

Vitamin D supplementation

Your vitamin D levels are low, but you are not alone. People all over the United States are being diagnosed with vitamin D deficiency. In our community, approximately 2/3 of people over the age of 50, and ¼ of adults and children under age 50, who fracture a bone have insufficient vitamin D levels.

Insufficiency is defined as a 25-Vitamin D level under 32. It is our goal to raise your vitamin D levels above 32, and help you maintain sufficient levels. It has been shown that lifeguards tend to have 25-Vitamin D levels 2.5 times higher than normal. While the sun is an excellent source of Vitamin D, exposing one's self to sunlight can also increase the risk of getting skin cancer. Unfortunately, using SPF 8 sun-block decreases the body's ability to turn sunlight into Vitamin D by 95%. Fortunately, it is easy and affordable to supplement your Vitamin D levels without adding to the risk of getting cancer. This can be done through diet and/or by taking one of many excellent supplements available today (*see table*). Fish oils are particularly high in Vitamin D, but few of us consume diets centered on oily fish, and most of us find Cod liver oil to be distasteful. Luckily, there is a wide variety of outstanding and readily available supplements on the market. We have prescribed one or more of these supplements for you.

If you received a prescription for 50,000 IU of Vitamin D, this is a plant derived form called ergocalciferol or Vitamin D2. While Vitamin D2 does a great job of rapidly increasing your levels, the body has a hard time storing plant derived Vitamin D. 50,000 IU of ergocalciferol is about equal to 20 minutes of sun exposure in the middle of the day during summer.

Additionally, you may have been advised to purchase Vitamin D over the counter. This form of Vitamin D comes in tablets or gels. This is the same type of vitamin D that your skin makes, and it is derived from animal sources. It is called cholecalciferol (Vit D3). We will likely recommend between 1000 IU and 3000 IU in addition to the Vitamin D you get in your calcium tablets (which is Vitamin D3). Most people need 200 IU to 3000 IU daily to maintain their Vitamin D stores, and may need more if they are Vitamin D deficient. While this might seem like a lot of Vitamin D, it is really not much at all. Your exposed skin can easily make around 2000 IU of Vitamin D3 walking across a large parking lot in the middle of summer! It is really not possible to overdose from Vitamin D.

Anyone living north of southern Georgia does not make enough Vitamin D in their skin outside of summer (roughly June 1-Sept1). Vitamin D is extremely vital for bone health and in decreasing the risk of fracture, but it also plays an essential role in maintaining your nervous system, immune system, muscle strength, and susceptibility to certain autoimmune diseases. So please, take your recommended Vitamin D!

Current cheapest source: Spring Valley Vitamins at Walmart
200 uncoated tables at \$5.00.

Easy to find and different doses: Walgreens has 400 IU, 1000 IU, and 2000 IU
Gels and tablets.

Trouble swallowing pills? Vit D dots (400 IU) dissolve on the tongue and are available at the Vitamin Shop. Alternatively, you can just prick a gelcap and empty it into flavored yogurt.

Sources of Vitamin D

Natural Sources	
Salmon	
Fresh, wild (3.5oz)	600-1000 IU of vitamin D3
Fresh, farmed (3.5oz)	100-250 IU of vitamin D3
Canned (3.5oz)	300-600 IU of vitamin D3
Sardines , canned (3.5oz)	300 IU of vitamin D3
Mackerel , canned (3.5oz)	250 IU of vitamin D3
Tuna , canned (3.6oz)	230 IU of vitamin D3
Cod liver oil (1 tsp)	400-1000 IU of vitamin D3
Shiitake mushrooms	
Fresh (3.5oz)	100 IU of vitamin D3
Sun-dried (3/5oz)	1600 IU of vitamin D3
Egg yoke	20 IU of vitamin D3
Exposure to sunlight , ultra-violet B radiation (0.5 minimal erythema dose)	3000 IU of vitamin D3

Fortified Foods	
Fortified Milk (8oz)	100 IU, usually vitamin D3
Fortified orange juice (8oz)	100 IU, of vitamin D3
Infant formulas (8oz)	100 IU of vitamin D3
Fortified yogurts (8oz)	100 IU, usually vitamin D3
Fortified butter (3.5 oz)	50 IU, usually vitamin D3
Fortified margarine (3.5 oz)	430 IU, usually vitamin D3
Fortified cheeses (3 oz)	100 IU, usually vitamin D3
Fortified breakfast cereals (1 serving)	100 IU, usually vitamin D3

Supplements	
Prescription	
Vitamin D2 (ergocalciferol)	50,000 IU/capsule
Drisdol (vitamin D2) liquid supplements	8,000 IU/ml
Over the counter	
Multivitamin	400 IU vitamin D1, D2, or D3
Vitamin D3	400, 800, 1000, or 2000 IU