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 excrete enough potassium.
• Some medicines 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 potassium in your blood. If your potassium is too high, you’ll need treatment to lower it. See the “Potassium zones” box for more information.

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 medicines you take, including over-the-counter meds, supplements, and herbal remedies. Some of these, including over-the-counter pain relievers and vitamins, might increase your potassium.
• Limit high potassium foods in your diet. See the next page for tips on how to do this, and see pages 3 and 4 to discover the levels of potassium in many common foods.
• Watch serving sizes. Even with low-potassium foods, an extra-large serving can give you too much potassium.

• Read the labels on salt substitutes and “low-salt” packaged foods. If they have more than 200 mg of potassium in a serving or if potassium is one of the first few ingredients, avoid them. If potassium isn’t listed on the “Nutrition Facts” section of the label, check the ingredients list for those high in potassium (refer to pages 3–4).

Tips on limiting potassium
Sometimes a low-potassium diet can feel complicated. Here are some practical tips for how to follow a low-potassium diet:

• Focus most on limiting very high-potassium foods (see pages 3 and 4). Most foods have some potassium, but avoiding or limiting these high-potassium foods is an important strategy.

• Limit milk and dairy items to 1 cup each day.

• 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. For example, your potassium can get too low if you don’t eat enough, if you vomit or have diarrhea for an extended period, or if you’re taking certain medicines such as diuretics or steroids.

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.

Help from a registered dietitian nutritionist (RDN)

Talk with your doctor about whether seeing an RDN would be helpful for you.

A registered dietitian nutritionist 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
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 1/2 cup unless a different serving size is listed. Foods listed in the “GO!” column in bold type have the lowest potassium — less than 100 mg per serving.

<table>
<thead>
<tr>
<th>Category</th>
<th>Very high potassium (Over 400 mg — LIMIT these)</th>
<th>High potassium (200-400 mg — watch portions)</th>
<th>Lower potassium (Less than 200 mg)</th>
</tr>
</thead>
</table>
| Fruits and fruit juices (Don’t drink the juice of canned fruit) | • Bananas 
• Honeydew melon 
• Orange juice 
• Papaya 
• Prunes and prune juice | • Apricots (fresh, canned) and apricot nectar 
• Apricots (dried, 1/4 cup) 
• Cantaloupe 
• Dates (1/4 cup) 
• Figs (dried) (1/4 cup) 
• Kiwi (1 fruit) 
• Mango 
• Nectarine 
• Orange 
• Pomegranate and pomegranate juice 
• Raisins (1/4 cup) | • Apples, applesauce, and apple juice 
• Berries: blackberries, blueberries, cranberries (craisins), raspberries, strawberries — and berry juices 
• Cherries and cherry juice 
• Figs (fresh) 
• Fruit cocktail 
• Grapefruit and grapefruit juice |
| Vegetables and vegetable juices | • Avocado 
• Bamboo shoots, raw 
• Beans: canned or dried white beans, black beans, garbanzos, kidney beans, pinto beans 
• Chinese cabbage 
• Potatoes: white and sweet potatoes, french fries, and potato chips 
• Squash: winter squashes like hubbard or acorn 
• Tomato products: tomato paste, marinara sauce, etc. | • Artichoke 
• Beets and beet greens 
• Brussels sprouts 
• Celery (cooked) 
• Chili peppers 
• Greens: spinach (cooked), chard (cooked), beet greens 
• Lentils 
• Mushrooms (canned) 
• Pumpkin 
• Root vegetables: parsnips and rutabaga 
• Tomatoes or tomato juice 
• Vegetable juice cocktail | • Asparagus 
• Bamboo shoots, canned 
• Broccoli 
• Carrots 
• Cauliflower 
• Cabbage 
• Celery (fresh) 
• Cucumber 
• Eggplant 
• Endive 
• Green beans 
• Green peppers |
|                                  |                                                  |                                             | • Leafy greens: chard (fresh), collards, kale, turnip, mustard, spinach (fresh) 
• Iceberg lettuce 
• Mushrooms (fresh) 
• Onions and radishes 
• Peas (including snap peas, snow peas) 
• Sprouts: alfalfa, bean 
• Squash: zucchini, yellow squash 
• Water chestnuts |  

Continued...
### Category

<table>
<thead>
<tr>
<th>Very high potassium (Over 400 mg — LIMIT these)</th>
<th>High potassium (200-400 mg — watch portions)</th>
<th>Lower potassium (Less than 200 mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dairy</strong></td>
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<tr>
<td>• Cream, half-and-half</td>
<td>• Soymilk, vanilla or plain (1 cup)</td>
<td>• Cottage cheese (1 cup)</td>
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<tr>
<td>• Ice cream with chocolate or nuts (1 cup)</td>
<td>• Yogurt (1 cup)</td>
<td>• Hard cheese and processed cheese (1 ounce)</td>
</tr>
<tr>
<td>• Milk: regular, skim, 2%, chocolate, buttermilk (1 cup)</td>
<td>• Ice cream with NO chocolate or nuts (1 cup)</td>
<td>• Rice milk (unenriched)</td>
</tr>
<tr>
<td>• Soymilk, chocolate</td>
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<tr>
<td><strong>Meats and meat substitutes</strong></td>
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<td></td>
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<tr>
<td>• Dried peas and beans</td>
<td>• Meat: beef, pork, veal (3 ounces)</td>
<td>• Eggs (2)</td>
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<tr>
<td>• Canned beans: white beans, pinto beans, etc.</td>
<td>• Poultry: chicken, turkey (3 ounces)</td>
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<tr>
<td>• Lentils</td>
<td>• Fish (3 ounces)</td>
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<tr>
<td>• Nuts and seeds</td>
<td>• Peanut butter (2 Tbsp)</td>
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<tr>
<td><strong>Breads and grains</strong></td>
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<tr>
<td>• Bran, bran cereals, breads made with bran</td>
<td>• Bread, crackers, noodles, pasta, or tortillas made with white (refined) flour</td>
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<tr>
<td>• Granola</td>
<td>• Bread, crackers, noodles, pasta, or tortillas made with whole wheat flour (These are a little higher in potassium, but they’re important in a heart-healthy diet)</td>
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<tr>
<td></td>
<td>• Air-popped popcorn</td>
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<td></td>
<td>• White rice</td>
<td></td>
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<tr>
<td><strong>Fats and oils</strong></td>
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<tr>
<td>• Salad dressings (some) — read the label and ingredient list</td>
<td>• Butter, margarine, and oils</td>
<td></td>
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<tr>
<td></td>
<td>• Mayonnaise and mayo-like spreads</td>
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<tr>
<td><strong>Sweets, desserts, and sweeteners</strong></td>
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<tr>
<td>• Chocolate</td>
<td>• Ice cream with no chocolate or nuts (1 cup)</td>
<td>• Cakes, cookies, and pies made without chocolate, or high-potassium fruits or vegetables</td>
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<tr>
<td>• Candy with chocolate or nuts</td>
<td>• Molasses (1 Tbsp)</td>
<td>• Candy: hard candies, gumdrops, jelly beans</td>
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<tr>
<td>• Ice cream with chocolate or nuts (1 cup)</td>
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<td>• Ice pops; jello</td>
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<td>• Nuts (1/2 cup)</td>
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<td>• Jam and jelly, maple syrup</td>
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<td></td>
<td></td>
<td>• Sugar (white), corn syrup, honey</td>
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<tr>
<td><strong>Drinks</strong></td>
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<td>• Hot chocolate (1 cup)</td>
<td>• Carbonated drinks</td>
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<tr>
<td>• Milk and other dairy drinks</td>
<td>• Drinks from powdered crystals</td>
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<td></td>
<td>• Lemonade</td>
<td></td>
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<td></td>
<td>• Coffee or tea (1 cup)</td>
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<tr>
<td><strong>Spices, flavorings, misc.</strong></td>
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<tr>
<td>• Low-sodium baking powder</td>
<td>• Cornstarch, regular baking powder</td>
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<tr>
<td>• Salt substitutes (some) — check the label</td>
<td>• Herbs and spices</td>
<td></td>
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<tr>
<td>• Low-sodium soups and sauces (some) — check the label</td>
<td>• Mustard</td>
<td></td>
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<tr>
<td></td>
<td>• Sauces and sauce mixes</td>
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<tr>
<td></td>
<td>• Vanilla and other flavorings</td>
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<td></td>
<td>• Vinegar</td>
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</table>

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