

# Vitamin D





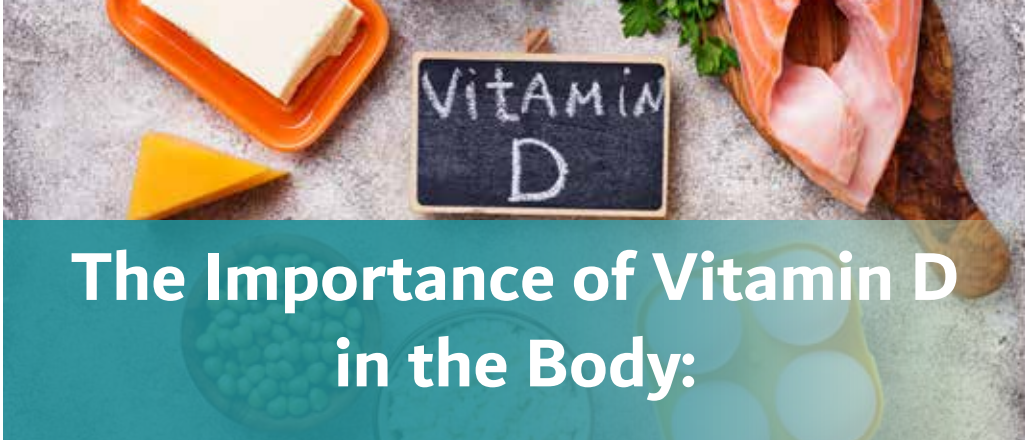
### **Vitamin D:**

One of the fat-soluble vitamins that the body produces when exposed to UV sunshine. It is considered the main source of vitamin D synthesis through the skin. In addition, it can be obtained from food sources; however, the amount of vitamin D in these foods is relatively low. And vitamin D can also be consumed as a food supplement.

### **Synthesizing Vitamin D:**

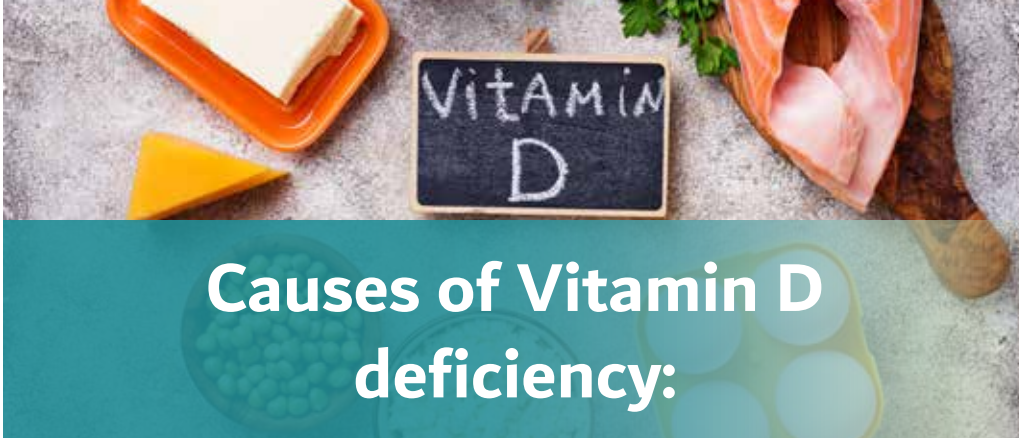
It is synthesized under the skin by exposure to sunlight (UV) and stored; the degree of synthesis depends on several factors: the skin's color (the dark color obscures part of the rays), the nature of the environment, and the availability of rays.)

**Must expose hands, face, and arms to sunlight for at least 15 minutes, three times a week while avoiding sun exposure during peak hours.**



## The Importance of Vitamin D in the Body:

- Boosts bone health.
- Maintains the body's immune system.
- Resists to cancer cell activity.
- Regulates insulin in the blood.
- Helps maintain blood pressure.
- Promotes children's health.



## Causes of Vitamin D deficiency:

- Insufficient exposure to sunlight.
- Ageing reduces the essential substance consisting of vitamin D in the skin.
- Lack absorption of vitamin D in the small intestine due to the intestinal diseases.
- Liver disease.
- Kidney disease.
- Malnutrition.
- Take some medications.
- Some genetic diseases in children.

### | Symptoms of Vitamin D Deficiency:

- Rickets disease in children.
- Osteoporosis.
- Arthritis.
- Increases risk of having heart disease and high blood pressure.
- Chronic fatigue.

### | Excessive Vitamin D Causes:

- Kidney problems.
- Calcium build-up in the body.
- Digestive disorders.
- Atherosclerosis and tissues.
- Irregular heartbeat.



**Yes. Your doctor can request a blood test to see if you have enough vitamin D.**

Doctors measure vitamin D levels in people at risk of vitamin D deficiency. These include persons who:

- Spend most or all of their time indoors and are not exposed to sunlight.
- They have medical problems (such as digestion dysfunction) that prevent the absorption of vitamin D.
- They have osteoporosis, which makes the bones weak.
- Suffer from some chronic diseases such as kidney failure.



## Where to find vitamin D?

Sunlight is one of the main sources that helps produce vitamin D in the body, preferably it is good to get sun exposure for (15-30) minutes 3 days a week during off peak hours.

### Food sources:

- Fortified milk and its derivatives.
- Whale liver oil.
- Egg yolks.
- Liver.
- Fish such as salmon, tuna, and sardines.
- Fortified foods.
- Fortified breakfast cereal.
- Soymilk.

### Required amounts of vitamin D:

- **Newborns:** the age of 1 year and 400 IU
- **Children:** 3-1 years of age and 600 IU
- **Teens:** 18-14 years of age and 600 IU
- **Adults:** 70-19 years of age and 600 IU
- **Seniors:** Age 71 and over 800 IU

**With exposure to the sun, and in the case of non-dose exposures up to 1,000 IU.**