Diet Tips to Prevent Kidney Stones

Kidney stones can form in adults and children for a couple of reasons. You can help prevent kidney stones from forming by making small changes to your child’s diet. This handout can give you tips on how to make these diet changes.

WHAT IS A KIDNEY STONE?
A kidney stone is a small, hard mass made of different substances in the body. They form in the kidneys and can cause pain when they leave the body through urine. Kidney stones can be different sizes, but most look like grains of sand.

WHAT CAUSES KIDNEY STONES?
Kidney stones can be caused by 2 things, which are:
- High levels of different substances in the body, like calcium or uric acid (a substance in urine)
- Lower levels of urine than usual
  Even when your body makes normal amounts of different substances, kidney stones can still form if your body makes less urine than usual.

Your child might be more likely to have kidney stones if other family members have had them or if your child has certain health issues. Most kidney stones are made of calcium, but other are made of other substances, like uric acid.

Did you know?
If your child had kidney stones even with calcium, he/she doesn’t need to change the amount of calcium he/she has every day. Calcium helps builds strong bones as your child grows. Not having enough calcium can make bones weak.
TIPS FOR ALL CHILDREN

For all children who have kidney stones, it’s important to follow these tips to prevent kidney stones:

- **Drink 6-8 glasses of water throughout the day, including at least 1-2 glasses of water at night**
  
  Drinking enough water helps prevent all kinds of kidney stones by flushing away substances that might form kidney stones.

  Water is the best fluid your child can drink to prevent kidney stones. Other drinks, like orange juice or lemonade, can also help, but they also add extra, unnecessary sugar to your child’s diet.

  6-8 glasses = 50-67 ounces or 1.5-2 liters.

  If the urine color is like water, your child is drinking enough fluid.

- **Have low amounts of salt, or sodium**

  Eating low amounts of salt (also called sodium) helps lower the amount of substances that might form kidney stones. Here are some tips for lowering the amount of salt in your child’s diet.

  - Eat foods with fewer than 250 mg of salt per serving.
  
  - Eat a meat-free (vegetarian) meal 2 times a week.
  
  - Eat fast food only 2 times a week.
  
  - Stay away from canned or packaged foods with ingredients like monosodium glutamate (MSG), baking soda (sodium bicarbonate), disodium phosphate, sodium alginate, sodium nitrate or sodium nitrite.

- **Have high amounts of potassium (more than 350g per serving)**

  Eating foods rich in potassium helps prevent kidney stones from forming. Some foods that are high in potassium are bananas, cantaloupe, honeydew melon, orange juice and papaya. Some foods with medium amounts of potassium include raisins, strawberries, watermelon, peaches and grapefruit.

TIPS FOR YOUR CHILD

If your child has certain types of kidney stones, he/she might need to follow a **low oxalate diet** or a **low uric acid diet**. Here are tips to prevent kidney stones depending on the diet your child should follow:

**Tips for a Low Oxalate Diet**

- Avoid certain fruits, vegetables and drinks that have oxalate in them.

  Oxalate is a type of salt in certain foods, especially some fruits, vegetables and drinks. Eat no more than 50 mg of oxalate every day.

  Here are fruits, vegetables and drinks your child should avoid on a low oxalate diet:

  **Vegetables:** Beans, beets, celery, chives, collards, eggplant, escarole, rutabaga, spinach, potatoes

  **Fruits:** Blackberries, red currants, dewberries, kiwi, strawberries, grapes

  **Drinks:** Chocolate milk, cocoa, coffee, tea

**Tips for a Low Uric Acid Diet**

- Try eating meat-free (vegetarian) meals at least 2 days a week to lower the amount of uric acid in your child’s diet.

  Uric acid is a substance formed when the protein from meat breaks down in urine.