

BREASTFEEDING

Supporting information

This guideline has been prepared with reference to the following:

University Hospitals of North Midlands. Hindmilk Policy. 2015

Maternal breast milk is to be preferred to formula for enteral feeding in preterm infants?

A systematic review and meta-analysis of 43 observational and six experimental studies gathered available evidence referent to the morbidity of preterm (≤ 28 weeks) and low birth weight infants, by means of feeding (Miller, 2018). This analysis concluded that (i) there is clear evidence that the use of human milk reduces necrotising enterocolitis, and that this effect is dose-dependent, (ii) there is a possible reduction in late onset sepsis using HM although inconclusively, (iii) evidence is inconclusive regarding human milk and severe bronchopulmonary dysplasia and (iv) using human milk for infant feeding possibly protects against severe retinopathy of prematurity. Last, there is inconclusive evidence regarding the neurodevelopment (i.e. cognitive and motor development) of preterm infants regarding human milk against other feeding practices.

A Cochrane review (Brown, 2019) found no randomised trial data comparing breast milk to formula for preterm infants, but concluded nonetheless that breast milk should remain the default choice as it conferred "major immuno-nutritional advantages for preterm or low birth weight infants".

A secondary analysis of data from a randomized controlled trial found that extremely preterm infants (28 weeks) explored a number of factors to see which were associated with the following feeding milestones: first enteral feeding, full enteral feeding, first oral feeding, half oral feeding, and full oral feeding (Park, 2015). The data suggested that infants fed with breast milk achieved each of five milestones earlier than formula-fed infants.

Brown JVE, Walsh V, McGuire W. Formula versus maternal breast milk for feeding preterm or low birth weight infants. *Cochrane Database Syst Rev*. 2019 Aug 12;8:CD002972
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002972.pub3/full>

Miller J, Tonkin E, Damarell RA et al. 2018. A systematic review and meta-analysis of human milk feeding and morbidity in very low birth weight infants. *Nutrients*. 10:707
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6024377/>

Park J, Knafl G, Thoyre S et al. Factors associated with feeding progression in extremely preterm infants. *Nursing research* 2015, 64;159-167.

Evidence Level: III

Last amended December 2021
Last reviewed December 2021