

# Vitamin D deficiency and poor muscle function in the over-60s

October 23 2019

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New research from Trinity College Dublin shows that vitamin D deficiency is an important determinant of poor skeletal muscle function in adults aged 60 years and over. Maintaining skeletal muscle function throughout life is a crucial component of successful aging, in promoting independence, mobility, quality of life and reducing falls and frailty. While resistance exercise is known to preserve muscle function, there is

growing evidence that adequate vitamin D status may also be protective. The paper was recently published in the international journal *Clinical Interventions in Ageing*.

- The prevalence of muscle weakness was twice as high among older adults with vitamin D deficiency (40.4 percent) compared with vitamin D adequacy (21.6 percent).
- Similarly, impaired "[muscle performance](#)" was three times higher in older adults with vitamin D deficiency (25.2 percent) compared with vitamin D adequacy (7.9 percent).
- Based on more complex [statistical analysis](#), the study showed that vitamin D deficiency significantly increased the likelihood of impaired muscle strength and performance.
- The study confirmed the associated benefits of physical activity. Older adults partaking in regular moderate physical activity had significantly lower likelihood of poor muscle strength and physical performance.
- In summary, vitamin D deficiency was associated with impaired [muscle strength](#) and performance in a large study of community-dwelling older people.
- It is generally accepted that vitamin D deficiency (at the 25(OH)D

Citation: Vitamin D deficiency and poor muscle function in the over-60s (2019, October 23) retrieved 14 January 2023 from <https://medicalxpress.com/news/2019-10-vitamin-d-deficiency-poor-muscle.html>

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