

Cognitive scores lower for children with iron deficiency

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Children with chronic iron deficiency have lower cognitive scores even

at four and 12 months after an intervention, according to a study published online Nov. 22 in *Pediatrics*.

Argie Gingoyon, M.P.H., from the Dalla Lana School of Public Health at the University of Toronto, and colleagues examined the association between chronic iron deficiency versus good iron status with cognitive scores in a contemporary, high-resource setting. The prospective study included children aged 12 to 40 months screened using [hemoglobin](#) and [serum ferritin](#).

Diet advice was received by all parents, and the children received oral iron according to their iron status. After four months, children were classified as having chronic iron deficiency or iron sufficiency. Data were included for 116 [children](#): 41 with chronic iron deficiency and 75 with iron sufficiency.

The researchers found that the mean between-group differences in Early Learning Composite were -6.4 and -7.4 points at four and 12 months, respectively. The mean between-group differences in serum ferritin were $14.3 \mu\text{g/L}$ at four months and were not significantly different at 12 months.

"By 12 months, the mean serum ferritin values were similar in the two groups; hemoglobin values were similar in the two groups at both four and 12 months," the authors write. "Thus, despite laboratory correction, cognitive differences remained."

More information: Frank R. Greer et al, Early Childhood Chronic Iron Deficiency and Later Cognitive Function: The Conundrum Continues, *Pediatrics* (2022). [DOI: 10.1542/peds.2022-058591](https://doi.org/10.1542/peds.2022-058591)

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