



SIMPLE • SUSTAINABLE • VITALITY

## Transcript of message on Kidney Stones

I received a question from a distributor, who has a Juice Plus+® customer who recently passed a kidney stone. If that isn't painful enough, they received advice from the hospital in a handout for tips on preventing kidney stones and the advice was to avoid certain foods, including some fruits and vegetables that are high in oxalate (oxalic acid) rich foods such as leafy greens and strawberries. And to take calcium supplements and antacids with calcium!!

WOW! What can I say?

Here are some references below. To summarize some main points:

- 1) Kidney stones are formed because the modern diet is so acidic – remember, only fruits and veggies are alkaline to the body, and so is Juice Plus+.
- 2) As a way to compensate, the body releases calcium from bones as well as other substances such as uric acid and oxalic acid, which forms kidney stones in time. Now there are no symptoms with this until the body tries to pass them – then there is lots of pain.
- 3) Taking more calcium won't help because it won't reduce the acidity of the modern diet, nor will it stop bones from leaching out calcium. In fact, it will probably help to create more kidney stones as calcium based stones make up 80-95% of all stones that people develop.
- 4) People who eat a more plant-based diet have lower incidence of kidney stones as their diet is more alkaline.
- 5) The small amount of oxalic acid in certain fruits and veggies is not the issue – the body secreting it from trying to compensate for the acidity of the modern diet is the issue. Taking Juice Plus+ and eating more plants is the answer.

### PROTEIN CAUSES KIDNEY STONES

"Acute effects of moderate dietary protein restriction in patients with idiopathic hypercalcuria and calcium nephrolithiasis" by Sandro Giannini in the February 1999 issue of the *American Journal of Clinical Nutrition* found in patients with high levels of calcium in their urine (hypercalcuria), "moderate protein restriction decreases calcium excretion, mainly through a reduction in bone resorption and renal calcium loss; both are likely due to a decreased exogenous acid load. Moreover, dietary restriction ameliorates the entire lithogenic profile in these patients." (69:267)

Eighteen patients were fed a diet higher in animal protein with 14% of the calories from protein, (59% from red meat, chicken, and dairy products). The American Diet is typically 14% to 20% protein. (People on diets like the Zone are getting 30% protein. And a follower of the Atkin's diet may be getting a diet of 35% to 75% protein.) The low protein diet was 9% of the calories from protein (43% from animal foods). This resulted in a 31% decrease in calcium lost into the urine.



SIMPLE • SUSTAINABLE • VITALITY

**Dr. McDougall's newsletter, April/May 1999 ([www.drjohnmcdougall.com](http://www.drjohnmcdougall.com)):**

Kidney stones affect up to 5% of the population, with a recurrence rate in afflicted individuals of 50 to 80 percent. Calcium based stones make up 80 to 95% of the total number of stones people develop. They are most common in men and the average age of onset is in their thirties. Stones usually cause no symptoms until they start to pass through the ureter. With passage, pain begins in the back (flank) and progresses over the next 20 to 60 minutes to become so severe that narcotic drugs are required. Blood is usually found in the urine.

Diet has been recognized as the cause of kidney stones for many years. Industrialized countries have a higher incidence of stones compared to underdeveloped countries; and high dietary protein intake is believed to be the cause. Vegetarians have a low incidence of kidney stones (*N Engl J Med* 328:833, 1993). High protein intake is known to cause increased calcium excretion. High protein, high meat, diets also increase other substances in the urine that lead to the formation of kidney stones, such as uric acid and oxalic acid. An elevated concentration of calcium in the urine, a condition known as hypercalcuria, is the most frequently found abnormality of people who form stones and is present in up to 60% of patients with kidney stones. Supersaturation of the urine with calcium, oxalic acid, and uric acid leads to the precipitation of a stone.

The average American diet, which is high in protein and low in fruits and vegetables, generates a large amount of acid from the sulfate and phosphate containing amino acids (*J Nutr* 128:1051, 1998). The highest acid loads are provided by red meat, poultry, fish, and eggs. Some cheeses and grains provide acid. Phosphoric acid from colas is another source of strong acid. The skeleton acts as the primary buffering system for this acid load. The bones dissolve releasing carbonate, sodium and citrates which serve to neutralize the acid. Fruits and vegetables actually provide alkaline materials to neutralize the acids from other sources, thus protecting the bones and preventing kidney stones. The elderly may be even more sensitive to the effects of an acid-laden diet.

Interestingly, the way calcium supplements, such as calcium citrate, lactate, or carbonate may benefit the bones and prevent kidney stones is not from the calcium part of the supplement, but from the buffering activity of the citrate, lactate, or carbonate. Adding alkaline fruits and vegetables to the diet is actually believed to cause people to regain lost bone (*J Nutr* 128:1051, 1998).

**Kidney Stones: Lemonade stops them recurring**

If you are suffering from recurring kidney stones, start drinking lemonade concentrate. The drink is one of the most effective ways of stopping the problem, as a small study has discovered.



SIMPLE • SUSTAINABLE • VITALITY

It's been tested on 11 patients who had recurring kidney stones caused by low urinary citrate excretion. Every day they drank two litres of water that included 120 ml of concentrated lemon juice containing 5.9 g of citric acid.

After several years of treatment, they reported an 87 per cent decrease in stone formation. (Source: Journal of Urology, 2007; 177: 1358-62).

### **Another Great Tip from Candace Corson, MD**

She told me that in her practice, the only time she prescribed isolated supplements was using magnesium for calcium oxalate kidney stones. Apparently, there is a 90% decrease in reoccurrence of calcium oxalate stones with supplementation of elemental magnesium, either 400 mg a day of magnesium citrate or 500 mg of magnesium glycinate – if you tend toward constipation, use the citrate form and if you tend towards loose bowels, use the glycinate (chelated with glycine). This was her prescription for anyone not on dialysis.

So, in addition to taking Juice Plus+ – which should help a great deal - an added measure can be the use of elemental magnesium. Of course, my opinion is that taking Juice Plus+ and changing to a primarily plant-based diet should do the trick, as plants are full of magnesium.