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LOW VITAMIN D LEVELS LEAD TO POOR PHYSICAL PERFORMANCE IN THE ELDERLY

In addition to its role in bone health, vitamin D is thought to play a role in musculoskeletal function. In a recent study, researchers examined the association between vitamin D status and physical performance in a sample of 976 persons over the age of 65. The physical performance of the subjects was analyzed using a short physical performance battery (SPPB) and handgrip strength. The SPPB tests included walking speed, ability to stand from a seated position, and ability to maintain balance in progressively more challenging positions.

Over 28% of the women and 13% of the men had vitamin D levels low enough to be considered a deficiency. Nearly three-fourths of the women and over half of the men had vitamin D levels that were considered insufficient. Among subjects with low vitamin D levels, physical performance and grip strength were significantly lower than that of participants who did not have reduced levels. The finding remained valid after taking into consideration other factors (such as season of the year and physical activity levels).

Given the high prevalence of vitamin D deficiency in older populations, additional studies examining the association between vitamin D status and physical function are needed. Current vitamin D recommendations are based on its role in bone health, although emerging research indicates vitamin D may also play important roles in preservation of muscle strength and physical function, as well as potential preventative roles in conditions such as cancer.

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