

Kidney Stones and Your Diet

Kidney stones are made from crystals that form in your kidney. You're at higher risk for stones if you have certain medical conditions, a family history of kidney stones, or had a kidney stone in the past. Some people have kidney stones when their pee (urine) is too concentrated (dark) over a long time.

Most kidney stones are made of calcium and oxalate crystals. If you're not sure what type you had, ask your healthcare provider. Most of the nutrition tips in this handout apply to all types of kidney stones.

Nutrition tips to lower your risk of kidney stones

Drink lots of fluid

This is the best way to lower your risk of kidney stones. Crystals are less likely to form in pee that is not concentrated (pale or light yellow).

Drink at least 10–12 cups (2.5–3 litres) of fluid each day. You need more fluid during heavy exercise, in hot weather, or when you're travelling a long distance. Talk to your doctor or dietitian if you've been told to restrict fluids.

Make water your drink of choice. This includes hot water, cold water, and sparkling water. It should make up most of the fluid you drink every day.

Other fluids such as milk, juice, and soup also count towards your fluid intake. Limit drinks like pop, sweetened iced tea, fruit drinks, energy drinks and sports drinks. The added sugar and salt in them may increase your risk of kidney stones.

Tips to get enough fluid every day:

- Drink 2 cups (500 mL) of fluid at each meal and snack.
- Carry a water bottle with you during the day.
- Add lemon, lime, or cucumber slices to water for flavour.
- If you wake up at night to pee, drink water to replace the fluid you lose.

Ask your dietitian or doctor whether you need to limit caffeine or alcohol.

Limit salt and high sodium foods

If you eat a lot of salt or sodium in foods, the amount of calcium in your pee increases, which increases your risk of kidney stones.

Limit the sodium in your meals and snacks to less than 2300 mg a day.

Tips to lower your sodium intake:

- Choose fresh foods and foods with no salt added.
- Prepare foods at home more often. Use low sodium ingredients.
- Eat less restaurant, take out, and fast foods.
- Use little or no salt in cooking and at the table.
- Try adding garlic, onion, ginger, chili, herbs, spices, lemon juice, vinegar, or salt-free seasonings instead of salt to flavour your food.
- Avoid electrolyte drink mixes.
- Look for foods labelled as "sodium-free", "low sodium", or "no added salt". Reduced sodium does not always mean the food is low in sodium.
- Read labels and compare packages to find foods lower in sodium. Look for foods that have a % Daily Value (DV) of 5% or less for sodium.

Serving size: →
The sodium listed below is for this amount, not the whole package.

Sodium: Look for foods with a Daily Value (% DV) of 5% or less. →

Nutrition Facts	
Per $\frac{3}{4}$ cup (175 mL/ 175 g)	
Calories 160	% Daily Value*
Fat 2.5 g	3 %
Saturated 1.5 g	8 %
+Trans 0 g	
Carbohydrate 25 g	
Protein 8 g	
Cholesterol 10 mg	
Sodium 75 mg	3 %
*5% or less is a little , 15% or more is a lot	

Salt substitutes: Talk to your dietitian or doctor about whether you should use salt substitutes. Most brands contain potassium instead of sodium. This is a problem for people with some medical conditions.

Limit intake of animal protein

Limit meat, fish, poultry, and eggs to 2–3 servings a day. Eating larger amounts of these foods can increase your risk of certain kidney stones. One serving is 2 eggs or 2½ oz (75 grams) of meat, fish, or poultry.

Choose more plant sources of protein:

- soy products
- beans, peas, and lentils
- nuts and seeds

Talk to your dietitian if you have questions about protein foods.

Eat foods with calcium

Food sources of calcium include:

- milk
- plant-based beverages with calcium added
- yogurt or kefir
- lower sodium cheese
- salmon or sardines, canned with bones
- kale or collard greens

It's better to get your calcium from food than from a supplement. Talk with your dietitian or doctor about whether you need to take a calcium supplement. Avoid supplements that have calcium combined with vitamin D.

If you drink plant-based beverages, ask your dietitian or doctor if you need to choose one that is lower in oxalates.

Eat plenty of vegetables and fruit

Include plenty of vegetables and fruits in your meals and snacks. Try making half your plate vegetables and fruits.

Vegetables and fruit are good sources of potassium, fibre, and citrate which can help reduce kidney stone formation. Limit your intake of fruit juices. Choose whole or cut fruits and vegetables instead of juice.

Limit vitamin C supplements

Getting a lot of vitamin C from supplements can increase your risk of kidney stones by converting it into oxalate.

Instead of taking vitamin C supplements, eat foods higher in vitamin C like citrus fruits, peppers, and tomatoes.

Talk to your dietitian or doctor before using vitamin, mineral, or herbal supplements.

Some people need to limit foods high in oxalate

If tests show high oxalate in your pee, you may need to limit foods high in oxalate. Your doctor will tell you if you need to do this.

To learn more about how to [limit foods high in oxalates](#), visit [Ahs.ca/NutritionHandouts](https://ahs.ca/NutritionHandouts) and search oxalates.

Manage your weight

If you have extra weight, you may be at higher risk of kidney stones. Talk to your healthcare team if you would like support in managing your weight.

For more information



- Talk to your healthcare team.
- Call Health Link at 811 and ask to talk to a dietitian or complete a [self-referral form](#) on ahs.ca/811.
- Visit ahs.ca/nutrition.

