

# Lower birth weight, more weight gain seen with in utero COVID-19 exposure

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Infants with in utero exposure to COVID-19 have lower birth weight and

increased weight gain in the first year of life, according to a study published online March 29 in the *Journal of Clinical Endocrinology & Metabolism*.

Mollie W. Ockene, from Massachusetts General Hospital and Harvard Medical School in Boston, and colleagues conducted a longitudinal cohort study involving 149 [infants](#) with in utero COVID-19 exposure and 127 unexposed controls. At ages 0, 2, 6, and 12 months, weight, length, and body mass index (BMI) were abstracted from health records.

The researchers found different trajectories of weight and BMI, but not length, z-scores during the first year of life for infants with in utero COVID-19 exposure versus controls. Lower BMI z-score at birth and greater gain in BMI z-score from birth to 12 months were seen for infants born to mothers with prenatal COVID-19 (effect sizes,  $-0.35$  and  $0.53$ , respectively). A significant proportion of the relationship between COVID-19 exposure and postnatal growth was mediated by birth weight z-score.

"The accelerated growth trajectory displayed by infants with fetal exposure to COVID-19 may be a harbinger for adverse cardiometabolic outcomes, including obesity and [heart disease](#), later in life," the authors write. "Detailed physiologic studies are now needed to further delineate cardiometabolic disease risk among children born to mothers with prenatal COVID-19 as a key step toward optimizing the health and longevity of this expanding global population."

Several authors disclosed financial ties to the [pharmaceutical industry](#).

**More information:** Mollie W Ockene et al, Accelerated Longitudinal Weight Gain Among Infants With In Utero COVID-19 Exposure, *The Journal of Clinical Endocrinology & Metabolism* (2023). [DOI: 10.1210/clinem/dgad130](#)

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