Vitamin C : Some Kids Are Not Getting Enough

McKenzie Pediatrics October 2008

Vitamin C, also known as **ascorbic acid**, is best known for causing **scurvy** when you don't get enough of it, with bleeding, bruising, hair loss, and bad effects on growth, healing, and the immune system. While scurvy is pretty unusual these days, more and more children are not eating enough fruits and vegetables, and therefore are not getting enough Vitamin C in their diets.

Vitamin C is an essential nutrient, but human bodies are not capable of making it on their own. Therefore, we rely on getting it from our daily diet. As many as 1 in 5 children do not get enough.

Unlike most vitamins and minerals, which can be a struggle to provide adequate amounts if your child is a picky eater, it is pretty easy to get enough Vitamin C. Consider that a single, medium orange can provide almost all the Vitamin C that most children need for an entire day.

Foods that are good sources of Vitamin C include:

*Red peppers
*Green peppers
*Strawberries
*Citrus Fruits (oranges, grapefruit, etc.)
*Tomatoes
*Mangos
*Cabbage
*Spinach
*Asparagus
*Collard Greens
*Papayas
*Broccoli
*Brussel Sprouts
*Kiwi Fruit
*Cantaloupe
*Cauliflower
*Raspberries
*Watermelon
*Kale
*Radishes

Even if your child doesn't eat many fruits or vegetables that are good sources of Vitamin C, most fruit juices, especially orange juice, that kids drink have some or as much as 100% of the recommended daily need of Vitamin C in each serving. It is the child who is not offered, or who will not eat, any fruits and vegetables, and who does not get any fruit juice fortified with or naturally containing Vitamin C who is at risk for Vitamin C deficiency.

Vitamin C plays an important role in skin healing, in fighting infections, and in iron absorption necessary to prevent anemia. It is a powerful anti-oxidant, and plays an important role in the metabolism of many important body chemicals and hormones, and in the metabolism of cholesterol.

Lack of Vitamin C leads to fragile blood vessels, potentially resulting in bleeding gums and more frequent nosebleeds and bruises. It also leads to less collagen production in the skin and bones, delaying wound healing, and causing weaker bones.

The most common age to begin seeing signs of Vitamin C deficiency is between age 6 months and 6 years. Initially, vague symptoms such as chronic diarrhea, irritability, and loss of appetite are possible. As the deficiency worsens, patients may experience bleeding and bruising, hair loss, painful limbs, joint discomfort, fatigue and a general lack of energy. Growth may be affected over the long term, and the child may experience more than the usual number of ordinary childhood infections.

The minimum recommended daily intake of Vitamin C varies for different ages:

* Age 1 to 3 years:	15 mg daily
* Age 4 to 8 years:	25 mg daily
* Age 9 to 13 years:	45 mg daily
* Age 14 to 18 years:	75 mg daily (for boys), 65 mg daily (for girls)
* Adult Men:	90 mg daily
* Adult Women:	75 mg daily
* Pregnant Women:	85 mg daily
* Lactating Women:	120 mg daily
* Smokers:	35 mg daily in addition to the RDI

It is difficult to take too much Vitamin C. Even at high doses, it is not considered toxic. But taking mega doses every day has not been shown to reduce the frequency of the common cold (although taking big doses for the first three days of a new cold seems to help reduce the length of the cold). Taking mega doses every day will increase the risk of excessive body iron, and of kidney stones.

The average children's chewable multivitamin contains 60 mg of Vitamin C, and the average liquid preparation 25-35 mg of Vitamin C. Therefore, for most children who are getting at least one or two servings of Vitamin C-containing fruits and vegetables each day, taking a daily vitamin provides more than enough Vitamin C for their body's needs.

But for children who do not eat fruits and vegetables, it is essential that they at least take a multivitamin EVERY DAY. In addition, they should take a daily Vitamin C supplement, readily available in relatively inexpensive over-the-counter forms. The maximum advisable Vitamin C supplement strength is 400 mg for children age 1 to 3 years, 650 mg for children age 4 to 8 years, 1000 mg for children 9 to 13 years, and 1800 mg for teens and young adults.

Please contact your child's physician's office if you have any further questions. Thanks for reading.