

# Vitamin D 2500 IU

## About Vitamin D 2500 IU

- Widely known for its role in calcium absorption and bone health, vitamin D is also important for every system of the body, including the immune system.
- Although vitamin D can be obtained through the diet, the majority of people get most of their vitamin D through sun exposure. This is why people in northern climates typically have lower levels of vitamin D. For example, 30–40% of people living in Canada and the United States have a vitamin D deficiency, while many more have levels considered suboptimal.<sup>1,2</sup>
- A decline in vitamin D levels during the winter, due to less sunlight exposure, has also been suggested as a reason for the increase in upper respiratory tract infections during winter months. In a large, nationally representative study in the United States, lower vitamin D levels were associated with a greater risk of infection.<sup>3</sup>
- Some people require larger doses of vitamin D to achieve healthy blood levels, and a number of genetic variants may inhibit the action of vitamin D. One large trial that monitored the parathyroid hormone, an indicator of vitamin D function, suggests that doses of 2000–3000 IU per day may be needed to achieve normal activity of vitamin D-dependent functions.<sup>4</sup>
- Individuals with a higher body weight may need a higher dose of vitamin D to achieve healthy blood levels.
- Bioclinic Naturals uses the D3 form of this vitamin, which has been shown to increase blood levels of vitamin D more successfully than the D2 form.<sup>5</sup>

## How to Use Vitamin D 2500 IU

- Take 1 softgel per day or as directed by a health care practitioner. To be taken with an adequate intake of calcium. Consult a health care practitioner for use beyond 6 months.

## Cautions and Contraindications

- Consult a health care practitioner prior to use if you are pregnant or breastfeeding; if you have lymphoma, tuberculosis, or a kidney disorder; or if you take other vitamin D supplements, multivitamin supplements containing vitamin D, products containing vitamin D analogues, or any prescription medications, including antacids, anticonvulsants, digoxin, cholestyramine, colestipol, mineral oil, steroids, statins, or thiazide diuretics. 15–20 mcg (600–800 IU) of vitamin D per day is adequate for most individuals. Consult a health care practitioner to determine if you would benefit from additional vitamin D before taking this product. Do not use this product if you have hypercalcemia and/or hypercalciuria. Individuals with sarcoidosis should also consult their health care practitioner; while previously

a relative contraindication, more recent data suggests hypovitaminosis D correlates with disease activity, and that un-supplemented individuals may be at a greater risk for hypercalcemia.<sup>6,7</sup> Stop use and consult your health care practitioner if weakness, fatigue, drowsiness, headache, lack of appetite, dry mouth, metallic taste, nausea, vomiting, vertigo, ringing in the ears, lack of coordination, and muscle weakness occur (which are early symptoms of hypercalcemia), or if you have any other side effects. Keep out of reach of children.

## Drug Interactions

- When taken with a thiazide medication (diuretic), it may increase the risk for hypercalcemia.<sup>8</sup> Also, vitamin D may improve insulin sensitivity and lower blood pressure, requiring a reduction in dosage of hypertension and/or diabetic medications.

## Quick Tips for Optimal Health

- Most studies related to bone health support the combined use of vitamin D with calcium supplementation. For example, a large analysis of randomized trials found a reduction in fracture risk when vitamin D was supplemented with calcium. Emerging evidence also suggests that vitamin K2 may act synergistically with vitamin D, and may help support cardiovascular, metabolic, and bone health.<sup>9,10</sup>
- Vitamin D combined with calcium supplementation has also been associated with improvement in non-specific chronic musculoskeletal pain when taken over a three-month period.<sup>11</sup>
- Limited sun exposure, living in northern latitudes, and having a darker skin colour all increase the risk of suboptimal vitamin D levels.
- Most dairy milk as well as plant-based milks are fortified with approximately 120 IU of vitamin D per cup. Oily fish are also a great source of dietary vitamin D.
- Adherence to the Mediterranean diet, including a higher intake of fish and olive oil, has been associated with higher levels of vitamin D, independent of other relevant factors.<sup>12</sup>
- While it is tempting to try to achieve higher vitamin D levels by increasing sun exposure, the risk for skin cancer from UV radiation remains high, including cancer that develops after tanning-booth exposure.<sup>13</sup>

PATIENT NAME: \_\_\_\_\_

### PRACTITIONER NOTES:

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### PRACTITIONER CONTACT INFORMATION:

## References

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