

Super D₃

(Vitamin E derived from soy)



Item # 74840
60 Vegetarian Capsules

The Possible Benefits of Super D₃, a Dietary Supplement

- Promotes gut absorption and normal blood levels of calcium and phosphorus*
- Supports bone mineralization and skeletal health*

Description

In March 1998, the New England Journal of Medicine published the surprising results of a study by researchers from Harvard, which found a prevalence of vitamin D deficiency not only among elderly people with low vitamin D intake, but in patients less than 65 years of age without any apparent risk factors for hypovitaminosis D. Hypovitaminosis D was found in 42% of 1546 African American women who participated in the study. Even among 243 subjects who consumed 200 IU daily from supplements, the prevalence of hypovitaminosis D was 28%. It has been estimated that as much as 40% of the U.S. population may be deficient in vitamin D, and this deficiency is prevalent in much of the world, in the young and old. It appears that vitamin D deficiency is so common because of both increasingly limited exposure to sunlight and inadequate dietary intake of vitamin D.

The primary source of vitamin D₃ is sunlight, which converts 7-dehydrocholesterol in the skin to vitamin D₃ via photochemical reactions using ultraviolet B radiation (UV-B). Numerous factors such as latitude, season, air pollution, pigmentation of skin, and sunscreen affect UV-ray exposure. The US is between 30° and 45° latitude, and six months or more of each year has insufficient UV-B sunlight to produce optimal D levels. People with dark skin produce less vitamin D since melanin, a skin pigment, acts as a natural sunscreen, absorbing UV radiation. Only a few foods naturally contain vitamin D: fatty fish, fish liver oils and eggs from hens that have been fed vitamin D. Fortified foods, such as milk

and breakfast cereals, are the major sources of dietary vitamin D intake.

The term vitamin D refers to vitamin D₂, vitamin D₃ as well as to their metabolites and analogues. Vitamin D₂ (ergocalciferol) is derived from fungal and plant sources; vitamin D₃ (cholecalciferol) is derived from animal sources. Super D₃ is derived from lanolin, from sheep's wool. Vitamin D usually acts as a hormone precursor, requiring two stages of metabolism before reaching hormonal form. Following absorption or endogenous synthesis, it is metabolized to 25-hydroxycholecalciferol (25(OH)D) in the hepatocytes. 25(OH)D is the major circulating form of vitamin D, but is not biologically active. Then, the biologically active hormone form, 1 alpha, 25-dihydroxycholecalciferol (1,25(OH)₂D) is produced in the kidneys. Vitamin D receptors exist in a wide variety of tissues and organs.

The principal direct toxic effects of too much vitamin D are excessive absorption of calcium and phosphorus from the intestine and resorption of calcium and phosphorus from bone. The prolonged ingestion of excessive amounts of vitamin D and accompanying hypercalcemia can result in metastatic calcification of soft tissues, including the kidney, blood vessels, heart and lungs. There is a wide variation among individuals in their tolerance to toxicity. In general, chronic ingestion of 50,000 IU to 100,000 IU daily of vitamin D is required to produce hypercalcemia.

*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.

The Reference Daily Intake (RDI) for vitamin D is 400 IU. The U.S. National Academy of Sciences has recommended the following adequate intakes for vitamin D: 200 IU for ages 0-50, 400 IU for ages 51-69, and 600 IU for ages greater than 70. They have also defined a tolerable upper limit intake level (UL) that is unlikely to pose risk to the general population: infants 0-12 months, 1000 IU/day; children and adults, including pregnant and lactating women, 2000 IU/day. However, some researchers argue that the RDIs and ULs are too limited. Testing of plasma 25(OH)D concentration is considered the best way to determine the level of vitamin D and to monitor vitamin D supplementation.

Vitamin D is the principal regulator of calcium homeostasis in the body, and it is essential for skeletal development and for bone mineralization.* A number of studies have reported significant benefits from supplemental vitamin D in supporting bone health.* Along with the classic role it plays in regulation of bone mineralization and serum calcium levels, vitamin D has been increasingly recognized to play important roles in the regulation of blood sugar within normal levels, and supporting normal muscle strength, the health of connective tissue, and the gastrointestinal, immune, circulatory, and respiratory systems.*

Serving Size: 1 Capsule

Servings Per Container: 60

Amount Per Serving:

Vitamin D3 (as Cholecalciferol)	2000 IU
Vitamin C (as Ascorbyl Palmitate)	2 mg
Vitamin E (as Mixed Tocopherols)	20 IU
Tocotrienols	3 mg

Other ingredients: Hydroxypropyl methylcellulose, rice flour, rice oil, silicon dioxide.

Suggested Use: As a dietary supplement, 1 capsule daily or as directed by a healthcare practitioner. Do not exceed recommended dose without proper blood monitoring. Administration with oils rich in omega-3 fatty acids can help with absorption.

Caution: Contraindicated in individuals with hypercalcemia and in those on cardiac glycosides. Individuals with serious chronic diseases and pregnant or nursing women should consult a healthcare practitioner before use. Not recommended for use by children. Blood testing is required for long-term use.

References

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