



Dr. Fuhrman
guiding you to great health

Osteo-Sun

(Vitamin D/Calcium/Magnesium)



A higher dose of vitamin D and a lower dose of calcium compared to other products.

Recent medical studies document that vitamin D is more effective than calcium for protecting and building bone. Too much calcium can actually interfere with the conversion of vitamin D into its biologically active form, so high dose calcium is not ideal for bone strength.¹ In addition, vitamin D powerfully protects against cancer.² The modern world has an epidemic of vitamin D deficiency and most often a multivitamin containing the RDA for D, with 400 IUs, is simply not sufficient, especially as we age.³ The standard amount in most multivitamins is simply not enough for bone protection and cancer protection. An additional 800 IUs of D₃ (cholecalciferol) or 2000 IUs of D₂ (ergocalciferol) should be taken over and above the 400 IUs, typically present in a multivitamin.

Features:

- Extra Vitamin D, a fat-soluble vitamin, which stimulates the intestines to increase absorption of calcium and phosphorus
- 2 formulations (with cholecalciferol, D₃; or ergocalciferol, D₂) – choose what's right for you
- Balanced levels of calcium and magnesium for optimal vitamin absorption

Benefits:

- Essential for bone growth and maintenance of bone density
- Increases calcium absorption to maximize bone health
- Promotes strong bones
- Formulated to reduce the risk of, and for the treatment of, osteoporosis
- Vital for maintaining a healthy immune system, regulating cell growth, & preventing cancer

Who may need extra vitamin D to prevent a deficiency?

- ☀ **People with limited sun exposure**
Vitamin D is the sunshine vitamin. Sun exposure is perhaps the most important source of vitamin D, but since most people work indoors, they have sub-optimal levels of this important vitamin. UV rays from the sun trigger vitamin D synthesis in skin. Season, geographic latitude, time of day, cloud cover, smog, and sunscreen affect UV ray exposure and vitamin D synthesis. For example, sunlight exposure from November through February in Boston is insufficient to produce significant vitamin D synthesis in the skin.
- ☀ **Older Adults**
Americans age 50 and older are believed to be at increased risk of developing vitamin D deficiency. As people age, skin cannot synthesize vitamin D as efficiently and the kidney is less able to convert vitamin D to its active hormone form.
- ☀ **People with greater skin melanin content**
Melanin is the pigment that gives skin its color. Greater amounts of melanin result in darker skin. The high melanin content in darker skin reduces the skin's ability to produce vitamin D from sunlight. It is very important for African Americans and other populations with dark-pigmented skin to consume recommended amounts of vitamin D.

The best way to know for sure if you are taking the right amount of vitamin D or if the mixture of your sun exposure and Vitamin D intake is adequate is to test your blood for vitamin D - 25 hydroxy. Most women take an excessive amount of calcium, but insufficient amounts of vitamin D.

Osteo-Sun

Recent medical studies document that Vitamin D is more effective than calcium for protecting and building bone. In fact, too much calcium can interfere with the conversion of Vitamin D into its biologically active form. High doses of calcium are not ideal for bone strength and may increase cancer risk as a result of lower vitamin D function. The modern world has an epidemic of Vitamin D deficiency and most often a multivitamin containing the RDA for Vitamin D is simply not sufficient to bring blood levels up to the ideal range, especially as we age.

Epidemiological data also indicates a low vitamin D status in autoimmune diseases such as rheumatoid arthritis, multiple sclerosis, inflammatory bowel diseases, as well as hypertension and cancer. Some intervention trials have demonstrated that supplementation with vitamin D or its metabolites is able to: (a) reduce blood pressure in hypertensive patients; (b) improve blood glucose levels in diabetics; and (c) improve symptoms of autoimmune diseases such as lupus, rheumatoid arthritis and multiple sclerosis.

Osteo-Sun contains vitamin D₃ (cholecalciferol), the most potent and efficient form of vitamin D.

Dr. Fuhrman's Osteo-Sun		
Supplement Facts		
Serving Size: 3 capsules (2-4 capsules daily) Servings per container: 60		
	Amount Per Serving	% Daily Value
Vitamin D (as cholecalciferol)	900 IU	225%
Calcium (as calcium citrate and calcium amino acid chelate)	375 mg	38%
Magnesium (as magnesium oxide, magnesium aspartate, and magnesium glycinate)	150 mg	38%
* Daily value not established.		

Other ingredients: cellulose, magnesium stearate and silica.

Osteo-Sun Vegan utilizes vitamin D₂ (ergocalciferol), obtained only from plant sources. Higher levels of vitamin D₂ are necessary in this product to adjust for its lower vitamin activity.

Dr. Fuhrman's Osteo-Sun – Vegan Formula		
Supplement Facts		
Serving Size: 3 capsules (2-4 capsules daily) Servings per container: 60		
	Amount Per Serving	% Daily Value
Vitamin D (as ergocalciferol)	1800 IU	450%
Calcium (as calcium citrate and calcium amino acid chelate)	375 mg	38%
Magnesium (as magnesium oxide, magnesium aspartate, and magnesium glycinate)	150 mg	38%
* Daily value not established.		

Other ingredients: cellulose, magnesium stearate and silica.

The combination of Dr. Fuhrman's *Gentle Care Formula* multivitamin with *Osteo-Sun* provides just the right level of micronutrients to protect bones, not too much and not too little, without the risk of overdosing from the overzealous use of supplemental ingredients.

¹ Giovannucci E Cancer Causes Control 1998 Dec;9(6):567-82 Dietary influences of 1,25(OH)₂ vitamin D in relation to prostate cancer: a hypothesis.

² Vitamin D; Linus Pauling Micronutrient Information Center; Oregon State University; <http://lpi.oregonstate.edu/inforcenter/vitamins/vitaminD/> date accessed: 8/29/08.

³ Melamed, ML, Michos ED, Post W, et al. 25-hydroxyvitamin D levels and the risk of mortality in the general population. Arch Intern Med 2008; 168:1629-1637. Fuller KE, CAsparian JM. Vitamin D: Balancing cutaneous and systemic considerations. South Med J 2001; 94(1):58-64