

Vitamin D, is an essential fat-soluble vitamin. Although classified as a vitamin, it should be considered a prohormone because it is involved in many metabolic processes in the body.

Vitamin D plays a role in calcium and phosphorus balance important in bone health, and nerve and muscle activity.

#### Vitamin D is Crucial to Bone Health

It prevents bone related issues such as Rickets, Osteomalacia, Osteoporosis Fractures and even helps with balance.

# **Vitamin D Can Improve Physical Performance**

Clinical evidence suggests that vitamin D plays a role in muscle metabolism and function. It also helps with asthma and has an anti-inflammatory role. It also regulates blood pressure, immune function, cell production, and insulin.

#### **Vitamin D is Beneficial for Brain Development and Function**

It may protect brain cells through detoxification pathways (production of antioxidant glutathione, inhibition of nitric oxide). Furthermore, it also helps synthesis of proteins necessary for survival of brain cells in aging and neurological diseases (neurotrophins).

### **Vitamin D Reduces Depression**

Deficiency of vitamin D was associated with an 8–14% increase in the prevalence of depression. Supplementation may reduce depressive symptoms, and improve physical functioning in patients with depression.

## **Vitamin D Improves Sleep Quality**

Low levels of Vitamin D were linked to lower sleep efficiency scores, and a greater chance of scoring below 70%. A healthy sleep efficiency score is generally considered to be 85% or higher.

Do not take too much! No more than 5,000 IU a day for adults. It is a fat soluble vitamin to toxicity can last for days. The greatest benefits of this vitamin is to make sure body is not running low on it. Supplementing above recommended daily intakes does not help much and too much can be toxic.