

Vitamin D and Your Child's Health

Eating a healthy variety of foods is a good way to get most vitamins and nutrients that your body needs. Unfortunately, there aren't many foods that naturally contain significant amounts of vitamin D. Milk and cereal are often supplemented with vitamin D but it turns out that many kids don't get enough. This is especially true during infancy and adolescence when rapid growth and bone development makes vitamin D particularly important.

Why Vitamin D?

Ensuring adequate levels of vitamin D in childhood can have life-long health benefits. Having very low levels of vitamin D in early childhood can cause rickets which is a disease of soft bones leading to bow legs, bone pain and fractures. While severe rickets is rare in the United States having low levels of vitamin D can increase the risk of bone fractures and lead to weak bones later in life.

Vitamin D and the Sun

Your skin is good at making vitamin D from sunlight but the sun rays that are good for making vitamin D are also the ones that can cause skin damage or even skin cancer. The American Academy of Pediatrics recommends that children protect their skin from sun exposure and take Vitamin D to avoid deficiency. Here in the Eastern Sierra the UV Index (a measure of the damaging rays of sun) reaches High, Very High or Extreme levels most days of the year and that means we all need to be extra careful to avoid sun exposure. Encourage kids to play outdoors as much as possible but protect their skin from damage by using broad spectrum sunscreen and wearing sun protective clothing, a wide brimmed hat and sun glasses. For more information on the UV Index and sun safety visit: <https://www.epa.gov/sunsafety>

Vitamin D Supplements

Children: Vitamin D 600 IU a day is recommended for children over a year of age.

Many children will get some vitamin D from fortified milk and cereal or from playing outdoors but due to increased sun protection and more indoor activities often they don't get enough especially in the winter months.

Vitamin D comes in concentrated drops which supply 600 IU in one drop which can be added easily to food or drink. Chewable tablets are also available which are generally safe for otherwise healthy children over three years of age but can be a choking hazard for younger children.

Adolescents: This is a time of rapid bone growth and therefore it is especially important to ensure adequate vitamin D and calcium intake. Adolescents who do not get at least 600 IU a day of vitamin D from their diet should take a supplement.

Supplemental vitamin D comes in a variety of forms for this age group to supply the recommended 600 IU a day.

Vitamin D levels in food sources:

Food	IUs per serving*	Percent DV**
Cod liver oil, 1 tablespoon	1,360	340
Swordfish, cooked, 3 ounces	566	142
Salmon (sockeye), cooked, 3 ounces	447	112
Tuna fish, canned in water, drained, 3 ounces	154	39
Orange juice fortified with vitamin D, 1 cup (check product labels, as amount of added vitamin D varies)	137	34
Milk, nonfat, reduced fat, and whole, vitamin D-fortified, 1 cup	115-124	29-31
Yogurt, fortified with 20% of the DV for vitamin D, 6 ounces (more heavily fortified yogurts provide more of the DV)	80	20
Margarine, fortified, 1 tablespoon	60	15
Sardines, canned in oil, drained, 2 sardines	46	12
Liver, beef, cooked, 3 ounces	42	11
Egg, 1 large (vitamin D is found in yolk)	41	10
Ready-to-eat cereal, fortified with 10% of the DV for vitamin D, 0.75-1 cup (more heavily fortified cereals might provide more of the DV)	40	10
Cheese, Swiss, 1 ounce	6	2

* IUs = International Units.

** DV = Daily Value. DVs were developed by the U.S. Food and Drug Administration to help consumers compare the nutrient contents among products within the context of a total daily diet. The DV for vitamin D is currently set at 400 IU for adults and children age 4 and older. Food labels, however, are not required to list vitamin D content unless a food has been fortified with this nutrient. Foods providing 20% or more of the DV are considered to be high sources of a nutrient, but foods providing lower percentages of the DV also contribute to a healthful diet.

U.S. Department of Agriculture, Agricultural Research Service. 2011. USDA National Nutrient Database for Standard Reference, Release 24. Nutrient Data Laboratory Home Page, <http://www.ars.usda.gov/ba/bhnrc/ndl> .