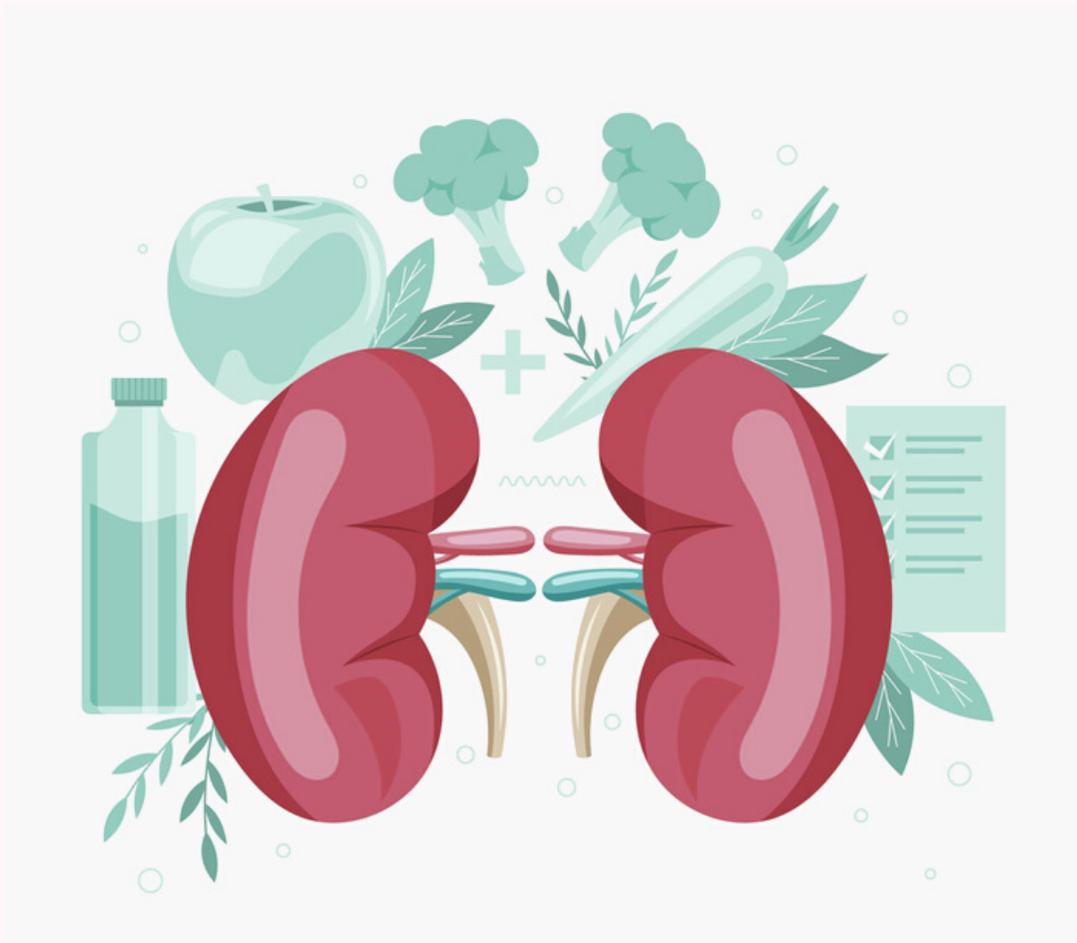




KIDNEY STONES



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KIDNEY STONES

Kidney stones are a common complication after weight loss surgery- especially “rerouting”/ bypass surgeries such as the Roux en Y gastric bypass and the duodenal “switch” procedures.

The most common kind of kidney stone is comprised of calcium oxalate and is most commonly due to dehydration.

There are a few things you can adjust in your diet to lower your risk for developing kidney stones. First, ensure you are staying hydrated. Drink enough water throughout the day to keep your urine clear and dilute (at least 2.5 L).

Reduce Your Intake Of:

- Cheese
- Egg yolks
- Sodium: by avoiding packaged foods that are highly processed (think frozen dinners, chips, cereals, canned items... basically items that come boxed, or bagged), you can significantly reduce the quantity of salt in your diet. Aim for < 2300mg of sodium /day.
- Foods high in oxalate: beans, beer, beets, berries, chocolate, coffee, cranberries, and dark green vegetables such as spinach
- Carbonated drinks that contain phosphoric acid: coke, diet coke, Dr. Pepper, etc. (dark colored sodas)... but read the nutrition label of ANY beverage you drink, screening for phosphoric acid as an ingredient. Reminder- avoid carbonated beverages after weight loss surgery.

Increase Your Intake Of:

- Water (worth reiterating!): 2.5 + liters / day
- Fiber (fruits and vegetables- especially non-starchy vegetables such as cucumbers, tomato, lettuce, etc.)
- Citrus: lemon, limes, oranges etc. Better yet- add some slices into your glass of water!



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There are certain disease states that can predispose you to forming kidney stones as well. You may have more risk factors if you have a BMI > 30, diabetes, high blood pressure, gout, kidney disease, sarcoidosis, inflammatory bowel disease, chronic diarrhea, hyperparathyroidism, and urinary tract infections.

By **STAYING ACTIVE**, you can reduce your risk of kidney stones by keeping your bones strong and healthy. Remember, calcium oxalate kidney stones are the most common kind of kidney stone. If you lead a sedentary lifestyle, your bones slowly start to break down and flood your kidneys with calcium. Keep your feet moving and heart rate going throughout your day to lower your risk of forming kidney stones.

Medications That Can Increase Your Risk Of Forming Stones:

**** Please, never stop or change medications without first discussing with your Provider.*

- Vitamin C (>1,000mg daily)
- High doses of Vitamin D
- Furosemide (Lasix) and Triamterene
- Acetazolamide (Diamox)

You can be at “high risk” for developing stones if someone else in your immediate family has had a history of kidney stones, or if you have had kidney stones in the past.

Sadly, weight loss surgery increases your risk of kidney stones. In addition, consumption of your bariatric multivitamins and a high protein diet are risk factors as well. However, it is very important to continue taking your multivitamins daily to reduce the risk of micronutrient deficiencies after surgery.



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Calcium intake > 1200mg/day, high doses of Vitamin D, and protein intake > 1g of protein/ kg of body weight can increase your kidney stone risk. Remember- never change your vitamins or protein intake without first discussing with your Bariatric providers.

Should you develop a kidney stone and are having pain that requires going to an Urgent Care or Emergency Room, be sure to let them know that you've had weight loss surgery and cannot have the pain medication Ketorolac (Toradol).

This is a non-steroidal anti-inflammatory medication (or “NSAID” for short) and is not allowed after Bariatric surgery. **NSAIDs can increase your risk of ulcers and complications after weight loss surgery.**

You are not allowed to have NSAIDs for the rest of your life after weight loss surgery (unless cleared by your Bariatric Provider / other specialist).

Better Pain Medication Options Include:

- Tylenol (< 4g / day): you can take 1,000mg three times daily. Speak with your Provider if you have liver disease.
- Oxycodone, Percocet, Hydromorphone, Dilaudid, Tramadol etc. (narcotic medications)
- Muscle relaxers such as Flexeril
- Tamsulosin (Flomax) to dilate the tubing from your kidneys into your bladder as well as your urethra
- Phenazopyridine (Pyridium): this is an orange dye (in pill form) and will discolor your urine. It can also stain contact lenses, so be sure to wear glasses while taking this medication.

As always, never make any changes to medications or treatment plans without first speaking with your provider. If you require further work-up, be sure to contact a Urologist and inform them of your weight loss surgery history.