Vitamin D

I was at a Multiple Sclerosis seminar for work this week and heard a very interesting lecture that can be applied outside of MS.

In the 1930's Vitamin D deficiency led to rickets and sunlight, with its UVB radiation, treated and prevented it and led to fortification of foods and drink and cod liver oil. Somewhere between then and now there began a perfect storm, of skin cancer concerns and sunscreen, the promotion of low protein diets, mercury concerns and the reduction of outside activity with technology bringing us little need to leave a building. For example, A sunscreen of 15 absorbs 99% of the UVB radiation, and thus reduces vitamin D3 in the skin by 99%.(1)

Because of decreased sun exposure of people living above and below the 35th parallels with long winters and the angle of sun, the risk of dying from cancer, type 1 diabetes, multiple sclerosis and hypertension is higher. In Vitamin D deficiency, one is only absorbing 10-15% of calcium and 60% of phosphorus. This prevents bones being built right and causes the parathyroid gland to freak out and pull calcium from the bones and back into the kidneys, making the bones weak. This process, known as secondary hyperparathyroidism, increasing risk of fracture. Not just in kids, adults with this are often misdiagnosed as having fibromyalgia, chronic fatigue syndrome or arthritis with throbbing, aching bone pain, though no rickets as the bones are dense and the growth plates are closed.

Even in sunny Southern California, neurologists report levels as low as 11ng with the optimal level being 40ng. Proper exposure to sunlight, oily fish such as salmon, mackerel, and herring and oils from fish, including cod liver oil and Vitamin D3 pills (easiest to absorb) are the only sources that can make a difference. It has been proven that every tissue and cell in the body has receptors that can convert and use Vitamin D.(2)

It is very rare to take too much Vitamin D3. The neurologist from Univ Colorado says the upper limit should not exceed 5000 IU a day. A good level is 2000 IU for adults and children by supplementation, especially if not eating the food choices below. (3)

You can find out your vitamin D levels using a Vitamin D test, also called 25-hydroxyvitamin D. Either a doctor's visit or an at home test by a reputable company.

Wild Caught Salmon vs. Farmed Salmon Vitamin D levels -

wild salmon- average 500–1000 IU vitamin D in 100g (3.5 ounces)
farmed salmon- average 100–250 IU vitamin D per 100g serving (3.5 ounces)

1.http://ajcn.nutrition.org/content/87/4/1080S.full

Vitamin D supplement to purchase: