

## Empfehlungen der Eidgenössischen Ernährungskommission zur Vitamin D-Zufuhr für die Schweizer Bevölkerung

## Recommandations de la Commission fédérale de l'alimentation concernant l'apport de vitamine D pour la population suisse

### Literatur

1. IOM. Dietary Reference Ranges for Calcium and Vitamin D. <http://www.iom.edu/Reports/2010/Dietary-Reference-Intakes-for-Calcium-and-Vitamin-D.aspx> (access Feb132012) 2010.
2. Dawson-Hughes B, Mithal A, Bonjour JP, et al. IOF position statement: vitamin D recommendations for older adults. *Osteoporos Int* 2010;21(7):1151–4. doi: 10.1007/s00198–010–1285–3 [doi].
3. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin d deficiency: an endocrine society clinical practice guideline. *J Clin Endocrinol Metab* 2011;96(7):1911–30. doi: jc.2011–0385 [pii]; 10.1210/jc.2011–0385 [doi].
4. Bischoff-Ferrari HA, Dawson-Hughes B, Staehelin HB, et al. Fall prevention with supplemental and active forms of vitamin D: a meta-analysis of randomised controlled trials. *BMJ* 2009;339(1):339:b3692.
5. Bischoff-Ferrari HA, Willett WC, Wong JB, et al. Prevention of nonvertebral fractures with oral vitamin D and dose dependency: a meta-analysis of randomized controlled trials. *Arch Intern Med* 2009;169(6):551–61.
6. Bischoff-Ferrari HA, Orav EJ, Willett WC, et al. A pooled analysis of vitamin D dose requirements for fracture prevention. *New England Journal of Medicine*; July 5th 2012 2012.
7. Forman JP, Giovannucci E, Holmes MD, et al. Plasma 25–hydroxyvitamin D levels and risk of incident hypertension. *Hypertension* 2007;49(5):1063–9.
8. Pfeifer M, Begerow B, Minne HW, Nachtigall D, Hansen C. Effects of a short-term vitamin D(3) and calcium supplementation on blood pressure and parathyroid hormone levels in elderly women. *J Clin Endocrinol Metab* 2001;86(4):1633–7.
9. Krause R, Buhning M, Hopfenmuller W, Holick MF, Sharma AM. Ultraviolet B and blood pressure. *Lancet* 1998;352(9129):709–10. doi: S0140–6736(05)60827–6 [pii]; 10.1016/S0140–6736(05)60827–6 [doi].
10. Wu SH, Ho SC, Zhong L. Effects of vitamin D supplementation on blood pressure. *South Med J* 2010;103(8):729–37. doi: 10.1097/SMJ.0b013e3181e6d389.
11. Bischoff-Ferrari HA, Dawson-Hughes B, Stöcklin E, et al. Oral supplementation with 25(OH)D3 versus vitamin D3: effects on 25(OH)D levels, lower extremity function, blood pressure and markers of innate immunity *Journal of Bone and Mineral Research* 2011; epub ahead of print
12. Gorham ED, Garland CF, Garland FC, et al. Optimal vitamin D status for colorectal cancer prevention: a quantitative meta analysis. *Am J Prev Med* 2007;32(3):210–6.
13. Ginde AA, Mansbach JM, Camargo CA, Jr. Association between serum 25–hydroxyvitamin D level and upper respiratory tract infection in the Third National Health and Nutrition Examination Survey. *Arch Intern Med* 2009;169(4):384–90.
14. Liu PT, Stenger S, Li H, et al. Toll-Like Receptor Triggering of a Vitamin D-Mediated Human Antimicrobial Response. *Science* 2006;23:23.
15. Munger KL, Zhang SM, O'Reilly E, et al. Vitamin D intake and incidence of multiple sclerosis. *Neurology* 2004;62(1):60–5.
16. Chiu KC, Chu A, Go VL, Saad MF. Hypovitaminosis D is associated with insulin resistance and beta cell dysfunction. *Am J Clin Nutr* 2004;79(5):820–5.
17. Borissova AM, Tankova T, Kirilov G, Dakovska L, Kovacheva R. The effect of vitamin D3 on insulin secretion and peripheral insulin sensitivity in type 2 diabetic patients. *Int J Clin Pract* 2003;57(4):258–61.
18. Visser M, Deeg DJ, Puts MT, Seidell JC, Lips P. Low serum concentrations of 25–hydroxyvitamin D in older persons and the risk of nursing home admission. *Am J Clin Nutr* 2006;84(3):616–22; quiz 71–2. doi: 84/3/616 [pii].
19. Dobnig H, Pilz S, Scharnagl H, et al. Independent association of low serum 25–hydroxyvitamin d and 1,25–dihydroxyvitamin d levels with all-cause and cardiovascular mortality. *Arch Intern Med* 2008;168(12):1340–9.
20. Ginde AA, Scragg R, Schwartz RS, Camargo CA, Jr. Prospective study of serum 25–hydroxyvitamin d level, cardiovascular disease mortality, and all-cause mortality in older U.S. Adults. *J Am Geriatr Soc* 2009;57(9):1595–603.
21. Melamed ML, Michos ED, Post W, Astor B. 25–hydroxyvitamin D levels and the risk of mortality in the general population. *Arch Intern Med* 2008;168(15):1629–37.

22. Zittermann A, Schleithoff SS, Frisch S, et al. Circulating calcitriol concentrations and total mortality. *Clin Chem* 2009;55(6):1163–70.
23. Michaelsson K, Baron JA, Snellman G, et al. Plasma vitamin D and mortality in older men: a community-based prospective cohort study. *Am J Clin Nutr* 2010;92(4):841–8. doi: 10.3945/ajcn.2010.29749.
24. Autier P, Gandini S. Vitamin D supplementation and total mortality: a meta-analysis of randomized controlled trials. *Arch Intern Med* 2007;167(16):1730–7.
25. Lips P, Chapuy MC, Dawson-Hughes B, Pols HA, Holick MF. An international comparison of serum 25–hydroxyvitamin D measurements. *Osteoporos Int* 1999;9(5):394–7. doi: 708 [pii].
26. Sempos CT, Vesper HW, Phinney KW, Thienpont LM, Coates PM. Vitamin D status as an international issue: national surveys and the problem of standardization. *Scand J Clin Lab Invest Suppl* 2012;243:32–40. doi: 10.3109/00365513.2012.681935 [doi].
27. Holick MF. 25–OH-vitamin D assays. *J Clin Endocrinol Metab* 2005;90(5):3128–9. doi: 90/5/3128–a [pii]; 10.1210/jc.2005–0162 [doi].
28. Holick MF. Sunlight, UV-radiation, vitamin D and skin cancer: how much sunlight do we need? *Adv Exp Med Biol* 2008;624:1–15.
29. Holick MF, Chen TC, Lu Z, Sauter E. Vitamin D and skin physiology: a D-lightful story. *J Bone Miner Res* 2007;22 Suppl 2:V28–33.
30. MacLaughlin J, Holick MF. Aging decreases the capacity of human skin to produce vitamin D3. *J Clin Invest* 1985;76(4):1536–8. doi: 10.1172/JCI112134 [doi].
31. van der Wielen RP, Lowik MR, van den Berg H, et al. Serum vitamin D concentrations among elderly people in Europe. *Lancet* 1995;346(8969):207–10. doi: S0140–6736(95)91266–5 [pii].
32. Matsuoka LY, Ide L, Wortsman J, MacLaughlin JA, Holick MF. Sunscreens suppress cutaneous vitamin D3 synthesis. *J Clin Endocrinol Metab* 1987;64(6):1165–8.
33. Edvardsen K, Brustad M, Engelsen O, Aksnes L. The solar UV radiation level needed for cutaneous production of vitamin D3 in the face. A study conducted among subjects living at a high latitude (68 degrees N). *Photochem Photobiol Sci* 2007;6(1):57–62.
34. Diffey B. A behavioral model for estimating population exposure to solar ultraviolet radiation. *Photochem Photobiol* 2008;84(2):371–5. doi: PHP271 [pii]; 10.1111/j.1751–1097.2007.00271.x [doi].
35. Engelsen O, Kylling A. Fast simulation tool for ultraviolet radiation at the Earth's surface. . 2005;44 (4) 041012.
36. Engelsen O, Brustad M, Aksnes L. Duration of Vitamin D Synthesis in Human Skin with Relation to Latitude, Total Ozone, Altitude, Ground Cover, Aerosols and Cloud Thickness. *Photochem Photobiol* 2005;81:1287–90.
37. Lu Z, Chen TC, Zhang A, et al. An evaluation of the vitamin D3 content in fish: Is the vitamin D content adequate to satisfy the dietary requirement for vitamin D? *J Steroid Biochem Mol Biol* 2007;103(3–5):642–4. doi: S0960–0760(06)00395–5 [pii]; 10.1016/j.jsbmb.2006.12.010 [doi].
38. Chel V, Wijnhoven HA, Smit JH, Ooms M, Lips P. Efficacy of different doses and time intervals of oral vitamin D supplementation with or without calcium in elderly nursing home residents. *Osteoporos Int* 2008;19(5):663–71.
39. Smith H, Anderson F, Raphael H, Maslin P, Crozier S, Cooper C. Effect of annual intramuscular vitamin D on fracture risk in elderly men and women--a population-based, randomized, double-blind, placebo-controlled trial. *Rheumatology (Oxford)* 2007;46(12):1852–7.
40. Sanders KM, Stuart AL, Williamson EJ, et al. Annual high-dose oral vitamin D and falls and fractures in older women: a randomized controlled trial. *JAMA* 2010;303(18):1815–22. doi: 303/18/1815 [pii]; 10.1001/jama.2010.594 [doi].
41. Trivedi DP, Doll R, Khaw KT. Effect of four monthly oral vitamin D3 (cholecalciferol) supplementation on fractures and mortality in men and women living in the community: randomised double blind controlled trial. *BMJ* 2003;326(7387):469. doi: 10.1136/bmj.326.7387.469 [doi]; 326/7387/469 [pii].