



Potassium and chronic kidney disease (CKD)

Potassium is a mineral which helps your nerves and muscles work well. Normally, healthy kidneys will keep the right amount of potassium in your body. If your kidneys are not working well, the potassium level in your blood can be too high or too low. This can affect your heartbeat. A very high or low level of potassium is DANGEROUS, as it can cause your heart to stop beating.

Most of the potassium comes from the foods and beverages we consume. Almost all foods have potassium, but some have much more than others. The amount of potassium your body can tolerate depends on several factors: your body size, the medications you are taking, how well your kidneys are functioning and, if you are on dialysis, how well your dialysis treatments are working.

People with CKD

Some people in the early stages of CKD do not need to limit their potassium intake, while others may need to restrict it. There is no benefit to restricting potassium unless your blood levels are high. If you need to restrict potassium, your registered dietitian and/or doctor will tell you how much potassium you should have each day to keep your blood levels in the healthy range.

Important:

If you are on hemodialysis, you may need to limit your potassium intake to avoid too much build-up between treatments. With peritoneal dialysis, you may be able to enjoy a variety of higher potassium foods, but check with your registered dietitian and/or doctor to be sure.

What is a safe level of potassium in my blood?

Normal blood potassium levels for adults are 3.5 to 5.0 mmol/L. The goal is less than 5.0 if you are on peritoneal dialysis, and less than 5.5 if you are on hemodialysis.

How can I keep my potassium level from getting too high?

- Different foods have very different potassium contents. You may need to limit or avoid foods that are high in potassium. Your Registered Dietitian will help you make an eating plan that gives you the right amount of potassium.
- Serving size matters. Foods that contain a smaller amount of potassium may have a different serving size than foods with a higher amount of potassium.

Example: Lychees contain a small amount of potassium, so a serving size equals 10 fruit. Mangoes have a much higher potassium content, so a serving size is limited to ½ fruit.

- The number of servings you have each day is important. Even low potassium foods can make your potassium level high if you are having too many of them. Speak with your Registered Dietitian about the number of servings that is right for you.
- Cooking methods can affect the potassium content in some foods. You can reduce the amount of potassium in root vegetables by boiling them in large amounts of water (directions provided on the page below). Other foods will shrink to a smaller serving size when cooked, but the potassium content remains the same.

Example: 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.

- Do not use the liquid from canned, cooked or frozen fruits and vegetables.
- If you are on dialysis, be sure to complete all of your dialysis treatments.

How to double boil vegetables

Boiling vegetables twice is considered the best way to remove the most potassium from root vegetables such as potatoes and sweet potatoes. This process does not turn potatoes into a low potassium food. It does allow you to include these foods safely into your diet, in moderation.

1. Wash and peel the vegetable.
2. Dice or thinly slice the vegetable.
3. Place the vegetable in room temperature water. Use two times the amount of water to the amount of vegetable.
4. Bring the water to a boil.
5. Drain off the water and add fresh, room temperature water. Use two times the amount of water to the amount of vegetable.
6. Bring the water to a boil again and cook until the vegetable is soft and tender.
7. Drain and discard the boiling water.

What foods can I eat to manage potassium in my diet?

The food lists on the following pages can help you choose the right foods and avoid those that are high in potassium. They are a guide and do not replace the advice of a health care professional. If you are unsure about a particular food, please ask your Registered Dietitian.

All foods are listed in alphabetical order.

Potassium guidelines for choosing foods			
Choose		Avoid	
Juices and Nectars <i>(1 serving is equal to 1/2 cup and must be included as part of your fruit servings)</i>			
Apple Juice	Lemon Juice	Carrot Juice	Pomegranate Juice
Apricot Nectar	Lime Juice	Clamato Juice	Prune Juice
Blackberry Juice	Papaya Nectar	Coconut Juice	Tangerine Juice
Cranberry Juice	Peach Nectar	Coconut Water	Tomato Juice
Grape Juice	Pear Nectar	Grapefruit Juice*	V8 Juice, regular
Guava Nectar	Pineapple Juice	Orange Juice	V8 Juice, low sodium
		Passionfruit Juice	Vegetable Juice
		*Potential Drug Interaction - Speak to your Pharmacist or Registered Dietitian	

Potassium guidelines for choosing foods

Choose

Avoid

Fruits

*Limit your fruits to 3 servings per day or as recommended by your Registered Dietitian
(1 serving is equal to 1/2 cup unless otherwise noted)*

Apple (1)	Lemon (1)	Apricots	Medjool Date(2)
Apple rings (5)	Lime (2)	Banana	Nectarine
Applesauce	Loganberries	Breadfruit	Orange (large)
Blackberries	Lychees (10)	Cantaloupe	Papaya
Blueberries	Mandarin orange	Coconut (dried)	Passion fruit
Boysenberries	Mango (½)	Coconut (raw)	Persimmon
Canned fruit, all types	Peach (1)	Dates	Pomelo (½)
Casaba melon	Pear (1)	Dried fruit, all types	Prickly pear (1)
Cherries (10)	Pineapple	Durian	Raisins (1 box)
Clementine (1)	Plum (1)	Elderberries	Sapote
Crab-apple	Pomegranate ½	Figs	Soursop
Cranberries	Prunes (2)	Guava	Sugar apple
Currants	Raspberries	Honeydew melon	Starfruit**
Fruit cocktail	Rhubarb	Jackfruit, fresh	Tamarind
Gooseberries	Sapodilla (½)	Kiwi (1)	
Grapefruit*(½)	Strawberries		
Grapes (20)	Tangelo (1)		
Jackfruit, canned	Tangerine (1)		
Kumquats (5)	Watermelon		
<p>*Potential Drug Interaction – Speak to your Pharmacist or Registered Dietitian</p>		<p>**Do NOT consume. Speak to your Registered Dietitian. Starfruit may also be called carambala, bilimbi, belimbing, Chinese starfruit or star apple</p>	

Potassium guidelines for choosing foods

Choose

Avoid

Vegetables

*Limit your vegetables to 3 servings per day or as recommended by your Registered Dietitian
(1 serving is 1/2 cup unless otherwise noted)*

Alfalfa sprouts	Fiddlehead greens, boiled	Acorn squash	Mushrooms - Dried - Portabella
Arugula, raw (1 cup)	Kale	Artichoke	
Asparagus (6)	Leeks	Avocado (½)	Parsnips
Bamboo shoots, canned	Lettuce (1 cup)	Baked beans	Plantain
Beans, green	Mushrooms	Beans - Adzuki - Navy - Black - Pinto - Kidney - Red - Lima - Roman - Mung - White	Potato***
Bean sprouts	- Canned, drained - Shitake, raw		Potato chips
Beet greens, raw	- White, raw		Rapini, cooked
Broadbeans, fresh/boiled	Mustard greens	Bamboo shoots, fresh	Rutabaga
Broccoli	Okra	Beets	Snow peas, cooked
Cabbage	Onion, all types	Bok choy	Soybeans
Carrots, baby (8)	Peas, green	Broadbeans, canned	Spinach, cooked
Carrot, regular	Peppers	Brussel sprouts (4)	Split peas
Cauliflower	Radish	Burdock root	Succotash
Celeriac, cooked	Rapini, raw	Butternut squash	Sweet potatoes***
Celery (1 stalk)	Snow peas (raw) (10)	Cassava	Swiss chard, cooked
Chayote	Spaghetti squash	Celeriac, raw	Taro, cooked
Chicory greens (1 cup)	Spinach, raw (1 cup)	Chick peas	Tempeh
Collard greens	Swiss chard, raw	Cress, cooked	Tomato paste (2 tbsp)
Corn	Tomato, cherry (5)	Dock (sorrel)	Tomato sauce (¼ cup)
Cress, raw	Tomato (½)	French fries	Water chestnuts, raw
Cucumber	Turnip	Kohlrabi	Yam***
Dandelion greens	Turnip greens	Lentils	Zucchini, cooked
Eggplant	Watercress (raw)	Lotus root	
Endive (1)	Water Chestnuts, canned	***Double boil your potatoes to lower potassium	
Escarole	Wax Beans		
Fennel	Zucchini, raw		

Potassium guidelines for choosing foods

Choose

Avoid

Milk products

4-8 oz per day of fresh milk, homemade pudding, ice cream or yogurt

Chocolate milk, packaged or canned puddings

Grains

Bread: any bread, bagels and rolls made with white flour; light rye or 60% whole wheat

Bread: any bread, bagels and rolls made with whole grain, 100% whole wheat or dark rye

Cereal: any corn or rice-based cereals (ie. Corn Flakes®, Rice Krispies®), Cream of Wheat®, Cream of Rice®, non-bran cereals

Cereal: bran or whole grain cereal, granola, shredded wheat, cereals containing dried fruit or nuts

Crackers: cream crackers, graham crackers, matzo cracker, soda crackers, taco/tortilla shell, tortilla chips (10), water crackers, white melba toast, white rice cake

Crackers: any crackers made from whole wheat, grains or dark rye

Rice/pasta: white rice, white pasta, white soba noodles

Rice/pasta: brown rice, whole wheat pasta

Baked goods: arrowroot, angel food cake, blueberry muffins, oatmeal cookies, pound cake, shortbread, social teas (4), sponge cake, sugar cookies, vanilla wafers, white cake, yellow cake

Baked goods: danish, doughnuts, date square, fruitcake, gingerbread, gingersnap, granola bar, peanut butter cookie, or any baked good made from whole wheat/ grains, carrot or chocolate

Other: cornmeal, couscous (1/3 cup), white flour

Other: barley, buckwheat, bulgur, nuts/seeds, pancake/waffle mix, wheat germ, whole wheat flour

Additional items

Herbs and spices, herb mixes

Salt substitutes (ie. No Salt®, Nu Salt®)

Butter, margarine, oil, mayonnaise

Salt-free cheese with potassium added

Sugar or sugar substitutes
Honey, jam, jelly, pancake or corn syrup

Brown sugar, molasses, maple sugar or maple syrup

Regular or decaf coffee and tea
Drink crystals, fruit punch, lemonade, Kool- Aid® or soft drinks (non-colas)

Specialty coffee (cappuccino, espresso, Turkish),
Cocoa or colas

Chocolate (any type), carob

For information and tools to help you manage your kidney-friendly diet, visit www.kidneycommunitykitchen.ca

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