

# Vitamin D deficiency may compromise immune function

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Older individuals who are vitamin D deficient also tend to have compromised immune function, according to new research accepted for publication in the Endocrine Society's *Journal of Clinical Endocrinology & Metabolism (JCEM)*.

Vitamin D plays an important role in helping the body absorb calcium needed for healthy bones. The skin naturally produces [vitamin D](#) when it is exposed to sunlight. People also obtain smaller amounts of the vitamin through foods, such as milk fortified with vitamin D. More than 1 billion people worldwide are estimated to have deficient levels of vitamin D due to limited sunshine exposure.

"Our data suggest vitamin D may be involved in maintaining the health of the immune system as well as the skeletal system," said one of the study's authors, Mary Ward, PhD, of the University of Ulster in Coleraine, U.K. "This study is the first to find a connection between vitamin D levels and inflammation in a large sample of older individuals."

The observational study of 957 Irish adults who were at least 60 years old examined vitamin D levels as well as biomarkers of inflammation. Participants who were vitamin D deficient were more likely to have high levels of these biomarkers, which are linked to cardiovascular disease and inflammatory conditions such as multiple sclerosis and rheumatoid arthritis.

"The results indicate [immune function](#) may be compromised in older individuals with vitamin D deficiency," Ward said. "Ensuring older individuals have optimal vitamin D levels may be a way to boost immune function in this population, but this needs to be confirmed through additional studies."

Provided by The Endocrine Society

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