

Formula feeding raises odds for anemia in very 'preemie' babies

December 13 2022, by Cara Murez



Babies born prematurely who are fed formula may need iron

supplementation like their breastfed counterparts, new research suggests.

"Just because a baby is on iron-rich formula, we should not assume all of their iron needs are being met, since iron from the formula may not have the same absorption as iron from [breast milk](#)," said researcher Grace Power. She is a third-year [medical student](#) at Dalhousie University in Nova Scotia, Canada.

"These findings suggest we might need to rethink some of the guidelines for iron supplementation," she said in a news release from the American Society of Hematology.

Currently, the Canadian Pediatric Society recommends iron supplementation for breastfed [preterm babies](#), but not for those fed formula because the formula contains more iron than breastmilk. The American Academy of Pediatrics does not offer recommendations on iron supplementation for preterm babies.

For the new study, the researchers analyzed health records from 392 infants born before 31 weeks' gestational age in Nova Scotia from 2005 to 2018. The data set is considered to be representative of the general Canadian population.

About three-quarters of the infants in the study were exclusively fed iron-rich formula. The other one-quarter were partially or exclusively breastfed.

The investigators gathered data on feeding practices, iron intake from formula and iron supplements, and iron levels in the blood taken at 4 and 6 months of age, with ages corrected for prematurity by subtracting the number of weeks early each baby was born from its actual age.

Babies who were exclusively formula-fed had a significantly higher daily

iron intake than babies who were breastfed, the findings showed.

Yet, more than 36% of formula-fed babies and just over 20% of breastfed babies were iron-deficient, according to the report.

This suggests that higher [iron intake](#) from formula does not always translate into higher iron stores in the blood.

It is possible that components of breast milk that are not found in formula, such as hormones, help increase the absorption of iron into the baby's bloodstream, the researchers suggested.

Consuming a mix of breast milk and formula, rather than just formula, was found to be protective.

The formula-fed babies who were born earlier, smaller or who had received blood transfusions were at greater risk for [iron deficiency](#) than other formula-fed infants, the study authors said.

"We should not assume a one-size-fits-all approach to [iron supplementation](#)," Power stressed.

Preterm babies could benefit from closer monitoring, especially if they are exclusively fed [formula](#), she added.

"If iron stores are checked in time and [babies](#) are regularly supplemented with iron as needed, we can still prevent iron deficiency," Power concluded.

Careful monitoring is important to ensure the right balance, the researchers warned, because having too much iron can also be harmful.

Power was scheduled to present the findings Monday at the American

Society of Hematology [annual meeting](#), in New Orleans. Research presented at medical meetings should be considered preliminary until published in a peer-reviewed journal.

More information: The American Academy of Pediatrics has more on iron supplementation in [infants](#).

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: Formula feeding raises odds for anemia in very 'preemie' babies (2022, December 13) retrieved 6 May 2024 from

<https://medicalxpress.com/news/2022-12-formula-odds-anemia-preemie-babies.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--