D-Replete™ A Vitamin D Repletion Program

DESCRIPTION
D-Replete™ is a supplemental program to help maintain serum vitamin D concentrations of 25(OH)D in the sufficient range, defined as > 50 nmol/L. The program includes 2 bottles of Douglas Laboratories’ vitamin D products in one box: D-Sorb™ and Vitamin D 5000 IU. D-Sorb™ is a unique product containing 12,500 IU of vitamin D3 in a patented, self-assembling nano-colloid system for enhanced absorption.

The D-Replete™ program starts the patient on a 12,500 IU dose of a highly absorbable form of vitamin D for one month (dosing can be modified accordingly by the healthcare professional), and then shifts the patient to a maintenance dose of 5,000 IU daily for 3 months. It is suggested to test serum 25(OH)D levels before and after completion of this program. Monitoring of serum levels will help determine the appropriate level of supplemental vitamin D that the patient will need to maintain optimal health.

FUNCTIONS
Vitamin D, also known as the “sunshine vitamin” is an essential vitamin that plays many important roles in the proper functioning of the body. Though classified as a vitamin, vitamin D is actually a key regulatory hormone for multiple physiological systems: bone calcium, immune, pancreas, cardiovascular, muscle and brain systems. †

Vitamin D obtained from sun exposure, food, and supplements is biologically inert and must undergo two hydroxylations in the body for activation. The first occurs in the liver and converts vitamin D to 25-hydroxyvitamin D [25(OH)D], also known as calcidiol. The second occurs primarily in the kidney and forms the physiologically active 1,25 dihydroxyvitamin D [1,25(OH)2D], also known as calcitriol. Serum concentration of 25(OH)D is the best indicator of vitamin D status but optimal levels for bone and general health have not been established. Low serum concentrations of 25(OH)D may be associated with deficiency and suboptimal overall health. A committee of the Institute of Medicine reviewed the data on vitamin D needs and concluded that persons are at risk of vitamin D deficiency at serum 25(OH)D concentrations <30 nmol/L (<12 ng/mL). Some are potentially at risk for inadequacy at levels ranging from 30–50 nmol/L (12–20 ng/mL). Practically all people are sufficient at levels ≥50 nmol/L (≥20 ng/mL); the committee stated that 50 nmol/L is the serum 25(OH)D level that covers the needs of 97.5% of the population. Serum concentrations >125 nmol/L (>50 ng/mL) are associated with potential adverse effects.

**Serum 25-Hydroxyvitamin D [25(OH)D] Concentrations and Health***

<table>
<thead>
<tr>
<th>nmol/L**</th>
<th>ng/mL*</th>
<th>Health status</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>&lt;12</td>
<td>Associated with vitamin D deficiency, leading to insufficient bone health in adults</td>
</tr>
<tr>
<td>30–50</td>
<td>12–20</td>
<td>Generally considered inadequate for bone and overall health in healthy individuals</td>
</tr>
<tr>
<td>≥50</td>
<td>≥20</td>
<td>Generally considered adequate for bone and overall health in healthy individuals</td>
</tr>
<tr>
<td>&gt;125</td>
<td>&gt;50</td>
<td>Emerging evidence links potential adverse effects to such high levels, particularly &gt;150 nmol/L (&gt;60 ng/mL)</td>
</tr>
</tbody>
</table>

* Serum concentrations of 25(OH)D are reported in both nanomoles per liter (nmol/L) and nanograms per milliliter (ng/mL). ** 1 nmol/L = 0.4 ng/mL

Vitamin D intoxication is extremely rare. Studies showed that doses of more than 50,000 IU per day, which raises 25-hydroxyvitamin D to more than 150 ng/ml, is associated with hypercalcemia and hyperphosphatemia. Doses of 10,000 IU of vitamin D3 per day for up to 5 months did not cause toxicity.

Douglas Laboratories’ D-Sorb™ is unique among vitamin D products because it utilizes the patented
D-Replete™ A Vitamin D Repletion Program

VESIsorb® technology to deliver vitamin D3 and therefore enhance absorption. When mixed with an aqueous system, this patented technology results in the formation of a nano-colloid containing solubilized vitamin D. This colloid delivery system contains a highly uniform distribution of droplets that are less than 100 nm in diameter. The size and structure of these droplets allow for enhanced solubility and absorption of vitamin D. Douglas Laboratories’ Vitamin D 5000 IU tablets are tested for disintegration and meet the USP testing standards to disintegrate in the stomach within 30 minutes. Vitamin D tablets should be taken with foods containing fat to enhance absorption.

INDICATIONS
D-Replete™ may be a useful dietary supplement program for those who need to replete vitamin D to healthy serum levels.

FORMULA (#66130-2X)
Each D-Replete™ Box Contains 2 Bottles
**D-Sorb™**
Serving Size 1 Caplique® capsule
Servings Per Container 30
Vitamin D3 ............................................ 12,500 IU
(as cholecalciferol)

Vitamin D 5000 IU
Serving Size 1 tablet
Servings Per Container 100
Vitamin D-3............................................ 5,000 IU
(cholecalciferol)
D-Sorb™ is a trademark of SOURCEONE GLOBAL PARTNERS and VESIsorb® is a registered trademark of SOURCEONE GLOBAL PARTNERS.

SUGGESTED USE
Adults take 1 D-Sorb™ Caplique® capsule daily with a meal or as directed by your healthcare professional. Once this bottle is finished, start 1 Vitamin D 5000 IU tablet daily with a meal or as directed by your healthcare professional.
*Individual results will vary depending upon one’s ability to absorb and assimilate vitamin D.

SIDE EFFECTS
No adverse side effects have been reported.
Note: People consuming more than 2,000 IU per day should have their vitamin D blood levels monitored by a healthcare professional.

STORAGE
Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES
Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes for Calcium and Vitamin D.
D-Replete™ A Vitamin D Repletion Program
Washington, DC: National Academy Press, 2010

For more information on D-Replete visit douglaslabs.com

† 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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