

FROM THE FAMILY PRACTICE INQUIRIES NETWORK

Does breastfeeding protect against viral GI infections in children <2 years old?

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■ EVIDENCE-BASED ANSWER

While breastfeeding protects against all-cause diarrhea in infants¹⁻⁵ (strength of recommendation [SOR]: **B**, based on cohort studies and 1 randomized controlled trial), no evidence shows that breastfeeding confers specific protection against viral gastrointestinal infections. Several studies demonstrate that breastfeeding does not prevent acquisition of rotavirus but does decrease the severity of its course (SOR: **B**, based on cohort, case-control studies, and a systematic review lacking homogeneity).⁶⁻¹⁰

■ EVIDENCE SUMMARY

Breastfeeding has been associated with decreased overall rates of diarrhea in infants in developed²⁻⁴ and developing^{1,5} countries. Many cases of gastroenteritis without a confirmed enteropathogen have viral causes. Rotavirus is a common viral pathogen in children aged <2 years, and much of the evidence about breastfeeding and viral gastroenteritis comes from studies about rotavirus infections.

Prospective cohort studies conducted in Canada⁶ and the United States⁷ showed no difference in the incidence of rotavirus gastroenteritis between infants up to 2 years of age who were breastfed and those who were not. Although differences were not found between either the incidence or the duration of rotavirus infections, these studies showed a significant decrease in the frequency of vomiting among breastfed infants.

A case-control study in Bangladesh suggests that breastfed infants have a higher incidence of rotavirus diarrhea, but selection of diarrhea patients as controls may have underestimated the protective effect.⁸ Although breastfeeding was not found to provide overall protection from developing rotavirus gastroenteritis, exclusive breastfeeding appeared to protect against severe rotavirus diarrhea for infants aged <2 years.

Another US study showed that risk for rotavirus infection did not differ for infants who were exclusively breastfed, partially breastfed, or exclusively formula-fed.¹⁰ However, the breastfed infants were more likely to have milder symptoms.

■ RECOMMENDATIONS FROM OTHERS

The American Academy of Family Physicians¹¹ and the American Academy of Pediatrics¹² recommend exclusive breastfeeding for a minimum of the first 6 months of life, and continuation of breastfeeding to supplement age-appropriate foods through the next 6 months. The World Health Organization¹³ recommends exclusive breastfeeding for the first 4 to 6 months of life, and continuation of breastfeeding for 2 years of age or beyond.

CLINICAL COMMENTARY

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Another reason to encourage mothers to breastfeed

This review affirms that breast milk protects against diarrheal illness while questioning a specific effect in preventing rotavirus infections. Evidence that breast milk reduces severity of the world's major cause of diarrhea-associated death, however, is sufficient basis to support breastfeeding.

I educate expectant mothers about breast milk's disease-mitigating qualities and compliment breastfeeding mothers on giving this gift to their children. I discuss the impact of breastfeeding on incidence of otitis media, asthma, obesity, and all-cause diarrhea. I also counsel that breast milk may decrease severity of diarrhea because it is "easier on the digestive system" (lower osmolality) than formula.

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