

## **Vitamin D3**

Vitamin D is necessary for utilization of calcium and phosphorus and in many ways acts as a hormone. The two most important forms of Vitamin D are cholecalciferol (D3), which is derived from our own cholesterol, and ergocalciferol (D2), a plant analogue derived from the diet.

The cholecalciferol is derived from cholesterol and synthesized by sunlight on the skin. Cholecalciferol Vitamin D is essential for bone growth and maintenance of bone density.

A dietary deficiency of Vitamin D inhibits the production of the protein that binds calcium in the intestines, so that calcium cannot be absorbed even if there is adequate intake. Deficiencies of Vitamin D are often found in the elderly and in women who have low intake of milk and receive inadequate exposure to sunlight. Vitamin D is potent in minute quantities; one microgram of cholecalciferol has 40 IU (International Units) of vitamin D activity.

Vitamin D3 is identical to the natural Vitamin D that is produced in the body with the help of UV sunlight. Vitamin D2, on the other hand, is merely an analog of D3 that is found in plants, but it does not protect the body as completely as D3.

Dosage: The dosing of Vitamin D3 is controversial, so work with a well-informed natural health professional.