

Kidney Stone Prevention



1. Hydrate!

- Aim for **> 2L (8–10 cups or 64 oz)** of fluids daily
- Water is best
- Adding **lemon or other citrus juices** may help lower stone risk



2. Limit salt intake

- High sodium increases calcium in the urine
- Limit sodium to **≤1,500 mg per day**
- Avoid processed foods, fast food, and salty snacks



3. Cut back on animal protein

- Excess red meat and animal protein can increase stone formation
- Choose **moderate portions** of poultry, fish, or plant-based proteins



4. Limit oxalate rich foods

- Nuts and seeds
- Chocolate, black tea
- Okra and beans
- Spinach, rhubarb, beets
- Soy products
- Okra and beans
- Potatoes



5. Follow a Balanced, Healthy Diet

- Plenty of fruits and vegetables, whole grains
- Low-fat dairy products
- Lean sources of protein

Do not avoid calcium!

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Types of Kidney Stones

- Calcium oxalate:** Most common, created when calcium combines with oxalate in the urine.
- Calcium phosphate:** Can be associated with hyperparathyroidism and renal tubular acidosis.
- Uric acid:** Can be associated with a diet high in animal protein.
- Struvite:** Less common, caused by infections in the upper urinary tract.
- Cystine:** Rare and tend to run in families with a history of cystinuria.

	Preventative Measures
Behavioral Modifications	<ul style="list-style-type: none"> <input type="checkbox"/> Increase water intake <input type="checkbox"/> Limit salt intake <input type="checkbox"/> Decrease animal protein <input type="checkbox"/> Limit oxalate rich foods <input type="checkbox"/> Healthy diet <input type="checkbox"/> Ensure adequate dietary calcium (~1200mg/day) <input type="checkbox"/> Avoid excess vitamin supplements (Vit C, calcium supplements)
Further testing	<ul style="list-style-type: none"> <input type="checkbox"/> Bloodwork: PTH, Uric Acid, BMP <input type="checkbox"/> Urine: pH, infection risk <input type="checkbox"/> Litholink: collect urine for 24 hours <input type="checkbox"/> Stone analysis (if applicable)
Preventative medications	<ul style="list-style-type: none"> <input type="checkbox"/> Thiazide diuretics (HCTZ, chlorthalidone): lower urine calcium by helping the kidney take calcium out of the urine and put it back in the blood stream. <input type="checkbox"/> Potassium citrate (KCit): makes the urine less acidic or more alkaline (basic). <input type="checkbox"/> Allopurinol: lowers the level of uric acid in the blood and urine <input type="checkbox"/> Moonstone nutrition: provides high levels of alkali citrate (May purchase online)
Additional measures	<ul style="list-style-type: none"> <input type="checkbox"/> Referral to a kidney specialist (Nephrologist)