

'Triple exposure' may protect against peanut allergy



Eating peanuts while breastfeeding, combined with introducing peanuts to babies in their first year, may reduce a child's risk of peanut allergy by age five.

The [study](#), published in the *Journal of Developmental Origins of Health and Disease*, examined the relationship between: 1. maternal peanut consumption; 2. breastfeeding; and 3. infant peanut consumption, in the development of peanut sensitization – an early sign of allergy risk.

EAT PEANUT, BREASTFEED BABY & FEED BABY PEANUT

"We call it the 'triple exposure hypothesis'," says senior author Dr. **Meghan Azad** (University of Manitoba, CHILD Deputy Director).

The study found that:

- infants not breastfeeding who were fed peanut before one year of age had a reduced risk of peanut sensitization at age five (66% reduced risk); and
- the difference was more significant in the "triple exposure" scenario (88% reduced risk), where mothers introduced peanut early while breastfeeding and consuming peanut.

"We did not see a direct beneficial association

for breastfeeding alone in relation to peanut sensitization," Dr. Azad explains. "However, the combined effect of all three exposures seemed to offer an enhanced protection against peanut sensitization and future allergy risk."

BUILDING EVIDENCE

"In 2017, CHILD research showed that infants who avoided cow's milk products, egg and peanut during their first year were more likely to be sensitized to these foods at age one," says study co-author Dr. Malcolm Sears, founding Director of CHILD. In 2019, CHILD researchers published evidence that infants who did not consume peanut in their first 12 months were more than four times as likely to have a clinical peanut allergy by age three.

"This new paper confirms the benefits of early introduction of these potentially allergenic foods," adds Dr. Sears, "while contributing new evidence that maternal peanut consumption and breastfeeding could further enhance this protective effect."

We hope that this research may also eventually contribute to the development of supplements or therapeutics for mothers who cannot safely consume peanut, and for infants who cannot be breastfed," says Dr. Azad.

An infographic with a dark blue header and footer. The header contains the title "'Triple exposure' may protect against peanut allergy". On the left, there is a photo of a woman holding a peanut butter cookie. To the right of the photo are two circular icons: one with a brain and a peanut, and another with a brain and a baby. Next to these icons are two percentages: 66% and 88%. The 66% text says "lower risk if fed peanut before 12 months and NOT breastfed". The 88% text says "lower risk if fed peanut before 12 months and breastfed by peanut-eating mother". To the right of these percentages is a text box that says "Triple exposure: Eat peanut, breastfeed baby, and feed baby peanut before 12 months." and "The combined effect of all three exposures seems to offer better protection against peanut sensitization and future allergy risk." At the bottom right of the infographic is the CHILD COHORT STUDY logo, which consists of three stylized human figures in blue and the text "CHILD COHORT STUDY" with a small leaf icon. The footer of the infographic contains the text "childcohort.ca | Key Discoveries" and a small version of the CHILD COHORT STUDY logo.



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