



## 25(OH)-D: help to monitor vitamin D levels.

25(OH)-D is an important indicator of osteoporosis (bone weakness) and rickets (bone malformation).

### Single Panel Test Cartridge

#### Advantages

- ◆ Easy to Use
- ◆ Room Temperature Storage
- ◆ Wide Detection Range
- ◆ Different Specifications to Meet Different Needs



25(OH)-D

## Vitamin D test done in the patient who have

- ◆ Symptoms of Vitamin D deficiency like: Bone weakness; Bone softness in children; Fractures
- ◆ Osteoporosis
- ◆ Obesity
- ◆ Lack of exposure to sunlight
- ◆ Difficulty in fat absorption, such as cystic fibrosis and Crohn's disease and in patients who have undergone gastric bypass surgery.

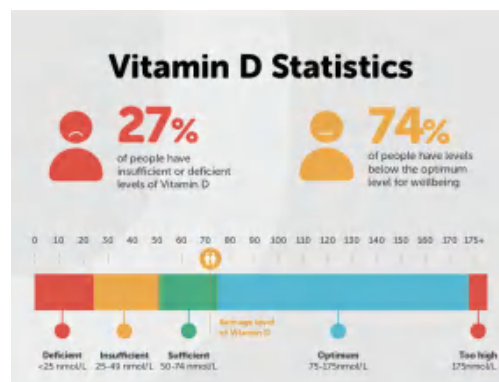
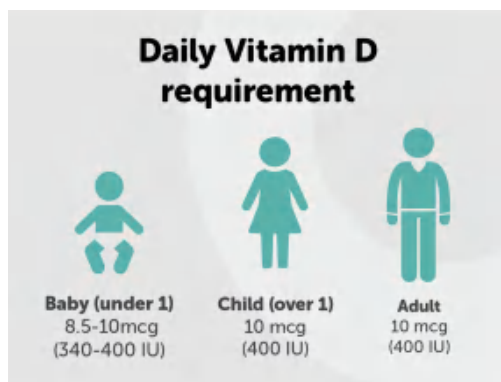
## Biological Function of Vitamin D

Vitamin D is a fat-soluble vitamin that is naturally present in very few foods, added to others, and available as a dietary supplement. It is also produced endogenously when ultraviolet rays from sunlight strike the skin and trigger vitamin D synthesis. Vitamin D obtained from sun exposure, food, and supplements is biologically inert and must undergo two hydroxylations in the body for activation. The first occurs in the liver and converts vitamin D to 25-hydroxyvitamin D [25(OH)D], also known as calcidiol. The second occurs primarily in the kidney and forms the physiologically active 1,25-dihydroxyvitamin D [1,25(OH)2D], also known as calcitriol.

### Vitamin D

- Regulation of Immune Function
- Growth and Bone Mineralization
- Regulation of Phosphorus and Calcium Homeostasis
- Regulation of Muscle Calcium Transport
- Regulation of Insulin Secretion
- Induction of Apoptosis
- Control of Cell Proliferation
- Stimulation of Cell Differentiation

## Vitamin D Level Monitoring



## Vitamin D Clinical Performance

- ◆ Monitoring of vitamin D level
- ◆ Monitoring of osteoporosis and osteoarthritis
- ◆ Auxiliary diagnosis of vitamin D deficiency in pregnant women
- ◆ Auxiliary diagnosis of vitamin D deficiency in adolescent and diagnosis of rickets
- ◆ Auxiliary diagnosis of hypercalcemia and vitamin D intoxication