

Your Diet and Chronic Kidney Disease



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What you eat affects your kidneys, so diet is an important part of your treatment plan. This brochure is for people who have been diagnosed with chronic kidney disease (CKD).

There is no standard kidney diet. You have very individual nutritional needs. These needs depend on your age, medications, medical history, activity level, and kidney function. Not everyone with CKD follows the same diet. What you eat may change over time. A registered dietitian can help you find out what is right for you.

Sodium (Salt)

Most Canadians eat more than twice the amount of salt the body needs! Sodium is a mineral added to processed foods like deli meat, snack foods, and fast food. It can also be hidden in foods like bread, muffins, canned vegetables, cheese, pickles, condiments, and tomato sauce. It's the main ingredient in table salt.



Model(s) are a depiction of people with kidney disease.

How Does Salt Affect Your Kidneys?

When your kidneys are fully functioning, they remove the excess salt from your blood. When you have CKD, your kidneys can't remove all the salt you eat. This can raise your blood pressure, which can damage your kidneys. Too much salt can also cause swelling in the ankles and lower legs. To reduce your blood pressure, limit your intake of sodium to 1500 – 2000 milligrams (mg) per day. One teaspoon of salt contains 2300 mg of sodium.

Cut Back on Salt

Most of the sodium we eat is not from the salt shaker – it is found in packaged, processed, restaurant, and convenience foods. That's one reason why it's important to read food labels, and, if possible, make your own food instead of eating prepared foods.

Replacing processed products with fresh and unprocessed foods can reduce your salt intake. Check food labels and choose products with lower sodium.

Try cutting back on salt and salty ingredients. When you cook, try using pepper, onions, garlic, lime, lemon, or vinegar to flavour your foods instead of salt. Be aware of salt replacement products in place of table salt. Blends of herbs and spices are fine, but some salt substitutes are made with potassium chloride and potassium can be dangerous for people with kidney disease.



READING FOOD LABELS CAN HELP YOU QUICKLY COMPARE SIMILAR FOOD PRODUCTS

Protein

Your body needs protein to help fight infections, heal wounds, and keep your muscles strong and healthy. Everyone needs some protein to keep healthy. In the early stages of CKD, you may need to avoid high protein diets.

Most people should aim for no more than two to three servings of high protein foods per day. High protein foods include milk, eggs, legumes (like peas, beans, and lentils), nuts, fish, poultry, and lean meat. A modest-size protein serving of cooked legumes is $\frac{3}{4}$ cup (170 mL). A modest serving of cooked fish, poultry, or lean meat is $\frac{1}{2}$ cup (70g or 2.5 ounces), about the size of a deck of cards.

If you start dialysis, you may need to eat more protein than before. A dietitian will help you determine the right amount of protein for you.

Phosphorous (Phosphate)

Phosphorous is a mineral found in bones and used in energy metabolism. In the early stages of CKD, you should avoid foods with phosphate additives. Phosphorous in food additives is absorbed easily by your body and may damage the kidneys or increase your risk of complications.

How Do I Avoid Phosphate Additives?

Phosphate additives are used in many foods to lengthen the shelf life, enhance flavour, or improve the look and feel of a product. Look for the word “phosphate” or “phosphoric acid” in the list of ingredients. Other examples of phosphate additives are “sodium phosphate”, “calcium phosphate”, “triphosphate”, and “phosphoric acid”.

To reduce your intake of phosphate additives, avoid: seasoned meats, fast food, processed meats and cheeses, and colas/dark sodas. Instead, choose fresh and unprocessed foods more often.

Most people receiving dialysis will need to limit their phosphorous intake to reduce phosphate in the blood. Dialysis removes only a small amount of phosphate from the blood. Too much phosphorous in the blood may lead to weak bones, itching, and even calcification (hardening) of the soft tissues of the body.

If your phosphate levels are high, your doctor may prescribe phosphate binders. Phosphate binders are often calcium-based, and they bind to phosphate from food in your gut. The bound phosphate leaves the body in your bowel movements (poop) instead of being absorbed into the blood.

Potassium

Potassium is a mineral that helps your nerves and muscles, including your heart, work well. Potassium is normally removed from the blood by healthy kidneys. Too much or too little potassium can be dangerous. If your potassium level is high, your doctor may recommend a low potassium diet.

Most people in the early stages of CKD (before needing dialysis or transplant) don't need to limit their potassium intake, while others do. If you start in-centre hemodialysis, you may need to limit your potassium intake to avoid too much build-up between treatments. With peritoneal dialysis or home hemodialysis, you may not need to limit your potassium intake as much since you are dialyzing more frequently.

Examples of high potassium foods are potatoes, squash, bananas, oranges, tomatoes, dried peas and beans, and meats with potassium lactate added (i.e. deli meats).

Fluids

Some people may need to limit their fluid intake before they start dialysis, while others may need to limit their fluid intake only after they start dialysis. As kidney function decreases, the kidneys may not produce as much urine (pee) as before, and your body may become overloaded with fluid. This can cause swelling of legs, hands and face, high blood pressure, and shortness of breath. Don't restrict your fluids unless recommended by your kidney healthcare team. Your dietitian can help you build your fluid allowance into your daily eating plan.

How Can a Dietitian Help Me?

Making changes to the foods you eat can be difficult and sometimes stressful for you and your family. It often means that you need to change your eating habits including what you eat, how much you eat, how often you eat out, and where you eat out.

A registered dietitian specializing in kidney nutrition will be able to help you design a tasty daily eating plan that will give you the right kinds and amounts of food to meet your nutritional needs, try to slow the loss of kidney function, and help you stay as healthy as possible.

Here are some ways a dietitian can help you:

- Explain meal planning and how to adjust to new eating habits
- Show you how to adapt some of your favourite recipes to meet your nutritional needs
- Be creative and adventurous with new recipes
- Show you how to measure food and fluids correctly
- Provide food lists showing the content of potassium, phosphorous, and salt in various foods
- Suggest specific products commonly available in stores and show you how to read labels to find safe products
- Monitor your nutritional needs over time
- Help you combine your renal diet with other special diets (for example, if you also have diabetes)

For more information about kidney diet and nutrition, including kidney-friendly recipes, fact sheets, and a meal planner, visit the Kidney Community Kitchen at: kidneycommunitykitchen.ca

The Kidney Foundation's patient handbooks have more information about healthy eating for different stages of CKD.



Ask your health care team for a copy of the handbook that's right for you:

Book One: Living with reduced kidney function

Book Two: Living with kidney failure

OUR VISION

The Kidney Foundation of Canada is committed to achieving excellent kidney health, optimal quality of life, and a cure for kidney disease.

OUR MISSION

The Kidney Foundation of Canada is the national volunteer organization committed to eliminating the burden of kidney disease through:

- Funding and stimulating innovative research for better treatments and a cure;
- Providing education and support to prevent kidney disease in those at risk and empower those with kidney disease to optimize their health status;
- Advocating for improved access to high quality healthcare;
- Increasing public awareness and commitment to advancing kidney health and organ donation.

For further information, or to help us in our efforts, please contact The Kidney Foundation office in your area. You can also visit our website at kidney.ca.

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This material is available in accessible formats upon request by contacting info@kidney.ca or calling 1-800-361-7494.