



## Dietary Changes to Prevent Calcium Oxalate Stones

By reducing the concentration of oxalate and calcium in your urine, you may reduce the risk of future calcium oxalate stone formation. The amount of fluid protein, sodium, and oxalate in your diet can affect the concentration of oxalate and calcium in your urine. Below are dietary guidelines to assist you:

### 1. Drink More Fluids

By increasing the fluid in your diet, your urine will be less concentrated with calcium or oxalate. Aim for eight cups of non-alcoholic, caffeine free fluids per day. The color of your urine is a good indicator of its concentration. It should appear light yellow in color.

### 2. Limit Protein

Excessive protein in your diet can increase both the calcium and oxalate in your urine. To eat adequate, but not excessive amounts of protein:

A) Limit milk and milk products to two servings per day.

One serving equals: 1 cup of milk, or yogurt or 1 ounce of cheese

B) Limit your intake of fish, poultry, and meat to five ounces per day. A deck of cards is approximately the same size as three ounces of these high protein foods.

### 3. Limit Foods High in Oxalate

By avoiding foods very high in oxalate, you may reduce the oxalate in your urine.

Protein Foods	Grains	Beverages	Fruits	Vegetables	
Nuts	Grits	Cocoa	Blackberries	Beets	Leeks
Peanut butter	Soybean crackers	Ovaltine	Blueberries	Beet greens	Lima beans
Soy protein	Wheat germ	Tea	Fruit cocktail	Carrots	Mustard greens
Tofu		Cola	Grapes	Cauliflower	Okra
		Cranberry Juice	Lemon peel	Celery	Pokeweed
			Oranges	Collard greens	Rutabagas
			Orange peel	Dandelion greens	Squash
			Plums	Eggplant	Sweet potato
			Red currants	Green beans	Swiss chard
			Rhubarb	Green peppers	Waxed beans
			Strawberries	Kale	

### 4. Reduce Sodium

Too much sodium in your diet can result in more calcium in your urine. Aim for less than 3000 milligrams of sodium per day. To reduce the sodium in your diet:

A) Enjoy your food without added salt. Use vinegar, herbs, and spices to flavor your foods instead of salt.

B) Cook without salt.

C) Check food labels. If the food contains more than 250 milligrams of sodium per serving, it contains too much sodium. In general, the more processed a food is, the greater is its sodium content.

### 5. Avoid Vitamin C Supplements

Vitamin C rich foods are acceptable. Vitamin C supplements are not recommended since it can increase oxalate in your body.

### 6. Calcium Restriction is NOT necessary

Low calcium intake may lead to bone loss (osteoporosis). Low levels of calcium may increase the oxalate absorbed during digestion.