

## Risk for severe COVID-19 increases with BMI above 23

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(HealthDay)—The risk for severe COVID-19 leading to hospital

admission and death is increased at a body mass index (BMI) of more than 23 kg/m<sup>2</sup>, according to a study published online April 28 in *The Lancet Diabetes & Endocrinology*.

Min Gao, from the University of Oxford in the United Kingdom, and colleagues conducted a community-based cohort study using deidentified patient-level data to examine the association of obesity with adverse outcomes after severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Data were included for 6,910,695 eligible individuals (mean BMI, 26.78 kg/m<sup>2</sup>).

The researchers found that 0.20 percent of the eligible individuals were admitted to the hospital, 0.02 percent were admitted to an [intensive care unit](#) (ICU), and 0.08 percent died after a positive SARS-CoV-2 test. A J-shaped association was identified between BMI and admission to the hospital for COVID-19 and death (adjusted hazard ratios per kg/m<sup>2</sup> from the nadir at BMI of 23 kg/m<sup>2</sup>, 1.05 and 1.04, respectively); across the whole BMI range, there was a linear association with ICU admission (hazard ratio, 1.10). There was a significant interaction between BMI and age and ethnicity; above BMI 23 kg/m<sup>2</sup>, hazard ratios increased per kg/m<sup>2</sup> for [younger people](#) (adjusted hazard ratio for [hospital admission](#), 1.09 versus 1.01 for those aged 20 to 39 versus 80 to 100 years) and for Blacks versus Whites (hazard ratios, 1.07 versus 1.04).

"We don't yet know that [weight loss](#) specifically reduces the risk of severe COVID-19 outcomes, but it is highly plausible, and will certainly bring other health benefits," a coauthor said in a statement.

**More information:** [Abstract/Full Text](#)  
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