

# Low Oxalate Diet

University of  
Pittsburgh  
Medical Center

Information  
for Patients

Kidney stones are caused by a buildup of minerals in the urine. Calcium, oxalate (OX-uh-layt), and uric acid may lead to kidney stones in some people. A low-oxalate diet is for people who have calcium oxalate kidney stones. Cutting back on high-oxalate foods and salt (sodium) and drinking plenty of water may help prevent kidney stones from forming.

Here are some important points to remember:

- Oxalates are found in a wide variety of foods.
- Foods that come from animals usually have little or no oxalate.
- Drink plenty of fluids. Drink more than 8 cups of fluid every day. Your urine should be as clear as water. If it isn't, drink more fluids.
- To help prevent oxalate stones from forming, limit oxalates to 40 to 50 mg per day. Use the chart below as a guide.
- Low-oxalate foods have less than 2 mg of oxalate per serving. You can eat as much of these foods as you like.
- Moderate-oxalate foods have 2 to 6 mg of oxalate per serving. You should eat no more than three of these foods per day.
- High-oxalate foods have more than 7 mg of oxalate per serving. Avoid these foods.

## Drinks

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- apple juice</li> <li>- beer, bottled or canned</li> <li>- cider</li> <li>- distilled alcohol</li> <li>- ginger ale</li> <li>- grapefruit juice</li> <li>- lemon juice</li> <li>- lemonade/limeade (made without peel)</li> <li>- lime juice</li> <li>- milk (skim, 2%, whole)</li> <li>- orange soda</li> <li>- pineapple</li> <li>- root beer</li> <li>- tea, instant</li> <li>- water</li> <li>- wine</li> </ul>	<ul style="list-style-type: none"> <li>- coffee (limit to 8 oz/day)</li> <li>- cola (limit to 12 oz/day)</li> <li>- cranberry juice</li> <li>- grape juice</li> <li>- orange juice</li> <li>- orangeade</li> </ul>	<ul style="list-style-type: none"> <li>- any juice made from high-oxalate fruits</li> <li>- beer, draft</li> <li>- chocolate, plain*</li> <li>- chocolate milk</li> <li>- cocoa*</li> <li>- coffee powder (instant)*</li> <li>- Ovaltine</li> <li>- <del>tea brewed*</del></li> </ul>

\* This food is extremely high in oxalates, 7 to 700 mg per serving.

continued

## Dairy

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- milk (skim, 2%, whole)</li> <li>- buttermilk</li> <li>- yogurt with allowed fruit</li> <li>- cheese</li> </ul> <p><b>For calcium restrictions, limit above to one serving per day.</b></p>	<ul style="list-style-type: none"> <li>- none</li> </ul>	<ul style="list-style-type: none"> <li>- chocolate milk</li> </ul>

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## Meat

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- beef, lamb, pork</li> <li>- eggs</li> <li>- fish/shellfish</li> <li>- poultry</li> </ul>	<ul style="list-style-type: none"> <li>- beef kidney</li> <li>- liver</li> </ul>	<ul style="list-style-type: none"> <li>- none</li> </ul>

## Meat Substitutes, Beans, Nuts, and Seeds

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- eggs</li> <li>- lentils</li> <li>- water chestnuts</li> </ul>	<ul style="list-style-type: none"> <li>- garbanzo beans, canned</li> <li>- lima beans</li> <li>- split peas, cooked</li> </ul>	<ul style="list-style-type: none"> <li>- almonds</li> <li>- baked beans canned in tomato sauce</li> <li>- cashews</li> <li>- green beans, waxed and dried</li> <li>- peanut butter*</li> <li>- peanuts*</li> <li>- pecans*</li> <li>- sesame seeds</li> <li>- sunflower seeds</li> <li>- tofu (soybean curd)*</li> <li>- walnuts</li> </ul>

## Fats and Oils

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- all</li> </ul>	<ul style="list-style-type: none"> <li>- none</li> </ul>	<ul style="list-style-type: none"> <li>- none</li> </ul>

\* This food is extremely high in oxalates, 7 to 700 mg per serving.

## Fruit

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- apples, peeled</li> <li>- avocado</li> <li>- bananas</li> <li>- cantaloupe</li> <li>- casaba</li> <li>- cherries, bing</li> <li>- coconut</li> <li>- cranberries, canned</li> <li>- grapes, green</li> <li>- honeydew</li> <li>- mangoes</li> <li>- nectarines</li> <li>- papaya</li> <li>- raisins</li> <li>- watermelon</li> </ul>	<ul style="list-style-type: none"> <li>- apples with skin</li> <li>- apricots</li> <li>- black currants</li> <li>- cranberries, dried</li> <li>- grapefruit</li> <li>- oranges</li> <li>- peaches</li> <li>- pears</li> <li>- pineapple</li> <li>- plums</li> <li>- prunes</li> </ul>	<ul style="list-style-type: none"> <li>- blackberries</li> <li>- black raspberries*</li> <li>- blueberries</li> <li>- red currants</li> <li>- dewberries</li> <li>- figs, dried</li> <li>- grapes, purple</li> <li>- gooseberries</li> <li>- kiwi</li> <li>- lemon peel*</li> <li>- lime peel*</li> <li>- orange peel</li> <li>- red raspberries</li> <li>- rhubarb*</li> <li>- strawberries</li> <li>- tangerines</li> <li>- any juice made from above fruits</li> </ul>

## Breads and Starches

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- bread</li> <li>- breakfast cereals</li> <li>- noodles, egg or macaroni</li> <li>- rice, white or wild</li> </ul>	<ul style="list-style-type: none"> <li>- barley, cooked</li> <li>- corn bread</li> <li>- corn tortilla</li> <li>- cornmeal</li> <li>- cornstarch</li> <li>- flour, white or wheat</li> <li>- oatmeal</li> <li>- rice, brown</li> <li>- unsalted saltine or soda crackers</li> <li>- spaghetti in tomato sauce</li> <li>- sponge cake</li> </ul>	<ul style="list-style-type: none"> <li>- Fig Newtons</li> <li>- fruit cake</li> <li>- graham crackers</li> <li>- grits, white corn</li> <li>- kamut</li> <li>- marmalade</li> <li>- soybean crackers*</li> <li>- wheat germ*</li> </ul>

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*continued*

## Vegetables

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- acorn squash</li> <li>- alfalfa sprouts</li> <li>- cabbage</li> <li>- cauliflower</li> <li>- peas, frozen and fresh</li> <li>- peppers, red</li> <li>- radishes</li> <li>- turnips, roots</li> <li>- zucchini</li> <li>- squash</li> </ul>	<ul style="list-style-type: none"> <li>- asparagus</li> <li>- artichokes</li> <li>- brussels sprouts</li> <li>- broccoli</li> <li>- carrots</li> <li>- corn</li> <li>- cucumbers, peeled</li> <li>- kohlrabi</li> <li>- lettuce</li> <li>- lima beans</li> <li>- mushrooms</li> <li>- onions</li> <li>- potatoes, white</li> <li>- peas, canned</li> <li>- snow peas</li> <li>- tomato, fresh</li> <li>- tomato sauce</li> </ul>	<ul style="list-style-type: none"> <li>- beans (green, wax, dried)</li> <li>- beets (tops, roots, greens)</li> <li>- celery</li> <li>- chives</li> <li>- collards</li> <li>- dandelion</li> <li>- eggplant</li> <li>- escarole</li> <li>- kale</li> <li>- leeks*</li> <li>- mustard greens</li> <li>- okra*</li> <li>- parsley</li> <li>- parsnips</li> <li>- peppers, green</li> <li>- pokeweed*</li> <li>- rutabagas</li> <li>- sorrel</li> <li>- spinach*</li> <li>- summer squash</li> <li>- sweet potatoes*</li> <li>- Swiss chard*</li> <li>- tomato soup</li> <li>- vegetable soup</li> <li>- watercress</li> <li>- yams</li> </ul>

## Condiments

Low Oxalate	Moderate Oxalate	High Oxalate
<ul style="list-style-type: none"> <li>- any not listed</li> </ul>	<ul style="list-style-type: none"> <li>- basil, fresh</li> <li>- malt, powder</li> <li>- pepper</li> </ul>	<ul style="list-style-type: none"> <li>- cinnamon, ground</li> <li>- parsley, raw*</li> <li>- pepper, more than 1 tsp/day*</li> <li>- ginger</li> <li>- soy sauce</li> </ul>

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