

Calcium Oxalate Stones



Calcium oxalate stones are one of the most common types of kidney stones. Formed in the kidneys because of a high level of calcium or oxalate in them with a low level of water.

Oxalate is a natural substance found in many foods, the body uses it as an energy source, after which the products of its consumption pass through the bloodstream to the kidneys and are removed through the urine. When the level of water in the kidneys decreases with the high level of oxalate, it begins to bind with calcium to form crystals in the urine, and it develops to increase its size and become stones.



To prevent oxalate stones, it is recommended to follow these guidelines:

- 1- Stay well hydrated by drinking plenty of fluids, especially water. This helps to decrease the concentration of minerals and salts in urine and can inhibit the formation of crystals that can lead to oxalate stones.
- 2- Limit foods that are high in oxalates, such as spinach, beetroot, okra, rhubarb, almonds, cashews, peanuts, soy products, wheat bran, and tea. While it's not necessary to completely avoid these foods, reducing your intake can help to prevent the formation of oxalate stones.
- 3- Stay away from salt (sodium), as sodium works to precipitate calcium in the urine and form stones.
- 4- Limit animal protein intake to moderate levels.
- 5- Include an appropriate amount of calcium in meals from natural sources, such as milk and dairy products. Calcium binds to oxalate in the stomach and intestines before it can move to the kidneys, helping to reduce the risk of stone formation. Avoid taking calcium supplements unless recommended by a doctor.
- 6- Avoid taking (Vitamin C) supplements without consulting a doctor, as high doses can increase the amount of oxalate in the urine.
- 7- Eat fruits rich in citric acid and potassium, such as apples, oranges, pomegranates, and lemons. These fruits can help prevent the formation of kidney stones.

It's worth noting that these guidelines may not be suitable for everyone, so it's best to consult a doctor or a registered dietitian for personalized advice.