# Effect of Infant Breastfeeding Versus Formula Feeding for a Minimum of One Month on Cognitive Outcomes in Early Childhood

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## Background

- Of women who start out breastfeeding, 43% stop by 3 months.
- Breast milk provides nutrients that enhance myelination in the brain, allowing for proper neuron signalling to improving cognition.
- Research supports that exclusive or mixed breastfeeding for at least 1 month may improve general child cognition.

## Purpose

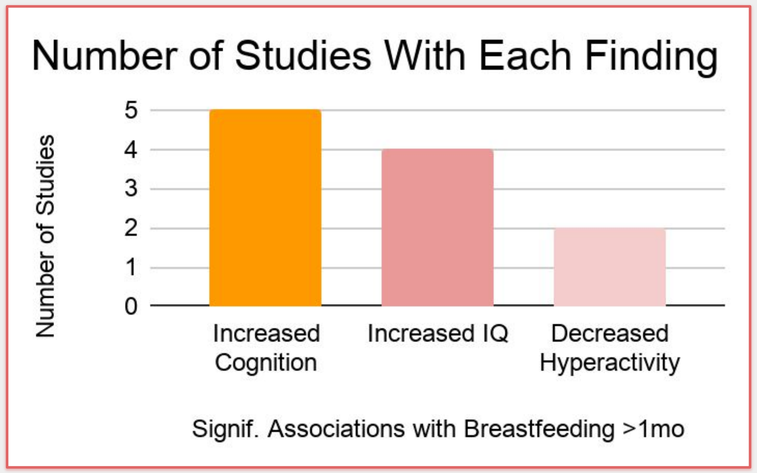
- This project aims to review and synthesize the literature on the relationship between a minimum of 1 month of exclusive or mixed breastfeeding versus exclusive formula feeding on infant cognitive development from birth to early childhood.

## Methods

- Literature Review: PubMed, CINAHL, BMJ
- Key search terms: “cognitive development” “IQ” “breastfeeding” “formula-feeding” and more similar terms
- Inclusion criteria: articles published within the last 10 years, quantitative design, breastfeeding>1 month
- Exclusion criteria: meta-analyses, qualitative design, commentaries, breastfeeding< 1 month
- 8 articles were selected.










## PICOT Question

- How does a minimum of one month of exclusive or mixed breastfeeding compared to exclusive formula feeding impact infant cognitive development from birth to early childhood?

## Findings and Results

- Our studies consisted of 8 longitudinal cohort studies that compared childhood cognition scores of infants breastfed at least 1 month (up to 9 months) to formula-fed infants.
- 7 studies found significant relationships between infants breastfed at least 1 month and improved cognitive outcomes up to 9 years old.
- 1 study found no significant relationship but was limited by a small sample size.

## Conclusions and Recommendations

- Our findings suggest that there is a positive relationship between breastfeeding for at least one month and cognitive development in children younger than 9 years of age.
- This supports the use of breastfeeding as the first choice for infant feeding.
- We recommend that future research compares cognition of breastfed versus formula fed infants from birth into adulthood.

**There is a positive relationship between breastfeeding for at least one month and cognitive development.**

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