

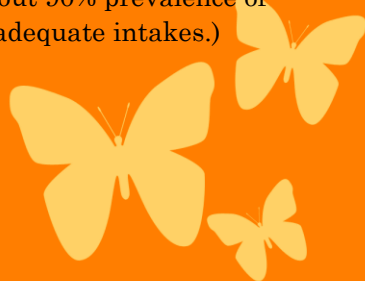
The Sunshine Vitamin



August 2015

Vitamin D Status of Canadians

The Canadian Community Health Survey (CCHS) in 2004 reported a very high prevalence of inadequate vitamin D intakes from food sources at a national level (range 75-96%; with most age and gender groups having about 90% prevalence of inadequate intakes.)



What is Vitamin D?

Vitamin D is a fat-soluble vitamin, meaning that your body can store extra amounts of this vitamin. It is called the ‘Sunshine Vitamin’ because our bodies make vitamin D from the sun. As sunlight hits our skin, the ultra-violet B rays are used to make vitamin D. Vitamin D is best known for its role in keeping bones and teeth healthy and strong. This vitamin also helps absorb calcium in your body. Too little vitamin D can cause calcium and phosphorus levels in the blood to decrease, leading to calcium being pulled out of the bones to help maintain stable blood levels. This can cause rickets in children and osteomalacia (softening of the bones) or osteoporosis (fragile bones) in adults.

Recent research suggests that vitamin D may also have benefits in fighting infections, reducing heart disease risk factors, and preventing diabetes, multiple sclerosis, and some types of cancers. The recommended intakes for vitamin D have increased over the years for people of all ages.



Am I at risk for Vitamin D deficiency?



Some people may not get sufficient amounts of vitamin D from the foods in their diet. For example, individuals who are lactose intolerant, avoid dairy products in their diet, or have limited exposure to the sun may be at risk of deficiency.

A study done by Paul Wischmeyer, MD, an expert in Critical Care medicine; about the Relationship of Vitamin D Deficiency to Clinical Outcomes, explains how you cannot make adequate amounts of vitamin D if you live north of Atlanta Georgia.

Dr. Wischmeyer describes how from September to March, you are unable to make enough vitamin D no matter how long you spend outdoors. Canadians are therefore in a compromised position during those months, and choosing vitamin D-rich foods and supplements are highly recommended.

Common Foods that Provide High Vitamin D Amounts:

Check out the Nutrition Facts table on food labels to see if a packaged food has vitamin D. A food has a lot of vitamin D if it has at least 15% Daily Value (DV) for vitamin D per serving.

Food	Serving Size	Vitamin D (IU)
Salmon, sockeye/red, canned, cooked or raw	75g (2 ½ oz.)	530-699
Soy Beverage, fortified with Vitamin D	250ml (1 cup)	123
Milk (3.3% homo, 2%, 1%, skim, chocolate milk)	250ml (1cup)	103
Egg, Yolk, cooked	2 large	57-88
Sardines, Pacific, canned	75g (2 ½ oz.)	144
Tuna, albacore, raw or cooked	75g (2 ½ oz.)	82-105
Halibut, cooked	75g (2 ½ oz.)	144

Fortification:

Cow's milk, infant formula, and margarine have added vitamin D as required by the Canadian Government. Other common food sources with added vitamin D include yogurt and cheese made with vitamin D-fortified milk, Goat's milk, plant-based beverages (e.g. soy)



How much vitamin D do we need?

Age in Years	Aim for an intake of international units (IU/day)	Stay Below* IU/day
Infants 0-12 months old	400	1000
Children 1-8 years old	600	2500
Children 9-18	600	3000
Men and women 19-50	600	4000
Men and women 51-70	600	4000
Men and Women 71 and older	800	4000
Pregnant and Breastfeeding women 19 and older	600	4000

Supplementation is strongly suggested for the following individuals

1) Breastfed infants:

Infants who are completely or partially breastfed should receive a daily vitamin D supplement of 400IU from birth until 2 years. Vitamin D can be found in drops, in pharmacies and grocery stores. Supplements should continue until the baby's diet includes at least 400IU of vitamin D from food sources or until the baby reaches one year of age. Formula fed infants who are transitioned to drinking cow's milk after 2 years do not require a vitamin D supplement because infant formula is fortified with the nutrient.

2) Populations residing in northern geographical areas:

People living in these areas are unable to make sufficient amounts of vitamin D .

2) Adults over 50 years of age:

Aging causes skin to lose some of its ability to make vitamin D from the UVB rays. Also, as we age, our bodies are less able to absorb vitamin D from the food we eat. Health Canada recommends that adults over 50 years take a supplement of 400IU/day.

3) People with skin darkly pigmented with melanin:

People of this skin colour are less able to make vitamin D from the sun.

4) People with medical conditions:

Medical conditions such as Crohn's disease, cystic fibrosis, celiac disease, and some forms of liver disease, may not absorb



Bottom Line

The best way to ensure you are getting sufficient vitamin D is by taking a supplement. The type of vitamin D you should purchase is vitamin D₃ (also called cholecalciferol). This is the most common type of vitamin D found in supplements in Canada. Some calcium supplements also have vitamin D added