

# How to Use This Oxalate List

Oxalate can be a confusing thing! *It doesn't have to be!*  
*You might not even need this oxalate list.*

## Step #1: Figure Out If Oxalate Is Contributing to YOUR Kidney Stones

*Hint: Just because you have calcium oxalate stones DOESN'T mean oxalate is the cause!*

High urine oxalate is NOT a risk factor for everyone with kidney stones. In fact, the most common cause of calcium oxalate kidney stones is *high urine calcium* (NOT high urine oxalate). The ONLY way to know the cause of your kidney is a [24-hour urine test](#). This test is also the only way to know what nutrition changes will prevent more stones for you. There is NO single kidney stone diet that is best for everyone.

[Tips to ask your doctor for a 24-hour urine test.](#)

## Step #2: If Your Urine Oxalate IS High...

*Oxalate you eat is only part of the story.*

Many other parts of your diet impact oxalate urine levels.

### 4 Steps to Lower Urine Oxalate

(in order of importance)

#### 1) Eat Enough Calcium!

Calcium binds to oxalate and reduces oxalate absorption...a lot! Ideally, eat 3 servings of high calcium foods, one with each meal. This is the most effective way to lower urine oxalate. [Learn more about calcium and kidney stones.](#)

#### 2) Do Not Take Vitamin C Supplements

Your liver can make oxalate from excess vitamin C. While it is hard to get too much vitamin C from food, it is easy to get too much from supplements.

#### 3) Avoid VERY High Oxalate Foods

For *most* people, **simply avoiding the foods highest in oxalate**, along with eating enough calcium, **is enough to lower urine oxalate to safe range**. Spinach, almonds, rhubarb, beets and navy beans are MUCH higher than nearly any other food. If this is not enough to bring urine oxalate down, ask your Registered Dietitian how much oxalate is okay for you.

#### 4) Avoid Too Much Protein

Your liver can also make oxalate from too much protein (especially from beef, pork, chicken & fish). Ask your dietitian how much protein is right for you.

## Step #2: If Your Urine Oxalate IS NOT High...

If you do NOT have high urine oxalate on a 24-hour urine test, a low oxalate diet will NOT prevent kidney stones.

Chances are there is something else going on. That 24-hour urine test will reveal WHY you are making kidney stones. There are many other dietary changes you can make to reduce stones, based on your urine risk factors.

[Learn more about nutrition for calcium oxalate kidney stone prevention.](#)

## More Help with Kidney Stone Nutrition!

### Online Course



### Guide to Your 24-Hour Urine Test



### Melanie's Private Kidney Stone Facebook Community



### Melanie's Kidney Stone Articles



The Kidney  
Dietitian

MELANIE BETZ MS, RD

# Oxalate Food List

	Low Oxalate 10 mg or less per serving	Medium Oxalate 11-29 mg per serving	High Oxalate 30 mg or more per serving
<b>Grains</b>	Biscuits, 1 each, 6 mg Blueberry Muffins, 1 each, 9 mg Bran Muffins, 1 each, 5 mg Cheerios, 3/4 cup, 6 mg Cornbread, 1 piece, 4 mg Cornflakes, 3/4 cup, 1 mg Couscous, 1/2 cup, 8 mg English muffin, white, 1 each, 8 mg Oat bran, 1/3 cup, 0 mg Rice chex, 3/4 cup, 2mg Rice krispies, 1 cup, 3 mg Rye bread, 1 slice, 7mg Spaghetti, 1/2 cup, 6 mg Special K, 3/4 cup, 2mg Tortillas, corn & flour, 1 each, 7mg Wheat bread, 1 slice, 5 mg White rice, cooked, 1/2 cup, 2 mg	Brown rice, 1/2 cup 12 mg Cream of Wheat, 1 cup, 18 mg English muffin, whole wheat, 1 each, 12 mg Farina, 1 cup, 16 mg French Toast, 2 slices, 13 mg Granola, 1 cup, 20 mg Kashi Go Lean, 3/4 cup, 14mg Mueslix, 3/4 cup, 19mg Pancakes, 4 each, 11 mg	Bagel, 1 large, 40 mg Bran cereal, 1 cup, 52 mg Bulgur, 1/2 cup, 43 mg Corn grits, 1/2 cup, 49 mg Cornmeal, 1/2 cup, 32 mg Millet, cooked, 1/2 cup, 31 mg Raisin Bran cereal, 3/4 cup, 35 mg Rice bran, 1/2 cup, 140 mg Shredded wheat cereal, 1 cup, 28 mg Wheat berries, 1/2 cup, 49 mg
<b>Dairy</b>	Butter, 1 teaspoon, 0mg Buttermilk, 1 cup, 1mg Cheese, 1 slice, 0mg Cottage Cheese, 1/2 cup, 0mg Cream cheese, 1 oz, 1mg Milk, all fat levels, 1 cup, 1mg Milk, chocolate, 1 cup, 7mg Yogurt, frozen, 1/2 cup, 1mg Yogurt, plain, 1 cup, 2 mg		
<b>Meat, Chicken, Fish &amp; Meat Alternatives</b>	**Most meat, chicken, fish and seafood is very low in oxalate  Beef, ground, 3oz, 0mg Chicken, 3oz, 0mg Crab & shrimp, 3oz, 0mg Eggs, 1 each, 0mg Fish(cod, flounder, halibut),3oz,0mg Pecans, 1/4 cup, 10 mg Pork, 3 oz, 0mg Pumpkin seeds, 1/4 cup, 5 mg Sunflower seeds, 1/4 cup, 3 mg Turkey, 3oz, 0mg Walnuts, 1/4 cup, 8 mg	Peanuts, 1/4 cup, 27 mg Pistachios, 1/4 cup, 14 mg Tofu, 3.5 oz, 13 mg Veggie burger, 1 each, 24 mg	Almonds, 1/4 cup, 122 mg Cashews, 1/4 cup, 49 mg

	Low Oxalate 10 mg or less per serving	Medium Oxalate 11-29 mg per serving	High Oxalate 30 mg or more per serving
<b>Fruits</b>	<p>Apple, 1 fruit, 1 mg            Apple, dried, ½ cup, 1 mg            Apricots, 1 fruit, 0 mg            Apricots, dried, ½ cup, 2mg            Applesauce, 1 cup, 2 mg            Banana, 1 fruit, 3 mg            Blackberries, 1 cup, 4 mg            Blueberries, 1 cup, 4 mg            Cantaloupe, 1 cup, 0 mg            Cherries, 1 cup, 3 mg            Cherries, canned, ½ cup, 7mg            Cranberries, dried, ½ cup, 1mg            Cranberry Sauce, ½ cup, 2 mg            Figs, 1 fruit, 9 mg            Fruit Cocktail, ½ cup, 1mg            Grapes, 1 cup, 2 mg            Honeydew Melon, 1 cup, 1 mg            Lemon, 1 fruit, 4 mg            Lime, 1 fruit, 3 mg            Mango, 1 fruit, 1 mg            Nectarine, 1 fruit, 1 mg            Papaya, 1 fruit, 1 mg            Peach, 1 fruit, 0 mg            Peaches, canned, ½ cup 1 mg            Pear, 1 fruit, 2 mg            Pears, canned, ½ cup, 1 mg            Pineapple, 1 cup, 4 mg            Plantain, 1 fruit, 1 mg            Plum, 1 fruit, 0 mg            Tangerine, 1 fruit, 10 mg            Raisins, 1 oz, 3 mg            Strawberries, 1 cup, 4 mg            Watermelon, 1 slice, 1 mg</p> <p>Canned cherries, ½ cup, 7 mg            Canned peaches, ½ cup, 1 mg            Canned pears, ½ cup, 1 mg            Fruit cocktail, ½ cup, 1 mg</p> <p>Dried Apples, 13 rings, 2 mg            Dried Apricots, ½ cup, 1 mg            Dried Cranberries, ½ cup, 1 mg</p>	<p>Avocado, 1 each, 19 mg            Dates, 1 each, 24 mg            Grapefruit, ½ fruit, 12 mg            Kiwi, 1 fruit, 16 mg            Orange, 1 fruit, 29 mg</p> <p>Dried figs, 5 each, 24 mg            Dried prunes, 5 prunes, 11 mg</p>	<p>Raspberries, 1 cup, 48 mg</p> <p>Canned pineapple, ½ cup, 24 mg</p> <p>Dried pineapple, ½ cup, 30 mg</p>

	Low Oxalate 10 mg or less per serving	Medium Oxalate 11-29 mg per serving	High Oxalate 30 mg or more per serving
Vegetables	Alfalfa sprouts, ½ cup, 0 mg Artichoke, 1 heart, 5 mg Asian mixed vegetables, ½ cup, 6mg Asparagus, 4 spears, 6 mg Bok choy, 1 cup raw, 1 mg Broccoli, 1 cup raw, 2 mg Brussels Sprouts, ½ cup, 2 mg Cabbage, ½ cup, 1 mg Carrots, ½ cup cooked, 7 mg Carrots, ½ large, 10mg Cauliflower, ½ cup cooked, 1 mg Celery, ½ cup cooked, 5 mg Celery, 1 stalk raw, 3mg Chili peppers, ½ cup, 5 mg Chives, 1 teaspoon, 0 mg Collard greens, ½ cup cooked, 5 mg Corn, ½ cup, 1 mg Cucumber, ¼ each, 1 mg Endive, ½ cup, 0 mg Green beans, ½ cup, 9 mg Green pepper, ½ cup, 5 mg Iceberg lettuce, 1 cup, 0 mg Kale, raw, 1 cup, 2 mg Mung beans, ½ cup, 8 mg Mushrooms, 1 each, 0 mg Mustard greens, 1 cup raw, 4 mg Onion, 1 small, 0 mg Peas, ½ cup, 1 mg Peppers, hot, ½ cup, 5mg Tomato, 1 each, 7 mg Radish, 10 each, 0 mg Romaine lettuce, 1 cup, 0 mg Scallions, ½ cup, 1 mg Sea vegetables, 1 cup, 3 mg Water chestnuts, 4 each, 0 mg Yellow squash, ½ cup, 4 mg Zucchini, ½ cup, 1 mg	Bamboo shoots, ½ cup, 18 mg Fava beans, ½ cup, 20 mg Kidney Beans, ½ cup, 15 mg Olives, 10 each, 18 mg Parsnip, ½ cup, 15 mg Potatoes, mashed, ½ cup, 15 mg Refried beans, ½ cup, 16 mg Sweet potatoes, ½ cup, 14 mg Tomato sauce, ½ cup, 17 mg	Beets, ½ cup, 76 mg Navy beans, ½ cup, 76 mg Okra, ½ cup, 57 mg Potato, baked w/ skin, 1 each, 97 mg Potatoes, French fries, ½ cup, 51 mg Rhubarb, ½ cup, 541 mg Rutabaga, ½ cup, 31 mg Soybeans, ½ cup, 48mg Spinach, ½ cup cooked, 755 mg Spinach, 1 cup raw, 656 mg Turnip, ½ cup, 30 mg Yams, ½ cup, 40 mg

	Low Oxalate 10 mg or less per serving	Medium Oxalate 11-29 mg per serving	High Oxalate 30 mg or more per serving
<b>Snacks</b>	<p>Popcorn, 1 cup, 5 mg            Pretzels, 1 oz, 5 mg            Ritz crackers, 5 crackers, 3 mg            Saltines, 5 crackers, 5 mg            Tortilla chips, 1 oz, 7 mg            Triscuits, 5 crackers, 5 mg            Wheat crackers, 5 crackers, 5 mg</p>	<p>Potato chips, 1 oz, 21 mg</p>	
<b>Desserts</b>	<p>Chocolate pudding, ½ cup, 2 mg            Custard, ½ cup, 0 mg            Fig bar, 1 cookie, 4 mg            Fruit roll up, 1 roll, 2 mg            Graham cracker, 1 sheet, 2 mg            Ice Cream, ½ cup, 0mg            Jello, 1 cup, 1 mg            Milk chocolate candy, 1 oz, 5 mg            Oatmeal cookie, 1 cookie, 3 mg            Pie, 1/8 pie, 5 mg            Popsicle, 1 each, 0 mg            Pudding popsicle, 1 each, 5 mg            Rice cake, 1 cake, 2 mg            Rice krispie treat, 1 bar, 1 mg            Sherbet, ½ cup, 0 mg            Snack cake, 1 cake, 3 mg            Vanilla pudding, ½ cup, 0 mg</p>	<p>Cake, 1 oz, 15 mg            Chocolate chip cookie, 1 medium, 10 mg</p>	<p>Brownie, 1 oz, 31 mg            Candy with nuts, 1 piece, 38 mg            Chocolate syrup, 2 tablespoons, 38 mg</p>
<b>Beverages</b>	<p>Apple juice, 1 cup, 2 mg            Apricot juice, 1 cup, 2 mg            Beer, 12 oz, 4 mg            Chocolate milk, 1 cup, 7 mg            Coffee, 1 cup, 2 mg            Gatorade, 1 cup, 0 mg            Grape juice, 1 cup, 1 mg            Grapefruit juice, 1 cup, 0 mg            Kool-Aid, 1 cup, 1 mg            Liquor, 1 oz, 0 mg            Mango juice, 1 cup, 1 mg            Milk, 1 cup, 1 mg            Orange juice, 1 cup, 2 mg            Pineapple juice, 1 cup, 3 mg            Prune juice, 1 cup, 7 mg            Soda, 1 cup, 0 mg            Wine, 4 oz, 1 mg</p>	<p>Black tea, 1 cup, 14 mg            Carrot juice, 1 cup, 27 mg            Lemonade, 1 cup, 15 mg            Rice milk, 1 cup, 13 mg            Soy milk, 1 cup, 20 mg            Tomato juice, 1 cup, 14 mg</p>	<p>Hot chocolate, 1 cup, 65 mg</p>

	Low Oxalate 10 mg or less per serving	Medium Oxalate 11-29 mg per serving	High Oxalate 30 mg or more per serving
<b>Condiments &amp; Other</b>	Apple butter, 1 tablespoon, 0 mg Black pepper, 1 dash, 0mg Butter, 1 tablespoon, 0 mg Coffee Creamer, 1 tablespoon, 0mg Cream cheese, 1 oz, 1 mg Cream sauce, ¼ cup, 0 mg Gravy, ¼ cup, 1 mg Horseradish, 1 tablespoon, 0 mg Hummus, 2 tablespoons, 8mg Jam/jelly, 1 tablespoon, 1 mg Ketchup, 1 packet, 1 mg Mayonnaise, 1 tablespoon, 0 mg Mustard, 1 teaspoon, 1 mg Salsa, 1 tablespoon, 1 mg Sour Cream, 1 tablespoon, 0mg Soy sauce, 1 tablespoon, 3 mg Syrup, 1 tablespoon, 0 mg Whipped cream, 2 tablespoon, 0 mg	Peanut butter, 1 tablespoon, 13 mg Tahini, 1 tablespoon, 16 mg	Miso soup, 1 cup, 111 mg
<b>Baking</b>	Artificial sweetener, 1 packet, 1mg Barley malt flour, ½ cup, 0mg Brown sugar, ½ cup packed, 0mg Corn Bran, ½ cup, 0mg Cornstarch, 1 tablespoon, 0mg Flaxseed, 1 tablespoon, 0 mg Flour, corn, ½ cup, 2mg Flour, white, ½ cup, 9mg Flour, white rice, ½ cup, 6mg Sugar, ½ cup, 0mg	Rice, brown, ½ cup cooked, 12mg Flour, whole grain, ½ cup, 15mg	Barley flour, ½ cup, 41 mg Brown rice flour, ½ cup, 33mg Buckwheat groats, ½ cup cooked, 67mg Cornmeal, ½ cup, 32mg Cocoa powder, 4 teaspoon, 67mg Soy flour, ½ cup, 47 mg

## Note on Accuracy of Oxalate Lists

This oxalate may be different than other oxalate lists you've found, or been given by your doctor. Oxalate is tricky. It is very difficult to measure in food, and varies based on where the food was grown, soil, harvest time and even ripeness. It is impossible to know exactly how much oxalate is in your food. Because of this, I **highly recommend** sticking with ONE list to avoid spending unnecessary time and energy comparing the hundreds of oxalate lists out there.

This list is based on the oxalate list produced by Harvard Medical School in 2002. I have standardized the portions to make it easier to compare foods. The Harvard list is widely recognized to be the most accurate and up to date by medical professionals. My colleagues and I have seen this list lower urine oxalate in patients, therefore we recommend it.

Remember, diligently tracking the amount of oxalate you eat every day is not necessary for most people. Avoid the very high ones, eat a variety of foods, get in your calcium, and chances are oxalate will fall into place.