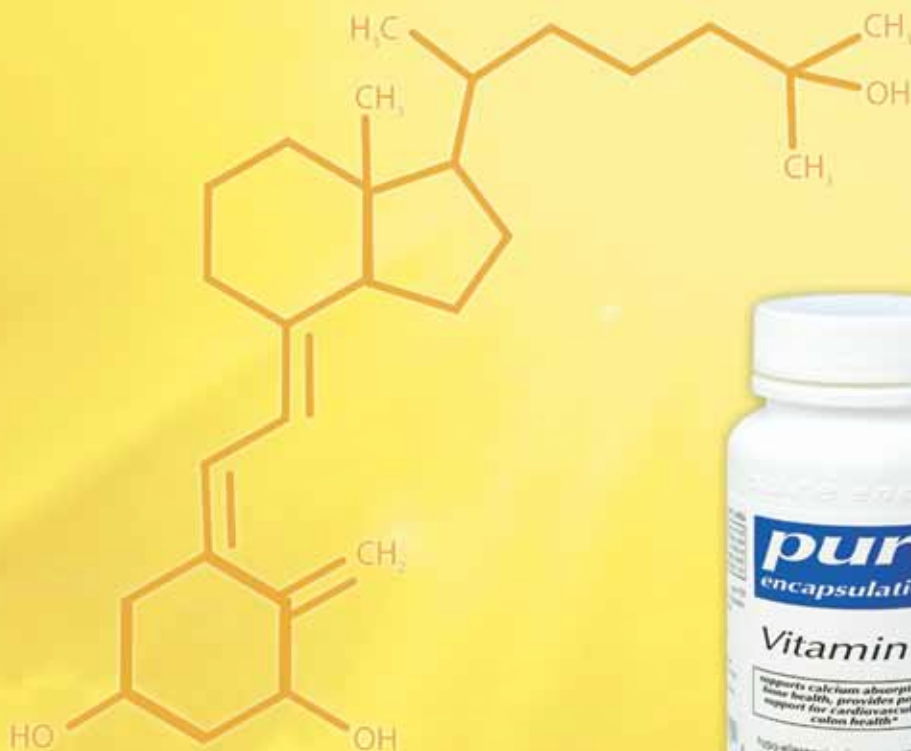


pure
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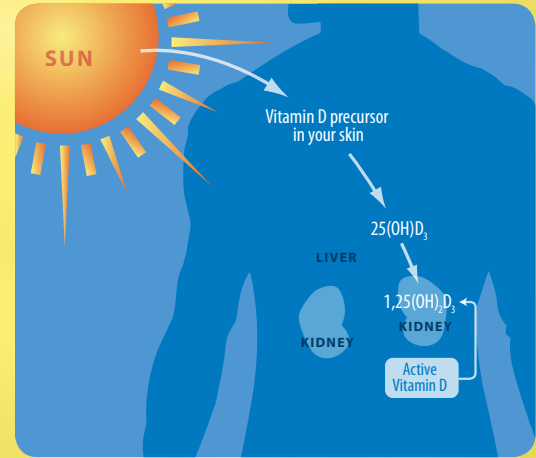


Vitamin D₃



Your Trusted Source – For All Your Vitamin D₃ Needs

- ✓ Natural form of vitamin D₃, cholecalciferol (from lanolin)
- ✓ Strengths from 400 i.u. to 10,000 i.u.
- ✓ Capsule and liquid forms available
- ✓ Bone support formulas containing up to 1,000 i.u. per serving
- ✓ Multivitamins containing 800-1,000 i.u. 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

SEE ALSO MULTIVITAMIN/MINERAL FORMULAS:

UltraNutrient®
Nutrient 950®
Polyphenol Nutrients
Multi t/d

SEE ALSO SPECIALTY FORMULAS:

Daily Immune
Breast Health Complete
SP Ultimate
PureCell
Cardio K/D liquid

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 (i.u.)
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

Health Benefits

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 i.u. 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.*

References available upon request

Recommendations

In 1941, the recommended dietary allowance (RDA) for vitamin D was set at 400 i.u. 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 i.u. 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 i.u. to 10,000 i.u. per day.

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

† NOTE: Hypercalcemia is rare and is associated with chronic vitamin D intake of 50,000-200,000 i.u. per day. Published cases of vitamin D toxicity all involved an intake in excess of 40,000 i.u. 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.

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 i.u. 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.*

References available upon request

Vitamin D₃ 10,000 i.u. **V 3**

each vegetable capsule contains

vitamin D₃ 10,000 i.u.

(hypo-allergenic plant fiber added to complete capsule volume requirement)

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

1 capsule per day 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 i.u.	120	VD101
	60	VD106

Vitamin D₃ 5,000 i.u. **V 3**

each vegetable capsule contains

vitamin D₃ 5,000 i.u.

(hypo-allergenic plant fiber added to complete capsule volume requirement)

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

1 capsule per day, with a meal.

	QUANTITY	ORDER CODE
Vitamin D ₃ 5,000 i.u.	120	VDS1
	60	VD56

Vitamin D₃ 1,000 i.u. **V 3**

each vegetable capsule contains

vitamin D₃ 1,000 i.u.

(hypo-allergenic plant fiber added to complete capsule volume requirement)

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

1-5 capsules per day, in divided doses, with meals.

	QUANTITY	ORDER CODE
Vitamin D ₃ 1,000 i.u.	120	VD11
	60	VD16

Vitamin D₃ 400 i.u. **V 3**

each vegetable capsule contains

vitamin D₃ 400 i.u.

(hypo-allergenic plant fiber added to complete capsule volume requirement)

1-2 capsules per day, in divided doses, with meals.

	QUANTITY	ORDER CODE
Vitamin D ₃ 400 i.u.	120	VD1
	60	VD6

Health Benefits

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 a healthy inflammatory response, 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



Manufacturers of
Hypo-allergenic
Nutritional
Supplements

PRSRT STD
U.S. POSTAGE
PAID
PERMIT #12
INDIANA, PA

490 Boston Post Road, Sudbury, MA 01776 USA



Cod Liver Oil (lemon flavor)

each teaspoon (5 ml/0.18 fl oz) provides

fish liver oil concentrate (cod).....	4,615 mg
providing (typical):	
vitamin A (naturally occurring).....	1750 i.u.
vitamin D (naturally occurring).....	180 i.u.
EPA (eicosapentaenoic acid).....	320–510 mg
DHA (docosahexaenoic acid).....	460–640 mg

other ingredients: natural lemon flavor, proprietary antioxidant blend (rosemary extract, ascorbyl palmitate, natural tocopherols)

1 or more teaspoons per day, with or between meals.

This formula requires refrigeration after opening. Best when consumed within 90 days after opening. Contents may appear cloudy when refrigerated.

	QUANTITY	ORDER CODE
Cod Liver Oil (lemon flavor)	200 ml (7 fl oz)	CLO2

Vitamin D₃ liquid v

1 drop contains

vitamin D ₃	1,000 i.u.
other ingredients: medium chain triglycerides	

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

1-7 drops per day, 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

Secure ordering and information at:

800-753-2277 • www.PureCaps.com • F: 888-783-2277 • csservice@purecaps.com