

D.A.V. PUBLIC SCHOOL, SECTOR 48-49, UPPAL'S SOUTHEND, GURGAON

FROM
THE DOCTOR'S DESK



Dear students,

Have you noticed that in past few years people are becoming more and more conscious about the requirement of **Vitamin D**. This is because of the increasing awareness about the health problems of vitamin D deficiency. Vitamin D deficiency is the most common Nutritional deficiency in the world.

In this month's Health Bulletin we will improve our knowledge about various aspects of **Vitamin D ("Sunshine" Vitamin)**.

What is Vitamin D?

Vitamin D is a fat- soluble vitamin. The specialty of this Vitamin is that it can be produced endogenously (within the body) when ultraviolet rays from the sunlight fall on the skin. 80% of Vitamin D needed can be obtained through adequate exposure to sunlight.

Why children need Vitamin D?

Vitamin D has various functions in the body-

- Helps in absorption of calcium thus helping in bone-building process
- Helps the body to fight against infection
- Maintains the immune system of the body
- Helps in prevention of heart disease, diabetes and certain cancers

What are the causes of Vitamin D deficiency?

- Decreased exposure to sun(UV rays-B)
- Decreased nutritional intake(strict vegetarian diet)
- Age (common in elderly)
- Malabsorption diseases
- Chronic liver disorders

What are the factors that decrease the production of Vitamin D obtained from sun?

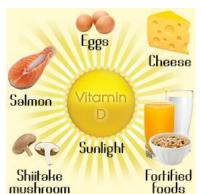
- Skin melanin content(dark skinned need more exposure)
- Cloud or smog cover(decreases ultraviolet radiation exposure)
- Sunscreen applied(SPF > 8 decreases UV radiation exposure)
- Window glass(UV radiation does not penetrate glass)

> What are the sources of vitamin D?

The cheapest and most easily available source is **SUNLIGHT**.

The other dietary sources are-

- Fish
- Fish and cod liver oil
- Liver
- Mushroom
- Egg yolk
- Milk and dairy products
- Fortified foods- dairy and grain products



> Which test is done to identify Vitamin D deficiency?

The most accurate way is to measure 25-hydroxy Vitamin D levels in blood. A level less than 20 nanograms / millilitre is considered as deficiency of Vitamin D in body.

- What are the signs of Vitamin D Deficiency?
- Frequent aches and pains
- Frequent fractures
- Muscle weakness
- Rickets

What is the daily requirement of Vitamin D?

Daily requirement of Vitamin D is 400 IU to 600 IU.

- How can we prevent the deficiency of Vitamin D?
- Adequate exposure to sunlight (daily 10-15min) preferably in the morning hours before 10am and after 4pm in the evening.
- Consume Vitamin D rich food as advised above.



