PATIENT INFORMATION LEAFLET · SUMMARY

# Chronic Kidney Disease

A long-term reduction in how well the kidneys work. It usually develops slowly and without symptoms, and is often found on a routine blood or urine test.

## What it is

Chronic kidney disease is a long-standing reduction in kidney function. The kidneys filter waste and excess fluid from the blood, balance salts and minerals, control blood pressure and support bone health. In CKD this filtering slowly declines, usually over years. It is graded in stages 1 to 5, based on how affected kidney filtering is and how much protein leaks into the urine.

## Symptoms to look out for

Early CKD usually causes no symptoms at all. The poor metabolic health that often underlies it can show up as:

- Fatigue and low energy
- Difficulty losing weight
- Raised blood pressure
- Skin tags

Early disease is silent, so testing people at risk is usually how it is found. Two tests are used: a blood test of how well the kidneys filter (eGFR) and a urine test for protein (ACR).

## Who is at risk

The two leading causes are diabetes and high blood pressure, both closely tied to metabolic health. Other risk factors include obesity, insulin resistance, cardiovascular disease, and increasing age. Some kidney and urinary conditions, repeated infections, obstruction and certain medicines can also cause it.

### Much of the damage is preventable

The kidneys are packed with small blood vessels, so they are harmed by the same processes that damage blood vessels elsewhere. High blood sugar injures the filtering units over time, and high blood pressure, itself often driven by insulin resistance, adds strain. It also means the main causes can be improved, and this can slow the decline.

## What you can do

- **Food.** In earlier CKD, build meals around a portion of protein, fill most of the plate with non-starchy vegetables, add natural fats, and treat starchy carbohydrate as an optional extra. In the most severe CKD, protein, potassium, phosphate and salt may need individual adjustment by a specialist.
- **Movement.** Aim for at least 150 minutes a week of moderate activity, plus resistance exercise 2 to 3 times a week if you are able.
- **Blood pressure, smoking and alcohol.** Controlling blood pressure, not smoking and moderating alcohol all protect the kidneys.
- **Sleep.** Aim for 7 to 9 hours, which supports both blood pressure and blood sugar.

## Medicines

Blood pressure medicines that also protect the kidneys (ACE inhibitors or ARBs) are often used, especially when protein is leaking into the urine. SGLT2 inhibitors protect the kidneys and heart in many people with CKD, whether or not they have diabetes. In very severe disease, dialysis or a kidney transplant may eventually be needed.

### When to get help

- If you have diabetes, high blood pressure or other risk factors, attend your regular kidney checks. These are simple blood and urine tests.
- Check any new supplement or over-the-counter painkiller with a pharmacist or clinician, as some can harm the kidneys.



Summarised from the in-depth leaflet by Dr Campbell Murdoch, GP, UK · healthshelf.org · Reviewed August 2026