Nutrition & Kidney Stones

Name__________________________________________
Height______ Weight______
Age______ BSA______
Nephrologist__________________________
Dietitian____________________________________

5 Nutrition Tips

1. Increase fluids.
2. Limit sodium.
3. Enjoy more fruits & vegetables.
4. Choose more plant protein.
5. Know the facts about nutrients and supplements.

Tip #1:

Drink more water

Water intake is the key to preventing stones.
Your child needs _____mL of fluid every day.

Daily Fluid Goal: _____ cups

<table>
<thead>
<tr>
<th>mL</th>
<th>Ounces</th>
<th>Cups</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>1500</td>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>2000</td>
<td>67</td>
<td>8</td>
</tr>
<tr>
<td>2500</td>
<td>83</td>
<td>10</td>
</tr>
</tbody>
</table>

What type of stone?

There are different types of kidney stones. Your doctor may test your child’s blood or urine to determine if there is a metabolic abnormality which may be causing the stones.

If your child is suffering from kidney stone disease, this handout will provide diet tips to help. This handout is good for all types of kidney stones. Depending on the particular metabolic abnormality, you may be instructed on additional restrictions if indicated.

Here are some simple tips to encourage your child to stay hydrated:

- Inspire your child to drink more water with brightly colored cups, straws, and re-usable water bottles.
- Have fun with water by adding fruits or cucumbers. Keep cold water in the refrigerator and lemons on the counter to squirt some flavor into your drink.
- Encourage our child to drink enough fluid so that their urine is pale or almost colorless.
- Enjoy sugar-free lemonade – which can help prevent stones.
Tip #2: Cut back on sodium

Children who eat diets high in sodium are at risk for kidney stones.

How to limit sodium:

Learning to read food labels can help control sodium intake. Food labels provide information about the amount of sodium and other nutrients per serving. When eating out, ask to see the nutrition information of your child’s meal. Be careful to count serving sizes and condiments.

Food labels should be checked for hidden sodium such as: salt, monosodium glutamate (MSG), sodium bicarbonate, disodium phosphate, sodium alginate, and sodium nitrate or nitrite. Ask your dietitian if you have questions about reading food labels.

Foods that contain high levels of sodium should be avoided. These include:

- Fast food and restaurant meals
- Processed meats such as hot dogs, sausage, deli meats, pepperoni, and bacon
- Canned soups and boxed meals
- Packaged and salted snacks
- Salt packets, sauces, and condiments

Tip #3: Eat more fruits & vegetables

Add a fruit or vegetable to every meal. Or enjoy them as snacks. Here are some ideas:

- fresh fruits such as sliced oranges, apples, tangerines, and kiwi
- sugar-free lemonade and fruit popsicles
- strawberries and cool whip for dessert
- unsalted macadamia nuts and dried mango
- celery, peanut butter, and raisins or “ants on a log”
- sliced cucumbers and cherry tomatoes
- green peppers and hummus
- sweet potato fries and no-salt ketchup
- mashed-cauliflower-potatoes
- frozen berries and yogurt
Encourage your child to enjoy more protein from plant foods like beans, peanut butter, veggie burgers, and unsalted nuts. Proteins from plant foods have the added benefit of other nutrients, such as potassium and phytates, that help to prevent stones.

Try these tips:
1. Go vegetarian for lunch or try “Meatless Mondays”.
2. Avoid high-protein fad diets which can lead to high calcium and acidity of the urine.
3. Avoid processed meats such as bacon, sausage, and hot dogs. These foods lack nutrients and are generally high in sodium.

Tip #4: Choose more plant proteins.

Your doctor may prescribe a vitamin supplement. It is important that your child takes this only as prescribed and visits the doctor to monitor blood levels regularly.

Always talk to the nephrologist before giving your child a vitamin or supplement.

Calcium supplements should be taken with food. It is best to take when eating a meal. Calcium-rich foods do not cause kidney stones. In fact, a diet that is rich in calcium can help protect against calcium-oxalate stones. Talk to your dietitian about how much calcium is recommended for your child. Choose a variety of sources such as yogurt, dairy, almond or soy milk, fortified orange juice, cooked greens, cheese, and tofu.

Tip #5: Know the facts about nutrients and supplements
**Vitamin C** (ascorbic acid) may be prescribed for children at risk for urinary tract infections. Avoid giving your child vitamin C unless instructed to do so by your physician. **Supplements can be harmful if taken in excess** and are generally *not* recommended for children with calcium oxalate stones. Daily requirement of vitamin C for children aged 4-18 years is 25-75 mg.

Encourage your child to eat a rainbow of fruits and vegetables.

<table>
<thead>
<tr>
<th>Food</th>
<th>Vitamin C per serving (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red pepper (1)</td>
<td>150</td>
</tr>
<tr>
<td>Broccoli (1 cup, cooked)</td>
<td>100</td>
</tr>
<tr>
<td>Strawberries (1 cup)</td>
<td>90</td>
</tr>
<tr>
<td>Orange (1)</td>
<td>70</td>
</tr>
<tr>
<td>Apple (1)</td>
<td>9</td>
</tr>
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