

# Kidney Disease and Potassium

## What is potassium and why is it important?

Potassium is a mineral found in many foods. When it's at the correct level in your body, potassium helps your muscles work properly and keeps your heart beating evenly.

## How does kidney disease affect potassium?

Potassium usually stays at the right level if your kidneys are healthy. Unfortunately, kidney disease can cause you to have too much potassium in your body. Here's why:

- With kidney disease, your kidneys don't remove enough potassium.
- Some medications that treat kidney disease may cause your potassium level to go up.

## What happens if I have too much potassium in my body?

Too much potassium can be dangerous. It can cause:

- Muscle weakness
- Numbness or tingling
- A slow or irregular heartbeat
- Sudden death due to a stopped heart

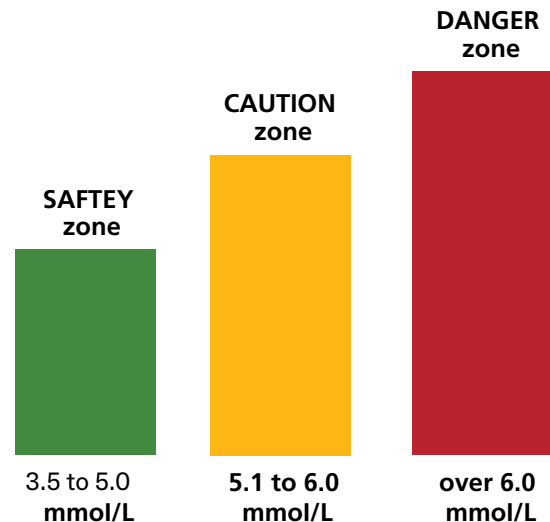
If you have kidney disease, you'll need regular blood tests to check the amount of potassium in your blood. If your potassium level is too high, you'll need treatment to lower it. See the "Potassium zones" box (at right) for more information.

## What do I need to do next?

- 1 Get regular blood tests to check the potassium level in your body.
- 2 Try to eat low-potassium foods. Check page 2 and page 3 to find out the potassium levels in common foods.
- 3 Review the tips on how to follow a low-potassium diet and manage your potassium level (see page 4).




## Potassium zones











You'll have regular blood tests to check the potassium in your blood. Your healthcare provider will tell you which of the following zones you're in and what you'll need to do:




## Potassium in common foods

Limit foods that are high in potassium, and choose foods that are low in potassium. The table below and on [page 4](#) shows the potassium levels in common foods. A serving is a ½ cup unless a different serving size is listed. Foods listed in the “GO!” column in bold type have the lowest potassium — less than 200 milligrams (mg) per serving.

Category	 <b>Very high potassium</b> (more than 400 mg — <b>LIMIT</b> these)	 <b>High potassium</b> (200 to 400 mg — <b>WATCH</b> portion sizes)	 <b>Low potassium</b> (less than 200 mg — <b>CHOOSE</b> these instead)
<b>Fruits and fruit juices</b>	<ul style="list-style-type: none"> <li>Bananas</li> <li>Honeydew melons</li> <li>Orange juice</li> <li>Papaya</li> <li>Prunes and prune juice</li> </ul>	<ul style="list-style-type: none"> <li>Apricots (fresh, canned) and apricot nectar</li> <li>Apricots (dried, ¼ cup)</li> <li>Cantaloupe</li> <li>Dates (¼ cup)</li> <li>Figs (dried) (¼ cup)</li> <li>Guava</li> <li>Jackfruit (raw)</li> <li>Kiwi</li> <li>Mango</li> <li>Nectarine</li> <li>Orange</li> <li>Pomegranate and pomegranate juice</li> <li>Raisins (¼ cup)</li> </ul>	<ul style="list-style-type: none"> <li>Apples, applesauce, and apple juice</li> <li>Berries: Blackberries, blueberries, cranberries (craisins), raspberries, strawberries, and berry juices</li> <li>Cherries and cherry juice</li> <li>Figs (fresh)</li> <li>Fruit cocktail</li> <li>Grapefruit and grapefruit juice</li> <li>Grapes and grape juice</li> <li>Jackfruit (canned)</li> <li>Lemons and lemon juice</li> <li>Lychee</li> <li>Mandarin oranges</li> <li>Peaches (fresh or canned)</li> <li>Pears (fresh or canned)</li> <li>Pineapple</li> <li>Plums</li> <li>Rambutan (canned and drained)</li> <li>Rhubarb</li> <li>Tangerines</li> <li>Watermelon</li> </ul>
<b>Vegetables and vegetable juices</b>	<ul style="list-style-type: none"> <li>Avocado</li> <li>Bamboo shoots (raw)</li> <li>Beans (canned or dried white beans, black beans, garbanzos, kidney beans, pinto beans)</li> <li>Chinese cabbage</li> <li>Potatoes (white and sweet potatoes, french fries, and potato chips)</li> <li>Squash (winter squashes like Hubbard or acorn)</li> <li>Tomato products (including tomato paste, marinara sauce)</li> </ul>	<ul style="list-style-type: none"> <li>Artichoke</li> <li>Beets and beet greens</li> <li>Bok choy</li> <li>Brussels sprouts</li> <li>Celery (cooked)</li> <li>Chili peppers</li> <li>Greens: Spinach (cooked), chard (cooked), beet greens</li> <li>Lentils</li> <li>Mushrooms (canned)</li> <li>Pumpkin</li> <li>Root vegetables (parsnips and rutabaga)</li> <li>Tomatoes or tomato juice</li> <li>Vegetable juice cocktail</li> <li>Yucca, cassava, taro</li> </ul>	<ul style="list-style-type: none"> <li>Asparagus</li> <li>Bamboo shoots (canned)</li> <li>Broccoli</li> <li>Cabbage</li> <li>Cactus (nopales)</li> <li>Carrots</li> <li>Cauliflower</li> <li>Celery (fresh)</li> <li>Cucumber</li> <li>Eggplant</li> <li>Endive</li> <li>Green beans</li> <li>Green peppers</li> <li>Iceberg lettuce</li> <li>Okra</li> <li>Leafy greens: Chard (fresh), collards, kale, turnip, mustard, spinach (fresh)</li> <li>Mushrooms (fresh)</li> <li>Onions and radishes</li> <li>Peas (including snap peas, snow peas)</li> <li>Seaweed (dried)</li> <li>Spaghetti squash</li> <li>Sprouts (alfalfa, bean)</li> <li>Squash (zucchini, yellow squash)</li> <li>Water chestnuts</li> </ul>

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<b>Dairy</b>	<ul style="list-style-type: none"> <li>• Cream, half-and-half</li> <li>• Milk: Regular, skim, 2%, chocolate, buttermilk (1 cup)</li> <li>• Soymilk, chocolate</li> </ul>	<ul style="list-style-type: none"> <li>• Soy milk, vanilla, or plain (1 cup)</li> <li>• Yogurt (1 cup)</li> </ul>	<ul style="list-style-type: none"> <li>• Cottage cheese (1 cup) </li> <li>• Hard cheese and processed cheese (1 ounce) </li> <li>• Rice milk (unenriched)</li> </ul>
<b>Meats and meat substitutes</b>	<ul style="list-style-type: none"> <li>• Canned beans</li> <li>• Dried peas and beans</li> <li>• Lentils</li> <li>• Nuts and seeds</li> </ul>	<ul style="list-style-type: none"> <li>• Beef, pork, veal (3 ounces)</li> <li>• Fish (3 ounces)</li> <li>• Peanut butter (2 tablespoons)</li> <li>• Poultry (3 ounces)</li> </ul>	Eggs (2)
<b>Breads and grains</b>		<ul style="list-style-type: none"> <li>• Bran, bran cereals, breads made with bran</li> <li>• Granola</li> </ul>	<ul style="list-style-type: none"> <li>• Air-popped popcorn</li> <li>• <b>Bread, crackers, noodles, pasta, or tortillas made with white (refined) flour</b> </li> <li>• Bread, crackers, noodles, pasta, or tortillas made with whole wheat flour </li> <li>• White rice</li> </ul>
<b>Fats and oils</b>		Salad dressings (some) — check the label and ingredient list	<ul style="list-style-type: none"> <li>• Butter, margarine, and oils</li> <li>• Mayonnaise and mayo-like spreads</li> </ul>
<b>Sweets, desserts, and sweeteners</b>	<ul style="list-style-type: none"> <li>• Chocolate</li> <li>• Candy with chocolate or nuts</li> <li>• Ice cream with nuts or chocolate (1 cup)</li> <li>• Nuts</li> </ul>	<ul style="list-style-type: none"> <li>• Ice cream with no chocolate or nuts (1 cup)</li> <li>• Molasses (1 tablespoon)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Cakes, cookies, and pies made without chocolate or high-potassium fruits or vegetables</b></li> <li>• <b>Candy (hard candies, gumdrops, jelly beans)</b></li> <li>• <b>Ice pops, jello</b></li> <li>• <b>Jam and jelly, maple syrup</b></li> <li>• <b>Sugar (white), corn syrup, honey</b></li> </ul>
<b>Drinks</b>	<ul style="list-style-type: none"> <li>• Hot chocolate (1 cup)</li> <li>• Milk and other dairy drinks</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Carbonated drinks</b></li> <li>• <b>Drinks from powdered crystals</b></li> <li>• <b>Lemonade</b></li> <li>• <b>Coffee or tea (1 cup)</b></li> </ul>
<b>Spices, flavorings, and other ingredients</b>	<ul style="list-style-type: none"> <li>• Low-sodium baking powder</li> <li>• Salt substitutes (some) — check the label</li> <li>• Low-sodium soups and sauces (some) — check the label</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Corn starch, regular baking powder</b> </li> <li>• <b>Herbs and spices</b></li> <li>• <b>Mustard</b> </li> <li>• <b>Sauces and sauce mixes</b> </li> <li>• <b>Vanilla and other flavorings</b></li> <li>• <b>Vinegar</b></li> </ul>

 A salt shaker next to an item means it's high in sodium (salt). To reduce sodium, limit those foods.

## How can I manage potassium?

To keep your body's potassium at a healthy level or to lower it if your level is too high:

- **Talk to your doctor about ALL the medications you take, including over-the-counter medications, supplements, and herbal remedies.** Some of these, including over-the-counter pain relievers and vitamins, might increase your potassium level.
- **Limit high-potassium foods in your diet.** See [page 2](#) and [page 3](#) to discover the potassium levels in many common foods.
- **Watch serving sizes.** Even with low-potassium foods, an extra-large serving can give you too much potassium.
- **Avoid the use of salt substitutes.** Potassium chloride is often used in place of sodium chloride (table salt) to make food items more “heart-healthy.” Check all “ingredient lists” for potassium chloride and avoid these foods.
- **Talk to your nephrologist if you have excessive diarrhea or vomiting.** These can affect the potassium levels in your body.

### Help from a Registered Dietitian Nutritionist

Talk with your doctor about whether seeing a Registered Dietitian Nutritionist (RDN) would be helpful for you.

An RDN can help you create an eating plan based on your diet restrictions and what you like to eat. Help from an RDN may be especially useful if you're on several dietary restrictions.

To learn more and contact an RDN, visit: [intermountainhealthcare.org/nutrition](https://www.intermountainhealthcare.org/nutrition)

## Tips on limiting potassium

Sometimes a low-potassium diet can feel complicated. Here are some tips for following a low-potassium diet:

- **Focus most on limiting very high-potassium foods (see [page 3](#) and [page 4](#)).** Most foods have some potassium, but avoiding or limiting high-potassium foods is very important.
- **Limit milk and dairy items** to 1 cup each day.
- **Limit high-protein food items to 3 ounces per meal.** A deck of cards is a good reference for the serving size of meats.
- **If you eat canned fruit, don't drink the juice** in the can. Drain the juice from all canned fruits and vegetables, and don't cook canned vegetables in their juice.
- **Set reasonable limits.** If your potassium level is less than 5 mmol/L, it's okay to have one or two higher-potassium foods. Just have a very small amount. For example:
  - Have a few small chunks of cantaloupe in a fruit salad, but don't eat a full slice of cantaloupe.
  - Have a thin slice of tomato on a sandwich, but don't have a tomato sandwich.
- **Don't “stack” several high potassium foods in a single meal or on the same day.** For example, don't have orange juice, bran cereal, and a banana for breakfast.

### Can my potassium ever get too low?

If you have kidney disease it's uncommon to have potassium that's too low, but it's possible.

If blood tests show that your potassium level is too low, your healthcare provider will tell you what to do. You can usually add high-potassium foods back into your diet, at least until your potassium levels are back to normal.

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