

## OXALATE CONTENT OF FOODS

### Description

It has been recognized that urinary oxalate is a causal factor in formation of calcium oxalate kidney stones. Oxalate restriction is based on oxalate content and bioavailability in foods. Recent research has improved the measurement of oxalate. While oxalate is found in most plant tissues, the availability is not necessarily related to the oxalate content of foods.

### Indications for Use

Initial dietary restriction for calcium oxalate stone-forming patients.

### Adequacy

The low oxalate diet is nutritionally adequate, according to the Recommended Dietary Allowances of the National Research Council.

### Low Oxalate Diet

1. Follow low oxalate diet as close as possible (approximately 40-50 milligrams/day).
2. Avoid foods known to raise urinary oxalate levels (see list of foods to avoid).
3. Consume adequate fluids (goal of 10 cups/2.4 liters per day).
4. Avoid vitamin C supplements.
5. Take supplemental calcium, vitamin B6, phosphate, citrate or magnesium if recommended by physician.

The following foods have been shown to increase urinary oxalate. Since decreasing oxalate excretion helps decrease the risk of forming kidney stones, avoid the following foods:

Nuts	Rhubarb
Beets and beet greens	Spinach
Tea (black and green)	Chocolate
Strawberries	Wheat bran