Doctoral Program in Nutrition at Harvard School of Public Health in Boston, USA, Vitamin D.

Projekt: 324

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Vitamin D reduces fracture risk by enhancing bone density and reducing the risk of falling[1, 2]. The effects of vitamin D on muscle strength and falls occur early after 2-3 months [3], which may explain early anti-fracture effects of vitamin D. As a large part of the older population, community-dwelling or institutionalized, have low 25-hydroxyvitamin D levels[4, 5], general vitamin D supplementation may be warranted. Such a recommendation is possible, for vitamin D (cholecalciferol) is inexpensive and well tolerated. Results of a recent meta-analysis of high quality randomized controlled trials indicate that 400 IU vitamin D per day is not enough for fracture or fall prevention, while a daily intake of at least 800-1000 IU vitamin D may achieve these benefits [1, 6, 7]. A combination of vitamin D with calcium may be important, however the amount of additional calcium is unclear and may depend on daily intake of calcium from food sources and 25-hydroxyvitamin D status[8]. An advantage of milk products as a source of calcium is the additional protein. According to results from fracture studies and data from epidemiologic studies on hip bone density and lower extremity function [9], a serum levels of at least 75 nmol/l 25-hydroxyvitamin D should be achieved [10].

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