Understanding your kidney function results

Kidney function, also called renal function is a common blood test to check how well your kidneys are working. Doctors also sometimes check it before or after you start a medicine that can affect your kidneys, or as part of a wellbeing check.

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

What is a normal result?
A normal result will be within the following ranges:
- Na 135 to 145 mmol/L
- K 3.5 to 5.2 mmol/L
- urea 3.2 to 7.7 mmol/L
- creat 45 to 90 umol/L
- eGFR 80 to 120 mL/min/1.73m² (this number drops as you get older).

What do the different terms mean?
**Na:** this is sodium, one of the salts in your blood which your kidneys helps to control. It 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. It is important for your muscles and nerves to work properly.

**Urea:** this is something your body makes when it breaks down protein. Your kidneys get rid of it through your urine.

**Creat:** this is creatinine, a by-product your muscles make. Your kidneys get rid of it through your urine.

**eGFR:** this stands for estimated glomerular filtration rate, a calculation that measures how well your kidneys are filtering your blood.

What does it mean if my results are too high?
If your urea levels are high it could be a sign of kidney damage or a sign of dehydration.
If your creatinine levels are high this is a sign that your kidneys are damaged.
What does it mean if my results are too low?
If your eGFR is low, then your kidneys are not filtering as well as they should do. This is a sign of kidney damage.

What happens next?
If your sodium (Na) or potassium (K) are too high or too low, talk to your doctor or nurse. There are many reasons why these might be outside the normal range, so ask if you need any follow-up about this.

If your blood tests show kidney damage or that your kidney function is getting worse, you should see your GP. There are several reasons why your kidneys may not be working so well, but the main causes of kidney damage are high blood pressure and diabetes.

You may need more tests to find out the cause of your kidneys damage, or you may need to change your medicines to protect your kidneys from further damage. Lifestyle changes may also help to prevent more damage – these can include losing weight, eating less salt, drinking less alcohol, and stopping smoking.

Talk to your health provider if you have more questions about your kidney function test, or if want to know more about how you can help to look after your kidneys.