



All about kidneys

Facts for whānau

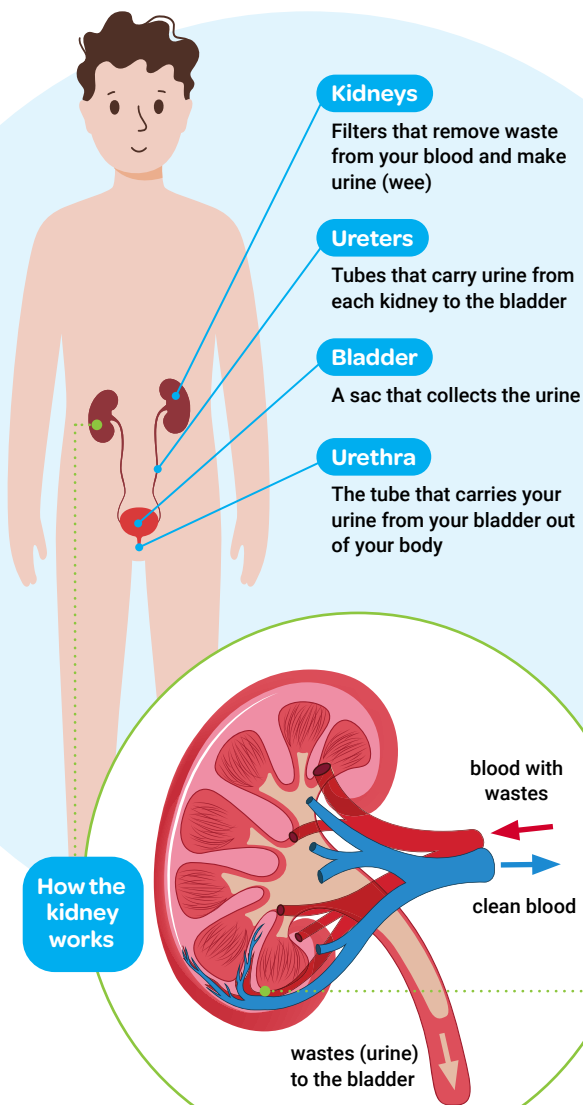


Advice in this pamphlet is only intended as a guideline.
Please check with your GP or specialist if you have any
questions relating to your child's condition.

What are kidneys?

Our kidneys are major organs that are vital for our survival. Every human needs at least one kidney to live. Most people are born with two kidneys. These are located near the middle of your back, just below the rib cage and are about the size of a person's fist.

The kidneys, the bladder and their tubes are part of the **urinary system** that includes the **kidneys, ureters, bladder** and **urethra**.

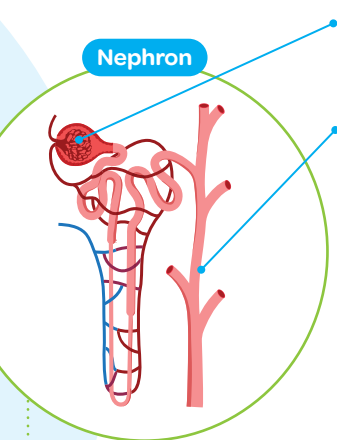


What do kidneys do?

Kidneys have a very important role to keep your body healthy. One of their main jobs is to clean your blood by getting rid of waste in the form of urine (wee).

Your kidneys also help your body produce red blood cells and control your blood pressure. They also play an important role in helping to balance all the electrolytes (salts) in your body that are responsible for bone growth and strength, muscle activity (including your heart) and normal day-to-day functioning of your body's cells and tissues.

Each kidney has tiny little factories called **nephrons**. Each nephron is made of:



The glomerulus which filters your blood and separates the waste into urine.

The tubule that acts like a conveyor belt moving and removing waste products, salts and water from the urine, returning what's needed to the body.

Eventually, urine drains into the bladder through tubes called ureters. When the bladder is full, you get the urge to go the toilet and pee the urine out through the urethra.

Problems with the kidneys

If your children's kidneys stop working, waste products and water will build up in their blood and they can get very sick.

Problems with children's kidneys can arise from:

- The kidneys not forming properly before birth
- The kidneys not draining properly
- Illness or injury acquired later in life

Kidneys are key!

Every time your heart beats a **quarter** of the blood pumped out of your heart goes straight to your **kidneys** to be filtered.

Some people are born with **only one kidney** and may not know about it until later in life.

You can lead a perfectly **normal life** with only **one kidney**. That's why if you have two healthy kidneys you can donate one to someone who needs one.

Each kidney is about **13cm long** and about **8cm wide** - about the size of a computer mouse or a **clenched fist**.

Anything in the body that is related to kidneys is called '**renal**' which is why you hear this word a lot.

The average person has 3.8 to 5.7 litres of blood circulating through their body which the kidneys filter around **40 times a day!**

There are more than **one million tiny filters** inside the kidneys called **nephrons**. They are so small you can only see them through a microscope!

To find your kidneys, simply put your hands on your hips, then slide your hands up until you can feel your ribs, then put your thumbs on your back.

Looking after your kidneys

You may have received this pamphlet because your child has been told they have kidney disease. Each disease is unique and the treatment recommended is special to your child.

But there are things you can do to look after your children's kidneys and help them to function better:

Maintaining a normal blood pressure

- Your child's blood pressure will need to be checked each time they see their doctor or nurse.
- If their blood pressure is not normal, medications or lifestyle changes may be recommended to help make it more normal again.

Practising a healthy lifestyle

- **Everyone** should eat lots of fresh fruit and vegetables, while getting 30 minutes of exercise daily and choosing water over juice or fizzy drinks will help keep your kidneys happy.



- **Some people with kidney problems** might need to reduce foods high in potassium and phosphate because their kidneys can't clear minerals properly. For example, bananas, potatoes and avocado are high in potassium, whereas yoghurt, oatmeal and fizzy drinks are high in phosphate.



- **Everyone with kidney failure** needs to track fluids in and out, and make sure their intake matches their urine output.



Kidney Kids has plenty of information about conditions that can affect children's kidneys. If you can't find the information you are looking for, please contact us.





Our vision is for all Kidney Kids and their whānau to lead their best lives and to feel supported, understood and connected in a caring community.

Get in touch

If you would like more information about our organisation, or if you, your whānau or friends have a child with a kidney condition and you would like to register with us, please get in touch.

Find us

0800 215 437 – Monday to Friday 8.30am to 5pm
or email support@kidneykids.org.nz

kidneykids.org.nz

