

Kidney Stones

What exactly is a kidney stone?

Kidney stones are solid pieces of material that form in the kidney. These stones are made up of many different types of chemicals that are normally found in the urine. The size of a kidney stone can vary, from as small as a grain of sand to as large as a pearl or pea. Many kidney stones pass out of the body, but sometimes they get stuck in the urinary tract, block the flow of urine, and cause pain.

Are different kinds of kidney stones made of different chemicals?

Yes. The most common type of kidney stone is made from calcium oxalate, but stones also are made of calcium phosphate, struvite, uric acid, or cystine. Knowing the type of stone is important to determine how to prevent more stones. For this reason, your doctor may ask you to try to save the stones when you pass them, so he/she can analyze them.

What are the symptoms of a kidney stone?

The most common symptom is extreme pain in your back or side that will not go away. Sometimes the following occur:

- The urine contains blood
- The urine is cloudy or foul smelling
- A burning feeling occurs with urination
- A fever or chills occur, indicating that an infection is present

What causes kidney stones?

Experts do not know what causes kidney stones, but they think that they are influenced by genetics, the environment, and what you eat and drink. Because of the many reasons people get kidney stones, it is hard to predict who might get them. If you have a family history of kidney stones, you probably are more apt to get them yourself. If you have had numerous urinary tract infections or certain medical conditions, you may develop kidney stones. You are also at risk for kidney stones if you don't drink enough liquids. It does appear that certain foods may cause certain types of stones to form, but only in people who are susceptible to stone formation.

How can I get rid of kidney stones?

Usually your doctor will want you to wait and let the kidney stones pass out of your body when you urinate. Your doctor will tell you to drink 2-3 quarts of water daily. You may need to take pain medication during this process. If you don't pass the kidney stones in a few days, you might need surgery to remove them. Many surgical options exist, including a method that sends shock waves through the skin and organs to break up the larger kidney stones so they can pass in the urine. In some cases, your doctor may need to make an incision into your kidney to locate and remove the kidney stones.

Will my diet help prevent kidney stones?

Yes. Drinking plenty of fluids is the most important dietary factor to prevent kidney stones. This can help prevent kidney stone formation and also help your body easily remove very small kidney stones. If you are prone to calcium oxalate kidney stones, changing your diet might help prevent them from forming. Foods that are linked to calcium oxalate stones include animal proteins, foods with oxalates, vitamin C, and sodium. Limiting your intake of these foods might help prevent stones. An inadequate

intake of fiber, potassium, and fluid also is linked with calcium oxalate stones. Despite the fact that this type of stone is made from calcium, limiting calcium in the diet does not seem necessary to prevent stone formation.

What foods have oxalates in them?

Oxalates are found in many foods. The following foods are considered very high in oxalates:

- Rhubarb
- Spinach
- Beets
- Swiss chard
- Wheat germ
- Soybean crackers
- Peanuts
- Okra
- Chocolate
- Black Indian tea
- Sweet potatoes

Foods that contain medium amounts of oxalates include:

- Grits
- Grapes
- Celery
- Green peppers
- Red raspberries
- Fruit cake
- Strawberries
- Marmalade
- Liver

Limiting these foods might help prevent calcium oxalate stones, but it might not. It is important not to restrict your diet unnecessarily in an attempt to prevent calcium oxalate stones. A registered dietitian can help you decide if dietary restrictions are needed.

References

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