

Diabetes and kidney disease

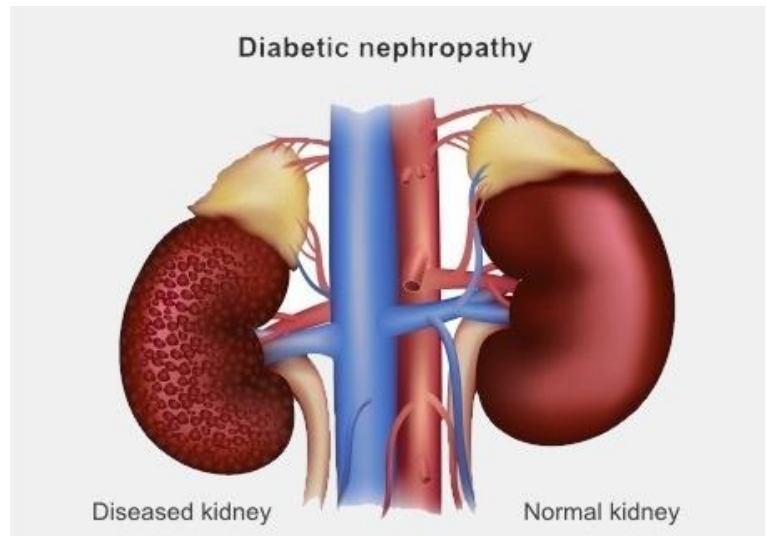
Diabetes is the most common cause of kidney failure, because of diabetic nephropathy.

Diabetic nephropathy happens when, over many years, high glucose levels damage your kidney's filtering units. As a result they leak protein into your urine – this is often the first sign of damage.

Over time, many of the filtering units stop working, so your kidneys can no longer remove waste. This leads to chronic kidney disease (CKD).

Your healthcare team will regularly check your urine for any signs that your kidneys are leaking protein. They will also use blood tests to check how well your kidneys are working. If they notice any early changes, they can take steps to help you prevent further damage.

Not all people with diabetes get diabetic nephropathy. Making sure your blood sugar and blood pressure are well controlled helps to reduce your risk of getting diabetic nephropathy, or slows down the disease if you do get it.



What are the symptoms of diabetic nephropathy?

Most people have no symptoms until the damage to their kidneys is advanced. Symptoms may include:

- high blood pressure (hypertension)
- protein in their urine (proteinuria)
- frothy urine (caused by the protein)
- swollen feet and legs (oedema).

How is diabetic nephropathy diagnosed?

Your doctors may use several tests to diagnose diabetic nephropathy. These include:

- blood tests that look at your kidney function
- urine tests that measure the amount of protein in your urine (especially albumin).



How is diabetic nephropathy treated?

Any treatment for diabetic nephropathy aims to slow it down. It includes:

- keeping your blood sugar (glucose) well controlled, with diet and medication
- keeping your blood pressure well controlled, often with a type of medicines called ACE inhibitors or angiotensin receptor blockers
- cutting down the amount of salt you eat
- avoiding medicines that are toxic to your kidneys, such as non-steroidal anti-inflammatory medicines such as ibuprofen (Nurofen) and diclofenac (Voltaren)
- starting medicines to lower your cholesterol levels.

If diabetic nephropathy becomes severe, you will need dialysis or a kidney transplant.

i Local health professionals recommend the following pages.

- Diabetes Info NZ – Long term complications (www.diabetesinfo.org.nz/lmac.html)
Information about some of the long-term complications of diabetes, including nephropathy.
- Kidney Health New Zealand – Chronic kidney disease and diabetes
(www.kidneys.co.nz/resources/file/ckd_&_diabetes.pdf)

This factsheet explains how diabetes can cause kidney disease, and what you can do to avoid damaging your kidneys.

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