

# Maternal caffeine consumption linked to smaller child height

November 1 2022

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Maternal caffeine consumption during pregnancy is associated with

smaller child height from age 4 to 8 years, according to a study published online Oct. 31 in *JAMA Network Open*.

Jessica L. Gleason, Ph.D., M.P.H., from the Eunice Kennedy Shriver National Institute of Child Health and Human Development in Bethesda, Maryland, and colleagues examined the association of [pregnancy](#) caffeine and paraxanthine measures with child growth in a contemporary cohort with low caffeine consumption (Environmental Influences on Child Health Outcomes cohort of the National Institute of Child Health and Human Development Fetal Growth Studies [ECHO-FGS], conducted at 10 sites from 2009 to 2013) and a historical [cohort](#) with high caffeine consumption (Collaborative Perinatal Project [CPP], conducted at 12 sites from 1959 to 1965).

The researchers found that in ECHO-FGS, 788 children of women in the fourth versus first quartile of plasma caffeine concentrations had lower height z scores ( $\beta = -0.21$ ), while only in the third quartile were differences in weight z score observed ( $\beta = -0.27$ ). In CPP, 1,622 children of women in the highest caffeine quintile group had lower height z scores than their peers from the lowest group starting at age 4 years; with each successive year of age, the gap widened ( $\beta = -0.16$  and  $-0.37$  at 4 and 8 years, respectively). At ages 5 to 8 years, slight reductions in weight were seen for children in the third versus the first [caffeine](#) quintile ( $\beta = -0.16$  to  $-0.22$ ). In both cohorts, results were consistent for paraxanthine concentrations.

"The clinical implication of this height difference is unclear and warrants future investigation," the authors write.

One author disclosed serving as a consultant to Organon and Cooper Surgical.

**More information:** Jessica L. Gleason et al, Association of Maternal

Caffeine Consumption During Pregnancy With Child Growth, *JAMA Network Open* (2022). [DOI: 10.1001/jamanetworkopen.2022.39609](https://doi.org/10.1001/jamanetworkopen.2022.39609)

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