

Potassium and Chronic Kidney Disease

Potassium is an important mineral that regulates your heartbeat and helps your nerves and muscles work properly. It's in many of the foods you eat, and your kidneys help to control the amount of potassium in your body. When your kidneys are not working well, your potassium can become too high or too low, which can affect your health.

Your dietary potassium needs may change throughout your kidney journey. Some people may need to restrict their potassium intake, while others may need more. Your dietitian will help you plan your diet so that you are getting the right amount of potassium.

HOW FOODS MAY AFFECT YOUR POTASSIUM LEVEL



Plant-based foods

(fruits, vegetables, legumes, and grains)

- The potassium from plantbased foods is less absorbed by your body.
- These foods affect your potassium level less than animal-based foods or processed foods.



Animal-based foods (Meat, fish, poultry, dairy)

- The potassium from animalbased foods can be more easily absorbed by the body than plant-based foods.
- These foods affect your potassium more than plantbased foods, but less than processed foods.



Processed foods

(ham, bacon, deli meats*)

- The potassium from processed foods is more easily absorbed by the body than plant-based foods or animal-based foods.
- These foods affect your potassium level the most.

*Processed foods can also include juices and sodas, fast food items, vegetarian meat substitutes, salt substitutes and more. Processed foods often contain high levels of salt and sugar.

If you do need to manage the amount of potassium you eat, here are some helpful tips:

Maintain a healthy, balanced diet

Choose fresh, unprocessed, and whole foods more often.

- Processed foods are rich in potassium and can affect your potassium level.
- Processed foods often have potassium additives.

Choose healthy plant-based foods more often.

- Adding plant-based foods can lower blood pressure and cholesterol, improve diabetes and weight management, and slow kidney disease progression.
- Choose animal-based proteins in moderation and consider adding plant-based proteins like beans or lentils (check out the recipes at Kidney Community Kitchen!)

Increase the fibre in your diet.

- Fibre can help manage the potassium level in your body by regulating bowel movements.
- Regular bowel movements help to remove excess potassium from the body.
- Most fruits, vegetables, legumes, and whole grains are also high in fibre.

Read food labels

Avoid potassium additives

- Potassium additives are common preservatives and salt substitutes.
- They can be found in many processed foods, like deli meats.
- They are concentrated sources of potassium that are easily absorbed by the body.
- Choose fresh, additive-free meats and other sandwich fillings more often.
- Eg. Thinly sliced chicken, turkey, pork, and beef, egg, or no-added-salt canned fish.
- Check the sodium content of processed meats that are promoted as additive-free.
- Read the ingredients list and look for words that include 'potassium'.
- Examples include potassium chloride, potassium phosphate, and potassium lactate.

Speak to your dietitian about how much potassium is right for you.

Be aware of serving size

Some foods may contain more potassium than others, so their serving sizes will be different.

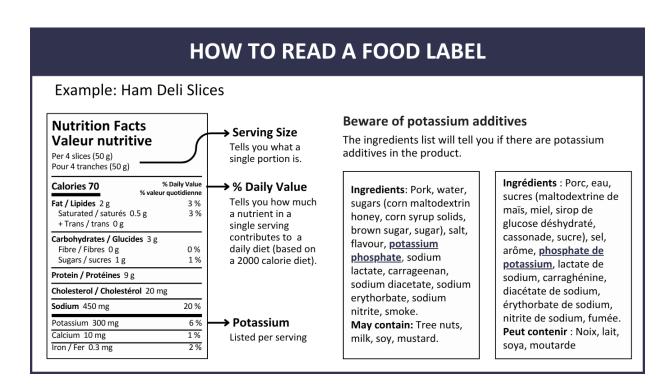


Lychees contain a small amount of potassium, so a serving size is 10 fruits. Mangoes have a much higher potassium content, so a serving size is only ½ fruit.

Cooking may cause some foods to shrink to a smaller serving size while the potassium content remains the same.

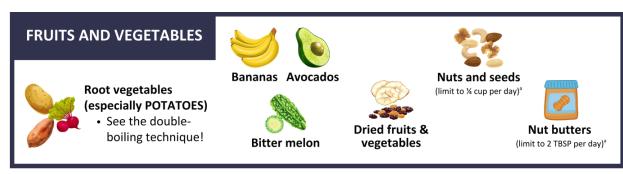


½ cup of raw spinach will shrink to 1 tbsp when cooked. Eating ½ cup of cooked spinach will have a much higher potassium content than ½ cup of raw spinach.



Choose kidney-friendly foods

If your potassium is too low or too high, your dietitian may recommend that you modify your diet based on your individual needs. Higher potassium foods will affect your potassium more than lower potassium foods. Here are some examples of **higher-potassium** foods:







- ^a If your potassium is **high**
- ^b Check for **potassium additives**

If your dietitian recommends reducing the potassium in your diet, here are some ways to do that:

BOILING



Boiling vegetables and legumes* in lots of water releases some of the potassium content from the food into the water.

- Be sure to drain the water and rinse the vegetables before cooking further or eating.
- The amount of time to boil varies depending on the food item.
- You can do this before adding vegetables, like squash, into soups or stews.

DOUBLE BOILING



Higher-potassium root vegetables, like potatoes and yams, can be boiled twice or "double-boiled" in lots of water to reduce their potassium content up to 50%.

- Be sure to use at least 2x the amount of water to vegetable.
- Be sure to drain and switch out the water in-between boils. Drain the water after the second boil.

SOAKING

Soaking foods in lots of water can also help reduce the potassium content.



- Fresh meats, grains, and leafy greens can be soaked in hot water for 5-10 minutes before cooking or eating.
- Dried legumes*, like beans, lentils, and chickpeas, can be soaked 8-12 hours (or overnight!).
- Root vegetables, like carrots or beets, can be peeled and then soaked in cold water for 2-4 hours before cooking or eating.
- Use lots of water to do this. Aim to use 5-10x the amount of water to the amount of food.
- Be sure to drain and rinse before cooking further or eating.

DRAINING



Always drain the liquid from canned fruits, vegetables, and legumes and rinse the items.

- The liquid from canned items can contain concentrated amounts of potassium.
- Choose no-salt added as often as possible.

*canned lentils and legumes are lower in potassium than dried due to the preparation method.

You can ind more details on how to reduce potassium in potatoes and legumes on the Kidney Community Kitchen Blog.

The Kidney Foundation of Canada would like to acknowledge and thank Fiona Bellefeuille, Danielle Renouf, and June Martin for their contributions and professional expertise in the development of this resource.