

CYSTINURIA

Definition:

Cystinuria results in a large amount of cystine in your body. The cystine is filtered by the kidney and since cystine is poorly dissolved in the urine, stones will form.

Treatment:

The treatment goal is to keep cystine concentration less than 200mg per liter of urine to prevent stone formation. Therefore, any combination of increasing fluid intake or reducing cystine excretion by medication should stop stone formation.

Medications:

Thiola (alpha-mercaptopropionylglycine) lowers the cystine levels in the urine.

D-Penicillamine lowers the cystine levels in the urine.

Side Effects:

Both D-Penicillamine and Thiola cause the same type of side effects, although Thiola is less toxic than the D-Penicillamine. Side effects include impaired taste, tingling, or numbness in your feet or hands. **Contact your doctor immediately should you experience any of these problems**

Nutrition Recommendations:

1. Increase fluids to at least 100 ounces (ten-10 ounce glasses every day). Try to drink fluids throughout the day, including in the evening and bedtime. Water is the best beverage, it is non-caloric, non-caffeinated, and contains insignificant amounts of solutes. Other recommended fluids are lemonade and fruit and vegetable juices.
2. Limit the amount of sodium to 2500 mg/day or less. 2500 mg is equivalent to about 1 teaspoon of table salt. Reduce high-sodium foods, such as canned soups and vegetables, deli and luncheon meats, cheeses, restaurant or fast foods, convenience foods, salted snack foods. Eat more fresh foods. Instead of salt or seasonings containing sodium, use fresh lemons, herbs, or spices. Check labels for ingredients and hidden sodium, such as monosodium glutamate (MSG), sodium bicarbonate (baking soda or baking powder), disodium phosphate, sodium alginate, and sodium nitrate or nitrite. Look for canned, boxed, frozen, and prepared foods with less than 300 mg of sodium per serving.
3. Avoid heavy intake of red meat protein. Limit daily protein intake to 8-12 ounces per day of beef, poultry, fish, and pork. Twelve ounces is equivalent in size to about three decks of cards. Increase protein intake from other sources, such as beans, grains and vegetables.