

# Vitamin D Family

Discover the D<sub>3</sub> absorption advantage—in liquid, tablets & softgels



Vitamin D is an important nutrient for the body and may be obtained from food, dietary supplementation, and exposure to sunlight's ultraviolet rays. If photosynthesis in the skin is insufficient (e.g., limited time in sunlight, wintertime, use of sunscreens, etc.), then dietary sources become increasingly important to health. According to the National Center for Health Statistics, three-quarters of US adults are deficient in Vitamin D.<sup>1</sup>

## D<sub>3</sub> 10,000 + K

### High-Potency Bioactive Vitamin D with Vitamin K

D<sub>3</sub> 10,000 + K provides 10,000 IU per softgel of vitamin D (as D<sub>3</sub>), designed for greater absorption. This high-potency formula also includes bioactive forms of vitamin K to complement vitamin D.

- Vitamin D helps support mineralization and healthy structure of bones, as well as immune health\*
- Supplies vitamin K as menaquinone-7 (MK-7)
- Vitamin K is a key vitamin in the metabolism of bone proteins important to bone integrity\*
- Adequate intake of vitamin K, as MK-7, may also play a role in vascular health\*
- Solubilized in oil to assist absorption in the digestive tract

## D<sub>3</sub> 5000™

### 5,000 IU of High-Potency, Bioactive Vitamin D<sub>3</sub>

D<sub>3</sub> 5000 features 5,000 IU of vitamin D<sub>3</sub> in easy-to-swallow softgels. This bioactive form of vitamin D is solubilized in oil to assist absorption in the digestive tract.

- Provides high-dose vitamin D<sub>3</sub> (5,000 IU)

## D<sub>3</sub> 5,000 + K

### 5,000 IU + K of High-Potency, Bioactive Vitamin D<sub>3</sub>

D<sub>3</sub> 5,000 + K provides 5,000 IU per softgel of vitamin D (as D<sub>3</sub>), designed for greater absorption. This high-potency formula also includes bioactive forms of vitamin K to complement vitamin D.

- Vitamin D helps support mineralization and healthy structure of bones, as well as immune health\*
- Provides high-dose vitamin D<sub>3</sub> (5,000 IU)\*
- Solubilized in oil to assist absorption in the digestive tract
- Available in easy-to-swallow softgels

## D<sub>3</sub> 2000™ Complex

### 2,000 IU of Vitamin D<sub>3</sub> with Isoflavones

D<sub>3</sub> 2000 Complex delivers 2,000 IU of the preferred form of vitamin D, as vitamin D<sub>3</sub>, in each tablet. The inclusion of isoflavones may help facilitate the body's utilization of vitamin D<sub>3</sub>.\*

- Vitamin D helps support mineralization and healthy structure of bones, as well as immune health\*
- Features soy isoflavones
- The inclusion of isoflavones may help facilitate the body's utilization of vitamin D<sub>3</sub>

## D<sub>3</sub> 1000™

### 1,000 IU of Bioactive Vitamin D<sub>3</sub> in Microtablet Delivery Form

D<sub>3</sub> 1000 features bioactive, high-potency vitamin D<sub>3</sub> in easy-to-swallow microtablets. Vitamin D is important for supporting mineralization and healthy structure of bones, as well as immune health.\*

- Provides high levels of vitamin D<sub>3</sub>\*
- Available in easy-to-swallow microtablet delivery form

\*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.

**D<sub>3</sub> Liquid****1,000 IU of Vitamin D<sub>3</sub> Per Drop—Supports Bone and Immune Health\***

D<sub>3</sub> Liquid delivers 1,000 IU of vitamin D<sub>3</sub> in a convenient, 2 oz. bottle for easy dosing. Designed for enhanced absorption, D<sub>3</sub> Liquid is ideal for those who prefer an alternative form of vitamin D.

- Provides vitamin D<sub>3</sub> solubilized in oil to assist absorption in the intestinal tract\*
- Designed for easy, flexible dosing
- Features a pleasant, natural mint flavor
- Ideal for those who prefer not to swallow tablets or capsules

**Scientific Rationale****Vitamin D**

In the past, vitamin D was thought to function primarily in bone mineralization. Today we know that “vitamin” D is actually a hormone that plays a role in various pathways and aspects of human health.<sup>2,3</sup> It is also one of the primary nutritional contributors to the maintenance of women’s health during perimenopause and menopause.<sup>4</sup>

**Vitamin K**

Vitamin K is an essential, fat-soluble vitamin that plays a role in bone mineralization and cardiovascular health. As a fat-soluble compound, vitamin K exists in two forms:<sup>5,6</sup>

- **Phylloquinone (vitamin K<sub>1</sub>)**. Generated by plants and algae, vitamin K<sub>1</sub> is found in green, leafy vegetables such as spinach, kale, broccoli, and cabbage. However, the absorption of vitamin K<sub>1</sub> from the diet is approximately 10%.<sup>7</sup>
- **Menaquinone (vitamin K<sub>2</sub>)**. Vitamin K<sub>2</sub> is generated by bacteria during the fermentation process, which can also be found in meat, dairy, eggs, and fermented foods such as cheese, yogurt, and natto (a Japanese dish of fermented soybeans). In contrast to vitamin K<sub>1</sub>, vitamin K<sub>2</sub> is well absorbed by the body.<sup>5,7</sup>

Vitamin K, and in particular vitamin K<sub>2</sub>, is essential for calcium utilization and bone mineralization. Additionally, adequate intake of menaquinone-7, or MK-7, may help contribute to healthy cardiovascular function.<sup>5,6</sup>

**References:**

1. Ginde AA et al. Demographic Differences and Trends of Vitamin D Insufficiency in the US Population, 1988-2004. *Arch Intern Med.* 2009;169(6):626–632.
2. Kuchuk NO et al. Vitamin D status, parathyroid function, bone turnover, and BMD in postmenopausal women with osteoporosis: a global perspective. *J Bone Miner Res.* 2009;24(4):693–701.
3. Wrancicz J et al. Health outcomes of vitamin D. Part II. Role in prevention of disease. *Rocz Panstw Zakl Hig.* 2014;65(4):273–279.
4. Van Dijk GM et al. Health issues for menopausal women: the top 11 conditions have common solutions. *Maturitas.* 2015;80(1):24–30.
5. U Gröber et al. Vitamin K: an old vitamin in a new perspective. *Dermatoendocrinol.* 2014 Jan-Dec; 6(1): e968490.
6. Maresz K. Proper Calcium Use: Vitamin K2 as a Promoter of Bone and Cardiovascular Health. *Integr Med (Encinitas).* 2015 Feb; 14(1): 34–39.
7. Geleijnse J et al. Dietary Intake of Menaquinone Is Associated with a Reduced Risk of Coronary Heart Disease: The Rotterdam Study. *The Journal of Nutrition*, Volume 134, Issue 11, 1 November 2004, Pages 3100–3105.

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