Understanding your kidney function results

Your kidneys balance the salt and water content in your body and get rid of some waste products. They do this by acting like a filter system for your blood.

The most common test to check how well your kidneys are working is a blood test called a kidney function or renal function test.

Health professionals may check your kidney function before or after you start a medicine that can affect your kidneys or as part of a wellbeing check.

Terms used

**Na:** this is sodium, one of the salts in your blood that your kidneys help to control. Sodium helps your body create energy and keep the right balance of salt and water.

**K:** this is potassium, another one of the salts in your blood that your kidneys control. Potassium is important for your muscles and nerves to work properly.

**Urea:** this is a waste product that comes from protein. Your kidneys get rid of it through your urine.

**Creat:** this is creatinine, a waste product that comes from normal muscle activity. Your kidneys get rid of it through your urine.

**eGFR:** this stands for estimated glomerular filtration rate, a calculation that tells how much kidney function you have. When you look at your result, it's important to know that kidney function decreases with age even in people without kidney disease.
Normal results
If you have a copy of your test results, it will show your results and a normal range for each test. The normal ranges may vary depending on your gender and age group and whether you're pregnant or have any underlying health conditions. So, the normal ranges shown on your test results may not be exactly right for you. Discuss your results with your general practice team if you're unsure.

High results
If your urea or creatinine levels are high, it can be a sign of kidney damage or dehydration (not enough fluid).
A high sodium level is usually a sign of dehydration.
A high potassium level could be a false reading due to a problem with the blood sample. It could also be a sign of kidney damage.

Low results
Low sodium could mean your blood has too much water in it, or it could be due to a medication you're taking. For more information, go to www.healthinfo.org.nz and search for “low sodium”.
Low potassium means your body has lost too much potassium through your urine or from vomiting and diarrhoea.
If your eGFR is low, your kidneys aren't filtering as well as they should do. This is a sign of kidney damage.

Next steps
If your blood results are too high or too low, talk to your general practice team.
If you want to know more about how you can help your kidneys, see Looking after your kidneys (go to www.healthinfo.org.nz and search for “healthy kidneys”).

Written by HealthInfo clinical advisers. Last reviewed October 2022.