



Vitamin D

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Safety

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Allergies

Avoid or use caution with known hypersensitivity to vitamin D or any of its analogues and derivatives.

Side Effects and Warnings

Vitamin D is generally well tolerated in recommended "Adequate Intake (AI)" doses. One study found a greater likelihood of daytime sleepiness for patients given vitamin D analogues.

Vitamin D toxicity can result from regular excess intake of this vitamin, and may lead to hypercalcemia and excess bone loss. Individuals at particular risk include those with hyperparathyroidism, kidney disease, sarcoidosis, tuberculosis, or histoplasmosis. Chronic hypercalcemia may lead to serious or even life-threatening complications, and should be managed by a physician. Early symptoms of hypercalcemia may include nausea, vomiting, and anorexia (appetite/weight loss), followed by polyuria (excess urination), polydipsia (excess thirst), weakness, fatigue, somnolence, headache, dry mouth, metallic taste, vertigo, tinnitus (ear ringing), and ataxia (unsteadiness). Kidney function may become impaired, and metastatic calcifications (calcium deposition in organs throughout the body) may occur, particularly affecting the kidneys. Treatment involves stopping the intake of vitamin D or calcium, and lowering the calcium levels under strict medical supervision, with frequent monitoring of calcium levels. Acidification of urine and corticosteroids may be necessary.

Pregnancy and Breastfeeding

The recommended adequate intake for pregnant women is the same as for non-pregnant adults. Some authors have suggested that requirements during pregnancy may be greater than these amounts, particularly in sun-deprived individuals, although this has not been clearly established. Due to risks of vitamin D toxicity, any consideration of higher daily doses of vitamin D should be discussed with a physician.

Vitamin D is typically low in maternal milk, and to prevent deficiency and rickets in exclusively breastfed infants, supplementation may be necessary, starting within the first two months of life.



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Dosing

Methodology

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