

# **SARS-CoV-2 seropositivity not associated with low vitamin D**

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Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

seropositivity is not associated with low vitamin D levels, according to a study published online May 19 in *JAMA Network Open*.

Yonghong Li, Ph.D., and colleagues from Quest Diagnostics in San Juan Capistrano, California, conducted a cohort study involving employees and their spouses who elected to be tested for SARS-CoV-2 immunoglobulin G (IgG) in August to November 2020. Data were included for 18,148 individuals with SARS-CoV-2 IgG tests and vitamin D levels from the prepandemic and pandemic periods.

The researchers found that 5.0 percent of participants were seropositive. SARS-CoV-2 seropositivity was not associated with having a vitamin D level less than 20 ng/mL before or during the pandemic in models adjusted for age, sex, race/ethnicity, education, body mass index, [blood pressure](#), smoking status, and [geographic location](#); there was also no association for having a vitamin D level less than 30 mg/mL before or during the pandemic. In propensity score analyses, the results were similar. There was an association noted for SARS-CoV-2 seropositivity with obesity (odds ratio, 1.26), not having a college degree (odds ratio, 1.40), and Asian, Black, Hispanic, and American Indian or Alaska Native and Native Hawaiian or other Pacific Islander race/ethnicity (odds ratios, 1.46, 2.74, 2.65, 2.01, respectively); inverse associations were seen for [high blood pressure](#), smoking, and residing in the Northeast and West of the United States (odds ratios, 0.82, 0.60, 0.75, and 0.54, respectively).

"These findings do not support the hypothesis that vitamin D plays a role in susceptibility to SARS-CoV-2 infection," the authors write.

Quest Diagnostics provided funding for the study.

**More information:** Yonghong Li et al, Assessment of the Association of Vitamin D Level With SARS-CoV-2 Seropositivity Among Working-

Age Adults, *JAMA Network Open* (2021). DOI: [10.1001/jamanetworkopen.2021.11634](https://doi.org/10.1001/jamanetworkopen.2021.11634)

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