Nutritional Lifestyle Changes for Kidney Stone

What are kidney stones?
Kidney stones (renal lithiasis) form in your kidneys from minerals in your urine. The most common stones are oxalate, calcium, and uric acid stones. Once they are formed, they can move to the ureter. When the stones move there may be no symptoms. However, when stones do not move they can lead to pain caused by urine backing up into the kidneys, bladder, ureter, and urethra.

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<th>CAUSES</th>
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| • Drinking too little water  
• Amount of exercise (too much or too little)  
• Obesity  
• Weight–loss surgery  
• Eating too much sugar or salt  
• Infections  
• Family history | • Severe pain on either side of your back  
• Dull pain or stomach pain that will not go away  
• Blood in your urine  
• Nausea or vomiting  
• Fever or chills  
• Cloudy or bad smelling urine |

Different Types of Kidney Stones

Calcium stones
Caused by an increase in the amount of calcium in your urine. To decrease the amount of calcium in your urine, decrease the sodium intake in your diet. Also, attempt to eat both calcium and oxalate foods together. Too much sodium can cause you to lose more calcium and possibly lead to kidney stones.

Oxalate Stones
Many high oxalate foods are healthy food choices. As mentioned with calcium stones, eat with calcium containing foods. These two bind together and are less likely to form stones. Oxalate is an end product of vitamin C metabolism. Consuming large amounts of vitamin C can lead to stones. Do not take supplements >500mg of vitamin C per day.

Uric Acid Stones
Purines are chemicals found in meat, seafood, and high protein foods which form uric acid. The higher the acid content of the urine the easier it is for kidney stones to form.
How to prevent kidney stones

- Staying hydrated is a large part of kidney stone prevention as well as pairing high calcium food sources with high oxalate food sources. By doing this, your urine will be less concentrated and your risk of developing stones will be decreased.
- Drink about 3 quarts (12 cups) of water throughout the day. On hotter days, it may be necessary to drink more water.
- Make sure to drink a glass of water before going to bed and if you wake during the night as well.
- Avoid “crash-dieting” and foods containing high fructose corn syrup.
- Eat 4-6 ounces of protein per day and 3 servings of milk or cheese daily.
- The majority of your diet should consist of fruit and vegetables, whole grains, and low fat dairy.
- Check with your doctor or dietitian for advice on use of vitamin and mineral supplements since some can increase the risk of stone formation in some people.