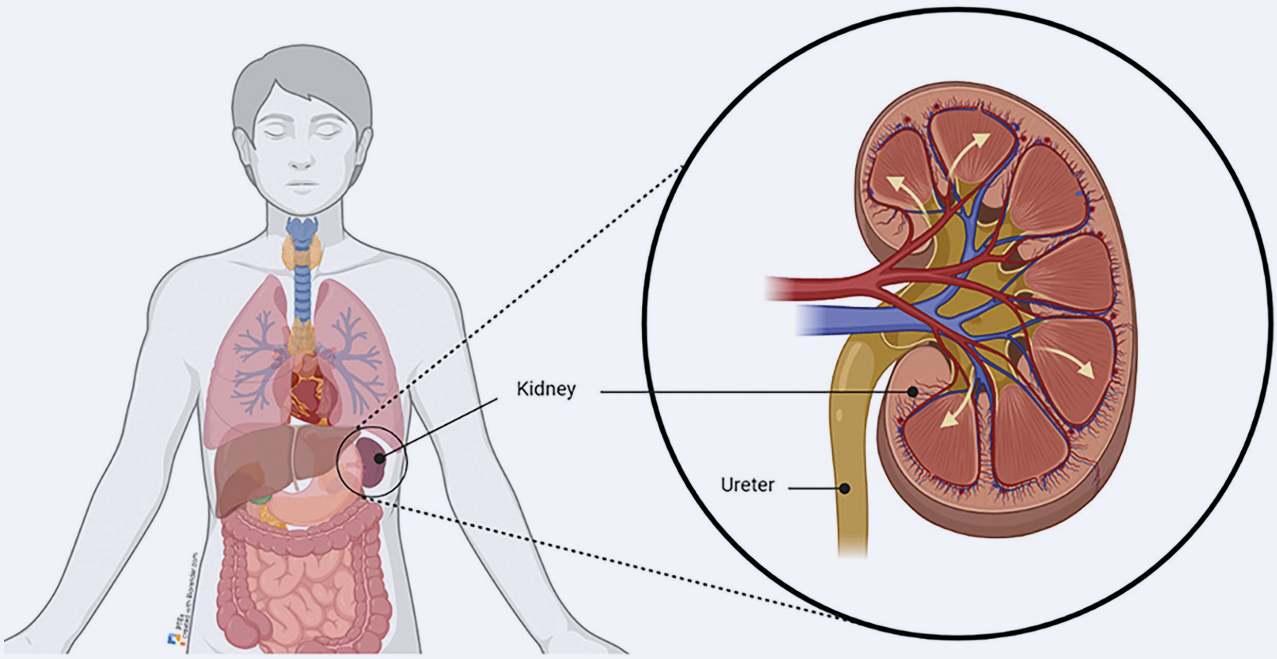
PATHOLOGY TESTS EXPLAINED

Information about pathology tests to help everyone take control of their health and make the right decisions about their care.

WHAT YOU SHOULD KNOW ABOUT **YOUR CREATININE TESTS**

Creatinine is a waste product that is found in your blood. It is produced by your muscles as part of normal activity. Almost all of it is filtered from your blood by your kidneys and passed out of the body in your urine.

If your kidneys are not working properly creatinine levels build up in your blood, so measuring creatinine is a good way to find out how well your kidneys are working. It is usually ordered along with other tests such as sodium, potassium bicarbonate and urea, and sometimes with calcium. It is often part of a routine blood test if you have non-specific health complaints that your doctor suspects could be to do with your kidneys. It also used at regular intervals to monitor treatment for kidney disease.



Kidney function

How your kidneys work

You have two kidneys and these are located at the bottom of the rib cage either side of the spine. Within them are about a million tiny blood filtering units called nephrons. In each nephron blood is continually filtered through a microscopic cluster of looping blood vessels, called the glomerulus. The glomerulus allows the passage of water and small molecules but retains blood cells and larger molecules.

Attached to each glomerulus is a tiny tube (tubule) that collects the fluid and molecules that pass through the glomerulus and then reabsorbs what still can be used by the body. The remaining waste forms urine. In a healthy person just over one litre of blood is filtered through your kidneys per minute.

Kidneys can be damaged by a range of health problems with the most common causes being diabetes and high blood pressure. When your kidneys are damaged, waste products and fluid are less easily filtered and removed and build up in your body.

What can your results tell you?

Your results will be presented along with those of your other tests on the same form. You will see separate columns or lines for each of these tests.

Increased creatinine levels suggest you have reduced kidney function, but this does not indicate the cause.

Reduced creatinine levels are not common but are not usually a cause for concern. They can be low due to decreased muscle mass, such as in the elderly, and occasionally in advanced liver disease.

What are reference intervals (reference ranges)?

Some of your results are shown in your report as a comparison against a set of numbers called reference intervals or reference ranges. This is the range of test results considered 'normal' for the general population.

If a result in your report is outside this range, it can be flagged as high (H) or low (L). This does not necessarily mean that anything is wrong and depends on your personal situation. Your results need to be interpreted by your doctor.

Creatinine reference intervals

The reference values for this test are common reference intervals which means that all laboratories in Australia should be using this range.

Adult

• Male	60-110 μmol/L
• Female	45- 90 μmol/L

The eGFR

Results from creatinine tests are used as part of a calculation to estimate the amount of blood filtered per minute by the kidneys. The eGFR (estimated glomerular filtration rate) uses the results of your creatinine blood test together with your age, body size and gender to come up with a number. It is the best way to determine how effectively your kidneys are filtering small molecules like creatinine out of your blood.

eGFR results

- Your eGFR is reported in millilitres per minute per 1.73m^2 (mL/min/1.73m^2).
- A value over 60 mL/min/1.73m^2 indicates your kidney function is normal.
- A value below 60 mL/min/1.73m^2 suggests some loss of kidney function. Your doctor will most likely want to confirm this result by repeating the blood test.

Questions to ask your doctor

Why does this test need to be done?
Do I need to prepare (such as fast or avoid medications) for the sample collection?
Will an abnormal result mean I need further tests?
How could it change the course of my care?
What will happen next, after the test?

For more detailed information on these and many other tests go to **pathologytestsexplained.org.au**

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www.pathologytestsexplained.org.au

Please use this QR code to access more information

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Pathology Tests Explained is managed by a consortium of medical and scientific organisations representing pathology practice in Australia. More details at: **www.pathologytestsexplained.org.au/about**

My Health Record

You'll find a direct link to the Pathology Tests Explained website embedded in the pathology results pages of your My Health Record and the my health app.

Click on the link to find information about what your tests are investigating or measuring and what your results can tell your doctor.