

Vitamin D reduces pain

Note: this effect is not like some pain pill.

**Don't expect taking one capsule
and feeling your pain go away.**

**Instead, gradually increasing your Vitamin D blood level
over months may lessen the overall experience of pain,
muscular weakness, and lessened mobility.**

**This effect may be greater in patients
who start with lower levels of Vit D in their blood.**

What follows are scientific references.

In this meta-analysis, we conclude that vitamin D supplementation is able to decrease pain scores and improve pain

-- Yong WC, Sanguankeo A, Upala S. Effect of vitamin D supplementation in chronic widespread pain: a systematic review and meta-analysis. Clin Rheumatol. 2017 Dec;36(12):2825-2833. doi: 10.1007/s10067-017-3754-y. Epub 2017 Aug 15.

Conclusion: All patients with persistent, nonspecific musculoskeletal pain are at high risk for the consequences of unrecognized and untreated severe hypovitaminosis D.

-- Plotnikoff GA, Quigley JM. Prevalence of Severe Hypovitaminosis D in Patients With Persistent, Nonspecific Musculoskeletal Pain. Mayo Clinic Proceedings, Vol. 78, Number 12, pp. 1463-1470.

CONCLUSION: A significantly greater mean decrease in pain score (primary outcome) was observed with vitamin D supplementation compared with placebo in people with chronic pain. These results suggest that vitamin D supplementation could have a role in the management of chronic pain.

-- Wu Z, Malihi Z, Stewart AW, Lawes CM, Scragg R. Effect of Vitamin D Supplementation on Pain: A Systematic Review and Meta-analysis. Pain Physician. 2016 Sep-Oct;19(7):415-27.

Vitamin D deficiency and insufficiency can cause or worsen neck and back pain and muscle spasm. The correction of vitamin D deficiency and insufficiency plays an important role in the treatment of chronic neck and back pain and muscle spasm

-- Cai C. Treating Vitamin D Deficiency and Insufficiency in Chronic Neck and Back Pain and Muscle Spasm: A Case Series. Perm J. 2019;23. doi: 10.7812/TPP/18.241. Epub 2019 Aug 8.

CONCLUSIONS: The findings suggest a role of low vitamin D levels for heightened central sensitivity, particularly augmented pain processing upon mechanical stimulation in chronic pain patients.

-- von Känel R, Müller-Hartmannsgruber V, Kokinogenis G, Egloff N. Vitamin D and central hypersensitivity in patients with chronic pain. *Pain Med.* 2014 Sep;15(9):1609-18. doi: 10.1111/pme.12454. Epub 2014 Apr 14.

In observational studies, low vitamin D levels have been associated with increased pain and higher opioid doses. Recent interventional studies have shown promising effects of vitamin D supplementation on cancer pain and muscular pain... Our conclusion is that vitamin D may constitute a safe, simple and potentially beneficial way to reduce pain among patients with vitamin D deficiency

-- Helde-Frankling M, Björkhem-Bergman L. Vitamin D in Pain Management. Int J Mol Sci. 2017 Oct 18;18(10). pii: E2170. doi: 10.3390/ijms18102170.

CONCLUSIONS: Our study therefore suggests that vitamin D deficiency exacerbates pain, dysfunction and a poorer quality of life in patients with knee osteoarthritis.

-- Alkan G, Akgol G. Do vitamin D levels affect the clinical prognoses of patients with knee osteoarthritis? *J Back Musculoskelet Rehabil.* 2017;30(4):897-901. doi: 10.3233/BMR-160589.

Vitamin D deficiency was highly prevalent in LSS (lumbar spinal stenosis) patients (74.3%), and severe pain was associated with higher prevalence of vitamin D deficiency and osteoporosis which could be potential risk factors or a fall and fracture.

-- Kim TH, Lee BH, Lee HM, Lee SH, Park JO, Kim HS, Kim SW, Moon SH. Prevalence of vitamin D deficiency in patients with lumbar spinal stenosis and its relationship with pain. Pain Physician. 2013 Mar-Apr; 16(2):165-76.

CONCLUSIONS: Standardized vitamin D supplementation in veterans with multiple areas of chronic pain can be effective in improving their pain levels, sleep, and various aspects of QoL.

-- Huang W, Shah S, Long Q, Crankshaw AK, Tangpricha V. Improvement of pain, sleep, and quality of life in chronic pain patients with vitamin D supplementation. Clin J Pain. 2013 Apr;29(4):341-7. doi: 10.1097/AJP.0b013e318255655d.

CONCLUSION: Vitamin D therapy was observed to increase muscle function in those who were the weakest and slowest at baseline. Vitamin D should be given to people with insufficiency or deficiency to improve muscle strength and mobility.

-- Zhu K, Austin N, Devine A, Bruce D, Prince RL. A randomized controlled trial of the effects of vitamin D on muscle strength and mobility in older women with vitamin D insufficiency. J Am Geriatr Soc. 2010 Nov; 58(11):2063-8. doi: 10.1111/j.1532-5415.2010.03142.x.

CONCLUSION: The prevalence and clinical correlates identified in this pilot study provide the basis for the assertion that vitamin D inadequacy may represent an under-recognized source of nociception and impaired neuromuscular functioning among patients with chronic pain.

-- Turner MK, Hooten WM, Schmidt JE, Kerkvliet JL, Townsend CO, Bruce BK. Prevalence and clinical correlates of vitamin D inadequacy among patients with chronic pain. *Pain Med.* 2008 Nov;9(8):979-84. doi: 10.1111/j.1526-4637.2008.00415.x. Epub 2008 Mar 11.