

# Gestational age tied to body size in infancy, childhood

January 30 2023, by Lori Solomon

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Gestational age (GA) may be an important factor for body size in

infancy, but the strength of association attenuates consistently with age, according to a study published online Jan. 26 in *PLOS Medicine*.

Johan L. Vinther, from University of Copenhagen in Denmark, and colleagues examined the association of GA at birth with [body size](#) from infancy through adolescence. The analysis included data from 253,810 mother-child dyads from 16 general population-based cohort studies in Europe, Canada, and Australia.

The researchers found that GA was positively associated with [body mass index](#) (BMI) in the first decade of life, with the greatest increase in mean BMI z-score seen during early infancy. In adolescence, preterm individuals reached similar levels of BMI as their term peers. There was a similar pattern observed between GA and overweight, with an increase in odds of overweight from late infancy through midchildhood. GA was slightly negatively associated with the risk for overweight by adolescence.

"In conclusion, based on data from infancy through adolescence in 16 cohort studies, we found that GA is important for growth in [infancy](#), but the strength of association attenuated consistently with age," the authors write. "By adolescence, preterm individuals have on average a similar mean BMI to peers born at term."

One author disclosed financial ties to the pharmaceutical industry.

**More information:** Johan L. Vinther et al, Gestational age at birth and body size from infancy through adolescence: An individual participant data meta-analysis on 253,810 singletons in 16 birth cohort studies, *PLOS Medicine* (2023). [DOI: 10.1371/journal.pmed.1004036](https://doi.org/10.1371/journal.pmed.1004036)

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Citation: Gestational age tied to body size in infancy, childhood (2023, January 30) retrieved 26 April 2024 from

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