### **Diabetes and your kidneys**

Diabetes is one of the most common causes of chronic (long-term) kidney disease. Kidney disease caused by diabetes is called diabetic kidney disease. Some people with diabetes can have chronic kidney disease not related to their diabetes.

If you have diabetes, it is important to look after your kidneys, whether you have kidney disease or not.

High blood glucose (sugar) levels in people with diabetes can cause damage to the kidneys over time. If this happens, the kidneys can't filter the blood properly and larger substances like protein are filtered out and lost in the urine (pee).

#### What the kidneys do

The main job of your kidneys is to filter waste products out of your blood and make urine.

They each contain a million tiny filters that your blood constantly passes through. These filters keep in useful things like protein but let out waste products.

# Effects of diabetic kidney disease

Kidney disease can increase your risk of other serious problems, including:



Cardiovascular (heart) disease, which can cause heart attacks or strokes

Acute kidney injury (your kidneys suddenly stop working properly when you're unwell)



High blood pressure

There are usually no symptoms in the early stages of diabetic kidney disease, and there is no cure. Over time, it can get worse and eventually the kidneys can stop working.

## Testing for diabetic kidney disease

- A simple urine test can pick up the early stages of kidney disease.
- You will have urine and blood tests as part of your annual diabetes review.

# LOOKING AFTER **YOUR KIDNEYS**

for people with type 2 diabetes



Having diabetes increases your risk of diabetic kidney disease

Kidney disease can make you more likely to develop heart problems

# Manage

Keep your blood glucose (sugar) and blood pressure to agreed targets

#### Test

Your urine and blood should be tested every year for signs of kidney damage

Stay healthy Make healthy lifestyle choices to help look after your kidneys

#### Manage your blood glucose

### Manage your blood pressure

### **Check your medicines**

- · Kidney disease can affect the way some medicines work.
- if your medicines are still suitable.

#### Give up smoking

- your risk of kidney disease.

### Eat a healthy diet

- Drink 6 8 glasses of water a day.
- Eat plenty of fresh fruit and vegetables.
- Cut down on processed foods and sugary drinks.

# Do some regular exercise



### What you can do to keep your kidneys healthy

 Keep to your agreed target blood glucose range. · Make sure you go to all your diabetes appointments.

· Take any prescribed blood pressure medicines regularly as instructed, and attend all your appointments.

- · If you have kidney disease, ask your doctor or pharmacist
- This includes medicines you can buy at a pharmacy or online.

- If you smoke, giving up is one of the best ways to lower
- There is lots of support available to help you stop smoking.
- Talk to your diabetes team for more information.

- Reduce salt to less than 6 grams a day.
- If your doctor says you can still drink alcohol, stay under 14 units a week.
- Try to exercise for 30 minutes 5 times a week. · You could try walking, cycling, gardening or yoga. Talk to your doctor before starting any new exercise.