerular filtration rate**: The glomerular filtration rate measures how well your kidneys filter the waste from your blood. It is the best measure of kidney function. Your doctor can estimate your glomerular filtration rate (known as eGFR) with a simple blood test. Your eGFR is lower if you have one kidney.

- **Urine test for protein in your urine**: Too much protein in your urine (also known as albuminuria) can be a sign of a kidney problem.

- **Blood pressure**: Your kidneys help to control blood pressure. After several years of living with a single kidney, you may have slightly raised blood pressure, so it is important to have it checked regularly.

It is important to ask your doctor for regular Kidney Health Checks (blood test for eGFR, urine test for protein, blood pressure check).

If your Kidney Health Check shows changes to your kidney function, treatment can extend the life of your kidney. Medication, changes to your lifestyle, and an early referral to a kidney specialist (nephrologist) can slow down any decrease in kidney function.

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Do I need to do anything different?

It is important to make healthy lifestyle choices, particularly if you have one kidney.

Healthy lifestyle choices include:

- **Reduce your salt intake.**
- **Be a non-smoker.**
  For information on quitting smoking, call the Quitline on 13 78 48.
- **Limit your alcohol intake.**
  No more than two standard drinks per day.
- **Undertake regular physical activity.**
- **Have a Kidney Health Check.**
  Blood test for kidney function, urine test for kidney damage, blood pressure once a year.
- **Achieve and maintain a healthy body weight.**
- **Consider if you can reduce stress in your life.**
- **Maintain healthy cholesterol levels.**
Special diets are not normally needed if you have one kidney.

If you have one kidney, it is important to be aware of injuries that can be caused by contact sports using direct blows, such as kickboxing, football and karate. Your single kidney is more at risk because it is larger and heavier. Ask for advice from your doctor if you are unsure.

THINGS TO REMEMBER

- Around 1 in every 750 people is born with a single kidney. Otherwise a kidney may have been removed due to disease or donation. Having a single kidney does not affect your lifespan.
- Ask your doctor for regular Kidney Health Checks:
  - Blood test for eGFR
  - Urine test for protein
  - Blood pressure
- It is important to make healthy lifestyle choices with diet and exercise, and be aware of activities that may cause injury to your kidney.

What does that word mean?

**Albuminuria** - Occurs when protein (albumin) is present in the urine. There are filters in the kidneys that prevent large molecules, such as albumin, from passing through. If these filters are damaged, albumin passes from the blood into the urine.

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

**Glomerular filtration rate (GFR)** - GFR is the best measure of kidney function and helps to determine the stage of kidney disease. It shows how well the kidneys are cleaning the blood. GFR is reported in millilitres per minute. The GFR is usually worked out from the results of the creatinine blood test with age and gender.

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](http://kidney.org.au) to access free health literature.