

# Vitamin D3 5,000 I.U.



## Clinical Applications

- Supports Bone and Dental Health\*
- Supports Modulation of Immune Function\*
- Supports Musculoskeletal Comfort\*
- Supports Cardiovascular Health & Healthy Blood Sugar Metabolism\*

*Vitamin D is inadequate in many individuals and daily need appears to be higher than previously thought. Vitamin D's role in calcium metabolism and bone health is well known. However, it has many other important physiologic roles that are not as well appreciated.*

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## Discussion

Vitamin D3 5,000 I.U. supplies a naturally derived and bioavailable version of vitamin D known as cholecalciferol or vitamin D3. Supplied in high-potency amount of 5,000 IU for those needing to conveniently augment dietary intake. Daily vitamin D3 intake of 1,000 to 2,000 units, an amount shown to be safe and effective by clinical studies, is now advised by many experts.\*

Vitamin D is inadequate in many individuals and daily need appears to be higher than previously thought. The role of vitamin D in calcium metabolism and bone health is well known.\* However, it has many other important physiologic roles that are not as well appreciated. Vitamin D receptors are widely distributed in the body, including colon, prostate, breast, and ovary, where it acts to inhibit the excessive growth of body cells and tissues and helps cells mature normally.\* Adequate amounts of vitamin D come from consistent exposure to sunshine and are difficult to obtain from dietary sources. Postmenopausal women, older individuals, and those with malabsorption, limited sun exposure, or certain illnesses may need higher intakes of vitamin D. In the diet, this fat-soluble vitamin occurs naturally in only a few foods, such as mushrooms and some types of fish.

## Product Features

**Bone and Dental Health\*** Numerous studies have highlighted the importance of vitamin D to maintaining healthy bone density. In one 2013 study, 52 overweight men and women with suboptimal vitamin D levels were given either 7,000 IU of cholecalciferol daily or a placebo for 26 weeks. The vitamin D group significantly increased vitamin D levels in the blood and improved biomarkers of bone health.<sup>1,2</sup>

**Cardiovascular Health and Healthy Blood Sugar Metabolism** \*In light of the role that vitamin D plays in a variety of tissues and body systems, it comes as no surprise that much research from recent years has underscored its contribution to cardiometabolic wellness.<sup>3</sup> There is accumulating evidence that calcitriol helps strengthens cardiomyocyte function, vascular smooth muscle cells, and the vascular endothelium. Low levels of 25-hydroxyvitamin D are associated with diminished cardiovascular health.<sup>4</sup> In a recent study of 222 participants, slow coronary function was significantly higher in those with insufficient blood levels of the vitamin<sup>5</sup>; optimal vitamin D status has also been linked with a 40% cardiovascular system protective effect<sup>6</sup> as well as maintenance of healthy blood pressure levels.<sup>7</sup> Vitamin D has also been shown to support healthy blood sugar metabolism.<sup>8,9</sup>

**\*These statements have not been evaluated by the Food and Drug Administration.  
This product is not intended to diagnose, treat, cure, or prevent any disease.**



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**Modulation of Immune Function** \* One of the more profound functions of vitamin D is its ability to modulate immunity. An important recent study suggested that improving vitamin D status significantly affects the expression of genetic pathways linked to immune activity.<sup>10</sup> Vitamin D has been shown to boost the immune response by up-regulating specific genes that increase cellular production of natural compounds that protect us against pathogens.<sup>11</sup>

**Musculoskeletal Comfort**\* Numerous studies also point to the key role of vitamin D in supporting musculoskeletal strength and comfort.<sup>12</sup> In one study, among 62 adult patients with nonspecific musculoskeletal discomfort, over 95% had vitamin D deficiency and responded to replenishment of vitamin D. Moderate deficiency of vitamin D has also been shown to predict knee discomfort over a five year period and hip discomfort over two years.<sup>13</sup>

Supplement Facts		
Serving Size 1 Capsule		
Servings Per Container 100		
Amount Per Capsule	% Daily Value	
Vitamin D <sub>3</sub> (as cholecalciferol)	5,000 I.U.	1250%

Other ingredients: Cellulose, vegetarian capsule (hydroxypropyl methylcellulose, water), L-leucine, and silicon dioxide.

#### Suggested Use

1 capsule daily with food or as directed by a healthcare professional.

**Free of the following common allergens:** milk/casein, eggs, fish, shellfish, tree nuts, peanuts, wheat, gluten, and soybeans. Contains no artificial colors, flavors, or preservatives.

#### Caution

If you are pregnant, nursing, have a medical condition, or taking prescription drugs, consult your healthcare professional before using this product. Keep out of reach of children.

#### References

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