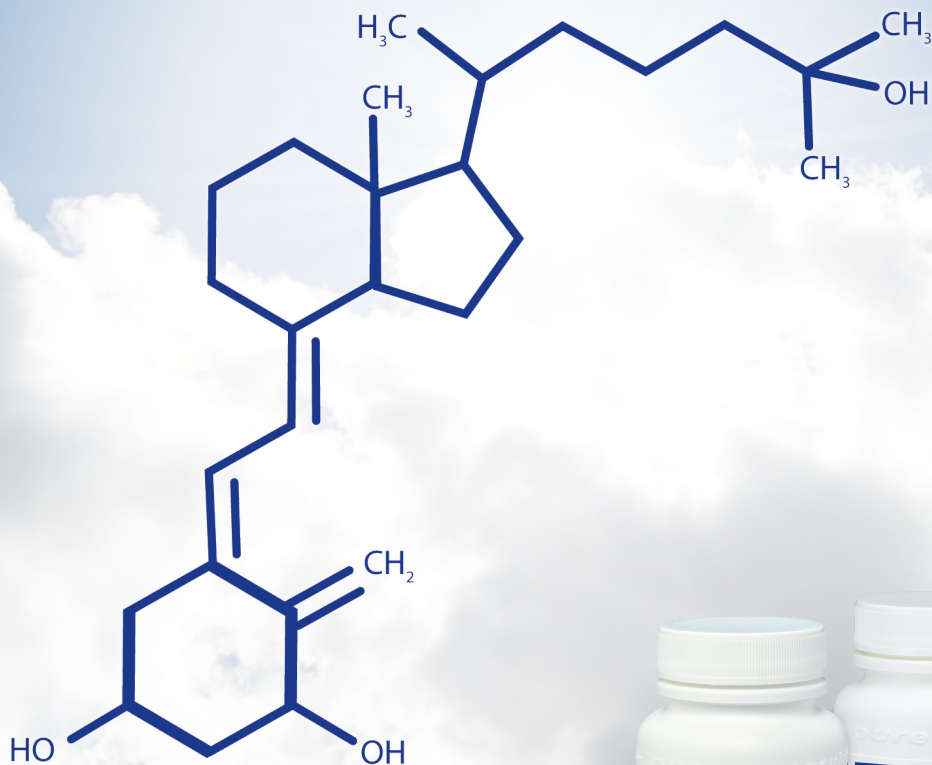


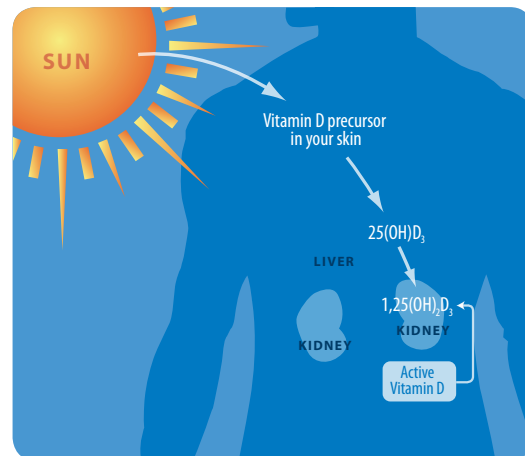


Vitamin D



YOUR TRUSTED SOURCE - FOR ALL YOUR VITAMIN D₃ NEEDS

- ✓ Natural form of vitamin D₃, cholecalciferol (from lanolin)
- ✓ Strengths from 400 iu to 10,000 iu
- ✓ Capsule and liquid forms available
- ✓ Bone support formulas containing up to 1,000 iu per serving
- ✓ Multivitamins containing 800-1,000 iu per serving
- ✓ Specialty breast, prostate and immune formulas with vitamin D



FREQUENTLY ASKED QUESTION

Q: What is the difference between vitamin D₂ and vitamin D₃?

A: Vitamin D₃ (cholecalciferol) is the naturally-occurring form of vitamin D synthesized in humans. Research indicates that plant-derived vitamin D₂ (ergocalciferol) is metabolized differently than vitamin D₃. In fact, vitamin D₃ may be more than three times more effective than vitamin D₂ in raising and maintaining serum vitamin D levels. In addition, its metabolites have more affinity for vitamin D-binding proteins in plasma. Pure Encapsulations products contain only vitamin D₃.*



SEE ALSO BONE SUPPORT FORMULAS:

OsteoBalance
+CAL+® with Ipriflavone
Calcium with Vitamin D₃
Cal/Mag w/Cofactors (powder)
Tri-Alkali
Synergy K
Cal/Mag/D liquid

SEE ALSO MULTIVITAMIN/ MINERAL FORMULAS:

UltraNutrient®
Nutrient 950®
Polyphenol Nutrients
Multi t/d
Longevity Nutrients
PureLean Nutrients
PureOne Nutrients
Vita-Essentials

SEE ALSO SPECIALTY FORMULAS:

Daily Immune
Breast Health Complete
SP Ultimate
PureCell
K/D liquid
PureDefense w/NAC
UltraKrill+D

SOURCES & RECOMMENDATIONS

SOURCES - Ultraviolet B (UVB) rays from the sun penetrate the skin and convert 7-dehydrocholesterol to previtamin D₃, which in turn becomes vitamin D₃ (cholecalciferol). Cholecalciferol is hydroxylated in the liver to form 25(OH)D₃. 25(OH)D₃ is then converted in the kidneys to the most active form of vitamin D, 1,25(OH)₂D₃.

Vitamin D production is reduced by anything that decreases the intensity of the sun's rays, including time of day, cloud cover, smog, skin melanin content and sunscreen. Geographic latitude is also important. Generally, UVB rays are not strong enough for vitamin D production from November through March in northern regions. Additionally, the efficiency of conversion tends to decrease with age.

There are very few dietary sources of vitamin D. The best sources include fatty fish and fortified milk. However, these foods may not provide enough vitamin D, especially if they are consumed sparingly.

FOOD SOURCE	Vitamin D (iu)
SALMON , cooked, 3 oz.	309
MACKEREL , cooked, 3 oz.	296
SARDINES , canned in oil, 2 oz.	286
TUNA FISH , canned in oil, 3 oz.	200
MILK , fortified, 1 cup	98

RECOMMENDATIONS - In 1941, the recommended dietary allowance (RDA) for vitamin D was set at 400 iu per day in order to prevent the incidence of rickets. Today, scientists worldwide have described an urgent need to raise the daily recommendation to as much as 1,000-2,000 iu per day. These levels are believed to be optimal for supporting bone, cellular, immune, nerve, cognitive and vascular health.* Experts also argue the need to increase the upper limit from 2,000 iu to 10,000 iu per day.

* NOTE: Hypercalcemia is rare and is associated with chronic vitamin D intake of 50,000-200,000 iu per day. Published cases of vitamin D toxicity all involved an intake in excess of 40,000 iu per day. Hypercalcemia may cause anorexia, nausea and vomiting. Prolonged hypercalcemia may result in the calcification of soft tissues, including the kidney, heart and lungs.

Vitamin D Serum Levels (ng/mL)	Health status	Supplementation Recommendations
<20	Vitamin D deficient	5,000-7,000 iu per day for 6-8 weeks. Retest. Then 3,000-5,000 iu per day for another 6-8 weeks, followed by 2,000 iu per day. Retest every 3 months.
20-39	Generally considered inadequate	5,000 iu per day for 4-6 weeks. Retest. Then 2,000-3,000 iu per day. Retest every 3 months.
40-50	Adequate Replete	2,500-5,000 iu per day for 4-6 weeks. Then 2,000 iu per day. Retest every 3 months.
≥50-60	Proposed level for optimal health	Maintain at 1,000-2,000 iu per day, retest yearly.
>200	Potentially toxic, leading to hypercalcemia and hyperphosphatemia, although human data are limited. ¹	

HEALTH BENEFITS

Immune Health*

Vitamin D receptors have been found on most immune cells. Vitamin D is believed to help maintain healthy immune cell maturation, differentiation and migration. Studies indicate that populations with limited sunlight exposure or vitamin D deficiency have been found to have weakened immune systems compared to populations with greater exposure to direct sunlight.*

Nerve Health*

A 2006 study published in the Journal of the American Medical Association and involving more than 7 million U.S. military personnel indicates that high circulating levels of 25-hydroxyvitamin D were associated with nerve and myelin health. A similar finding was reported in a study involving women from the Nurses' Health Study who were supplementing with 400 iu or more per day. Research indicates that vitamin D may help protect neural health by supporting immune function, nerve conduction potential, neuronal calcium regulation and antioxidant defense.*

Bone Health*

Vitamin D is essential in promoting calcium homeostasis. It enhances intestinal calcium and phosphorus absorption and reduces urinary calcium loss. A meta-analysis of twelve double-blind, randomized controlled trials involving 20,000 people indicates that vitamin D₃ supplements support hip and nonvertebral bone health. In another 3-year randomized controlled study, vitamin D₃ and calcium supplementation enhanced bone strength, lessening the risk of falling in women aged 65 or older.*

Cellular Health*

Vitamin D helps maintain healthy angiogenesis balance. A recent Creighton University study involving over 1,100 women revealed that 1,000 iu vitamin D combined with calcium provided statistically significant support for cellular health compared to calcium supplementation alone. Other research indicates that optimal vitamin D serum levels may be important in maintaining breast, ovary, uterine, prostate, esophagus, stomach, colon, bladder, kidney, pancreas and lung cell health.*

Cognitive Function*

Vitamin D receptors and vitamin D hydroxylation pathways have been found in areas of the brain involved in both memory and cognition. Two cross-sectional trials involving more than 300 elderly individuals indicate that a higher serum 25-hydroxyvitamin D level is associated with positive mood and mental performance.*

Cardiovascular Health*

Higher levels of vitamin D are associated with proper cytokine production and enhanced endogenous antioxidant defense. Additionally, optimal serum vitamin D concentrations have been associated with healthy blood vessel relaxation and blood flow. Preliminary evidence also suggests that vitamin D may play a role in maintaining healthy glucose metabolism, due to the presence of vitamin D receptors on the islet cells of the pancreas.*

References available upon request

VITAMIN D

Vitamin D₃ 10,000 iu

each vegetarian capsule contains  v 3

vitamin D (as cholecalciferol)(D₃) 10,000 iu
other ingredients: hypo-allergenic plant fiber (cellulose), vegetarian capsule (cellulose, water)

Not to be taken by pregnant or lactating women. It is recommended that individuals taking more than 2,000 iu vitamin D per day have their blood levels monitored.

1 capsule daily for up to five days per week, with a meal, or as directed by a health professional.

	quantity	order code
Vitamin D ₃ 10,000 iu	120	VD101
	60	VD106

Vitamin D₃ 5,000 iu

each vegetarian capsule contains  v 3


vitamin D (as cholecalciferol)(D₃) 5,000 iu
other ingredients: hypo-allergenic plant fiber (cellulose), vegetarian capsule (cellulose, water)

Not to be taken by pregnant or lactating women. It is recommended that individuals taking more than 2,000 iu vitamin D per day have their blood levels monitored.

1 capsule daily, with a meal.

	quantity	order code
Vitamin D ₃ 5,000 iu NEW SIZE	250	VD52
	120	VD51
	60	VD56

Vitamin D₃ 1,000 iu

each vegetarian capsule contains  v 3

vitamin D (as cholecalciferol)(D₃) 1,000 iu
other ingredients: hypo-allergenic plant fiber (cellulose), vegetarian capsule (cellulose, water)

It is recommended that individuals taking more than 2,000 iu vitamin D per day have their blood levels monitored. If pregnant or lactating, consult your physician before use.

1-5 capsules daily, with meals.

	quantity	order code
Vitamin D ₃ 1,000 iu NEW SIZE	250	VD12
	120	VD11
	60	VD16

Vitamin D₃ 400 iu

each vegetarian capsule contains  v 3

vitamin D (as cholecalciferol)(D₃) 400 iu
other ingredients: hypo-allergenic plant fiber (cellulose), vegetarian capsule (cellulose, water)

1-2 capsules daily, with meals.

	quantity	order code
Vitamin D ₃ 400 iu	120	VD1
	60	VD6

Vitamin D₃ liquid

one drop contains **v**

vitamin D (as cholecalciferol)(D₃) 1,000 iu
other ingredients: medium chain triglycerides


It is recommended that individuals taking more than 2,000 iu vitamin D per day have their blood levels monitored. If pregnant or lactating, consult your physician before use.

1-7 drops daily, with a meal, or as directed by your health care practitioner.

	quantity	order code
Vitamin D ₃ liquid (810 servings)	22.5 ml (0.75 fl oz)	VDL


Vitamin D₃ VESIsorb®

Liquid-filled Caplique® Capsule

 Caplique® Capsule is a registered trademark used by Pure Encapsulations under license.

Each Caplique® Capsule is preserved with a nitrogen bubble, which may give the appearance of the capsule not being full. Contents may appear cloudy or thick and may settle or separate.

VESISORB® is a registered trademark of Source One Global Partners.

each Caplique® Capsule contains  v 0

vitamin D (as cholecalciferol)(D₃) 2,000 iu
other ingredients: medium chain triglycerides, polysorbate 80, polyglycerol fatty acid esters, vegetarian Caplique® Capsule (cellulose, water)

1-2 Caplique® Capsules daily, with a meal.

	quantity	order code
Vitamin D ₃ VESIsorb®	60	VDV6



490 Boston Post Rd, Sudbury MA 01776

800-753-2277 | PureEncapsulations.com

The information contained herein is for informational purposes only and does not establish a doctor-patient relationship. Please be sure to consult your physician before taking this or any other product. Consult your physician for any health problems.