# 10 Sources of Vitamin D2 and D3

Written by <u>Dr. Edward Group</u>, Founder, Global Healing

There are five different types of Vitamin D (D1, D2, D3, D4 & D5), but D2 and D3 are the only types that our bodies can use. When something just says "vitamin D" it is generally referring to D2 or D3 (or a combination of the two). Vitamin D is a pro-hormone, which is the precursor to a hormone. In its raw form (sun exposure, foods, supplements), Vitamin D is inert and has to go through a series of complex biochemical reactions before your body can use it. These reactions produce calcitriol, which is the form of Vitamin D that is used by your body (D2 and D3). Vitamin D is one of the only vitamins that your body can produce by itself.

# What is the catalyst that gets your D production going?

Good old-fashioned sunshine! It's the ultraviolet-B radiation (UVB) that enables vitamin D production to occur in the skin. Vitamin D is produced in equal amounts in both people with fairly pigmented and darkly pigmented skin after exposure to UVB radiation (sunlight) [1]. Sunlight is important for Vitamin D production, but the strength of sunlight and the intensity of UVB exposure can be affected by season, distance from the equator, and even personal habits. If you have a job that keeps you indoors during daylight hours, or you work nights, you don't produce as much Vitamin D as someone who is

outside for at least ten to fifteen minutes each day.

Vitamin D can be supplemented by eating the right foods. See page 2 here.

#### **Benefits of Vitamin D**

Vitamin D supports bone development by enabling calcium uptake by your body. It is also important for healthy immune system function and may help lower your risk of contracting colds [3]. Vitamin D also helps confer innate immunity which may protect your body from the influenza virus [4]. Vitamin D has had a positive effect on many different diseases. including multiple sclerosis [5], arthritis [6] and even cancer [7]. Children with higher vitamin D levels are less likely to suffer from asthma [8] and allergies than those who are vitamin D deficient. Mental agility might be maintained by adequate levels of the vitamin, especially in the elderly [9]. Because Vitamin D promotes calcium absorption, it is important for bone mineralization (hardening), which keeps your bones strong and supple. A sufficient amount of Vitamin D helps prevent joint discomfort.

There is also evidence suggesting that Vitamin D may play an important role in weight loss [10], both in adults and in children. Some researchers are exploring whether vitamin D

# 10 Sources of Vitamin D2 and D3

Written by Dr. Edward Group, Founder, Global Healing

may act as a natural protector from low levels of radiation [11], such as the background radiation we receive from sunlight and other sources.

# The Top Foods Containing Vitamin D

- Shiitake and Button Mushrooms
- Mackerel
- Sockeye Salmon
- Herring
- Sardines
- Catfish
- Tuna
- Cod Liver Oil
- Eggs
- Sunshine

#### 1. Shiitake and Button Mushrooms

Dried shiitake mushrooms are high in vitamin D. [3] Shiitake, button, and oyster mushrooms are also rich in vitamins B1 and B2. [4] To benefit from the high vitamin D content, make sure that you find mushrooms that have been dried in the sun, not by artificial means.

### 2. Mackerel

A 3-ounce portion of this omega-3-rich fish will give you 90 percent of your recommended daily amount of vitamin D.<sup>[5]</sup> The FDA recommends that Americans eat oily fish for their omega-3 essential fatty acids (EFA's).

# 3. Sockeye Salmon

A small 3-ounce portion of cooked salmon will give you 90 percent of the recommended dietary intake of vitamin D. [5] Make sure to purchase salmon that was caught from the wild or sustainably farmed.

## 4. Herring

Herring are high in vitamin D because they thrive on plankton, which is a hearty source of vitamin D. [6, 7]

#### 5. Sardines

Sardines are one of the best dietary sources of vitamin D. One small tin can of sardines will provide you with approximately 101 percent of your daily needs. These tiny canned fish are also a great source of vitamin B12, omega-3 fatty acids, protein, and selenium.<sup>[8]</sup>

#### 6. Catfish

Catfish are a freshwater fish that have a habit of feeding on minuscule organisms that use sunlight to produce vitamin D. [9]

## 7. Tuna

You'll have to eat 6 ounces of tuna daily to obtain 50 percent of your vitamin D needs. [10] Fresh, wild-caught tuna is the most nutritious. Remember, oily fish can also provide

# 10 Sources of Vitamin D2 and D3

Written by Dr. Edward Group, Founder, Global Healing

the body with "good fats" that support memory and brain function.

## 8. Cod Liver Oil

If you can stomach the strong aroma, this oil is super-rich in vitamin D. Just a teaspoon offers 113 percent of your daily vitamin D needs. This golden oil is also rich in omega-3 fatty acids. Some medical experts recommend taking vitamin D to improve brain function and optimize nervous system function.

# 9. Eggs

Eggs contain vitamin D in small amounts.

Eating one egg will provide you with approximately 21 percent of your daily needs. It's best to only consume free-range eggs from a local farm, if possible.

#### 10. Sunshine

Okay, I know it's not food, but daily exposure to sunshine can seriously increase your vitamin D levels. In fact, this vitamin is often called the "sunshine vitamin." When sunlight hits the skin, it stimulates the production of vitamin D from cholesterol. This is great news for those of us that can take a daily sunbath. But, for those of us who can't, you must boost your intake from the foods you eat. This may explain why native Inuit people in Alaska ate so much fish!