

# **D3** Liquid

Supports Bone, Cardiovascular, and Immune Health\*

D3 Liquid is a water-soluble micellized (droplet) form of vitamin D that provides highly absorbable vitamin D3 (as cholecalciferol).\* The micellization process significantly increases the solubility, absorption, and bioavailability of vitamin D3 when compared to oil or emulsified forms.

Vitamin D3 is a micronutrient with rather ubiquitous actions in the body; examples of its myriad functions include supporting stress levels, bone health, skin health, heart health, and healthy immune function. <sup>1</sup> Much of the vitamin D we obtain comes from direct exposure to sunlight, thus spending a significant amount of time indoors (and away from sunlight) can lead to low levels of vitamin D in the body.

Supplementation with D3 Liquid can help ensure users obtain adequate amounts of this key micronutrient.\*

### **How D3 Liquid Works**

Vitamin D is a term that refers to a group of five fat-soluble vitamins that are classified as secosteroids, with research suggesting vitamin D3 (cholecalciferol) as being the most important form in humans.<sup>2</sup> Since we produce much of our natural vitamin D transdermally (through the skin) via sunlight exposure, oral supplementaion of vitamin D must come in the form of D3; this is the most bioavailable form of vitamin D and comes in micellized form, maximizing its absorption into the body.\*3

Technically speaking, vitamin D3 is structurally similar to cholesterol and is converted via the liver and kidneys to its active form calcitriol. Calcitriol goes on to perform a multitude of roles in the body and is particularly crucial for proper absorption of the minerals calcium, iron, magnesium, phosphate, and zinc. Calcitriol also supports bone growth and regeneration, as well as immune, cardiac, and neuromuscular functions.\*

It is crucial to obtain adequate amounts of vitamin D on a daily basis, as deficiency can lead to a host of health issues.<sup>4,5</sup>

## **D3 Liquid Supplementation**

Given the importance of adequate Vitamin D levels in the body and many people's lack of exposure to direct sunlight, D3 Liquid supplementation can help users in a variety of ways. The most relevant research-backed benefits derived from the consumption of vitamin D3 include:<sup>6,7</sup>

- Supports cardiovascular function
- Supports healthy mood and stress levels\*
- Supports bone and skin tissues\*
- Supports immune function<sup>†</sup>



Form: Liquid

Serving Size: 1 Drop (0.04 mL)

Ingredients	Amount	%DV
Vitamin D3	30 mcg (1,200 IU)	150%
(as cholecalciferol)		

#### Other Ingredients:

Deionized water, ethoxylated castor oil, glycerine, citric acid, grapefruit seed extract, and potassium sorbate.

#### **Directions:**

Take one drop twice daily with 1-2 oz water or juice as a dietary supplement, or as directed by your healthcare practitioner.

Caution: If you are pregnant, nursing, or taking medication, consult your healthcare practitioner before use. Keep out of reach of children.

Notice: It is highly recommended that serum 25 (OH)and 1,25(OH)2-vitamin D be monitored every 60-90 days while consuming this product to ensure that levels remain in an acceptable range.







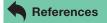


GLUTEN-FREE DAIRY-FREE

NON-GMO

PRODUCED IN A

 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.



#### References:

- 1. Omdahl, J. L., & DeLuca, H. F. (1973). Regulation of vitamin D metabolism and function. Physiological reviews, 53(2), 327-372.
- 2. Holick MF (March 2006). "High prevalence of vitamin D inadequacy and implications for health". Mayo Clin. Proc. 81 (3): 353-73.
- 3. Armas LA, Hollis BW, Heaney RP (November 2004). "Vitamin D2 is much less effective than vitamin D3 in humans". J. Clin. Endocrinol. Metab. 89 (11): 5387–91
- 4. Heaney RP (December 2004). "Functional indices of vitamin D status and ramifications of vitamin D deficiency". The American Journal of Clinical Nutrition. 80 (6 Suppl): 1706S–9S
- 5. Holick MF (December 2004). "Sunlight and vitamin D for bone health and prevention of autoimmune diseases, cancers, and cardiovascular disease". The American Journal of Clinical Nutrition. 80 (6 Suppl): 1678S–88S
- 6. Vieth R (May 1999). "Vitamin D supplementation, 25-hydroxyvitamin D concentrations, and safety". Am. J. Clin. Nutr. 69 (5): 842-56.
- 7. Chung M, Balk EM, Brendel M, Ip S, Lau J, Lee J, Lichtenstein A, Patel K, Raman G, Tatsioni A, Terasawa T, Trikalinos TA; Balk; Brendel; Ip; Lau; Lee; Lichtenstein; Patel; Raman; Tatsioni; Terasawa; Trikalinos (August 2009). "Vitamin D and calcium: a systematic review of health outcomes". Evidence report/technology assessment (183): 1–420.