

Kidney Health Information

Living with One Kidney

The kidneys perform many functions that are vital to good health, but it is not unusual to have only one kidney to do the work of two.

Why do people have a single kidney?

- Many people are born with a single kidney. It is more common in males, and the left kidney is the one more often absent. The ureter (the tube that takes urine from the kidney to the bladder) on the affected side is usually abnormal or absent. An abnormality of the reproductive tract may also be seen on the same side, more often in females than in males.
- In some cases, one kidney may need to be surgically removed, leaving a single remaining kidney. Removal of the kidney (a “nephrectomy”) may be required as a result of an anatomic abnormality such as obstruction, or because of a tumour, or from a severe traumatic injury after an accident. Alternatively, one kidney may be donated to a loved one who has kidney failure.
- Kidney donors will need to be aware of the simple precautions that will help their kidney health – see below.

How is a single kidney different?

The single normal kidney will grow faster and get larger than a normally paired kidney. For this reason, the single kidney is larger and heavier than normal and so is more vulnerable to injury. It is important to be aware of the increased risk of injury with certain heavy contact sports, so that careful decisions can be made regarding participation in various physical activities. There is evidence to suggest that people with one kidney should avoid sports that involve higher risks of heavy contact or collision. These may include boxing, field hockey, football, ice hockey, martial arts and wrestling. Anyone with a single kidney who decides to participate in these sports should be extra careful and wear protective padding. He or she should understand that the consequences of losing a single kidney are very serious.

Are there any long-term problems to living with a single kidney?

Most people with a single normal kidney have few or no problems, particularly in the first few years. However, some longer-term problems have been recognised and most doctors believe that people with a single kidney, particularly from birth or during early childhood, should be followed up more closely than people with two normal kidneys. Children who have had a kidney surgically removed may have some slightly increased chance of developing abnormal amounts of protein in the urine and some abnormality in kidney function in early adult life. Similar abnormalities have been found in individuals born with a single kidney. In addition, there is a greater chance of developing a slightly higher blood pressure than normal. The decrease in kidney function is usually mild, and life span is normal.

Are dietary changes needed?

In general, special diets are not needed by individuals who have one healthy kidney. You should have a healthy well-balanced diet, reduce your salt intake and aim to drink six to eight glasses of water a day, or a minimum of two litres. Speak to your doctor or a registered dietician if you have questions about the basic ingredients of a healthy diet. Also see [Healthy Eating for Kidney Patients](#) and [Food Labelling](#) written by Marianne Vennegor, Renal Dietician.

Over the Counter Medicines

Those living with a single kidney should be cautious how they use non-prescription medicines. For more information, please see our factsheets [Over the Counter Medicines](#) and [Analgesia and Kidney Disease](#).

How often should someone with one kidney see their GP?

A urine test (urinalysis) and blood pressure check should be done yearly, and kidney function should be checked every few years – more often if an abnormal urinalysis or blood pressure is found.

What special precautions are recommended for transplant patients?

Because the transplanted kidney is usually placed into the pelvis, these kidneys are less protected and more easily injured. Consequently, the same recommendations of avoiding heavy contact and collision sports apply to people who have had a kidney transplant.

Careful testing has shown that the transplanted kidney can (as in other situations resulting in a single kidney) increase its function, reaching a level of function that is about 70 per cent of that normally achieved by two kidneys.

Further Information

[Over the Counter Medicines](#)

[Analgesics and Kidney Disease](#)

[The Yellow Card Scheme](#) From the website of The Medicines and Healthcare products Regulatory Agency (MHRA)

[Healthy Eating for Kidney Patients](#)

[Food Labelling](#) (Marianne Vennegoor, Renal Dietician)

Please be aware that we have made every effort to ensure this information is accurate, however we cannot guarantee that there are no mistakes. Also, the best management plans for individual patients may vary from those outlined here. Only the doctors caring for the patient will be able to advise on this. Please consult your own doctor.

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