



# Breast Milk

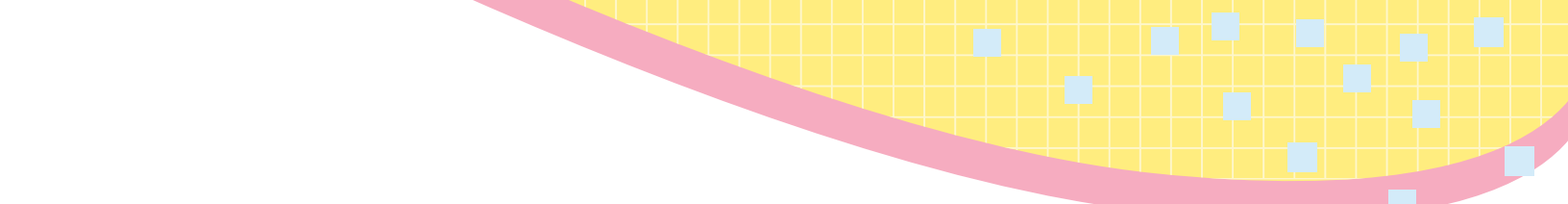
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## Benefits

- Optimal food for almost all infants regardless of gestational age.
- Has been shown to improve subsequent mental development in term/preterm infants as well as provide enhanced protection against infection.
- Premature infants with BW<1800-2000g are supplemented with human milk fortifier while hospitalized to provide adequate calories, protein, and nutrients for growth and development.
- Human milk fortifier is not recommended after discharge.
- Mothers of premature babies produce milk with significantly higher concentrations of lipids, proteins, sodium chloride, iron, anti-infective properties (e.g., IgA), and neuroprotective properties for approximately 4-6 weeks following birth.
- Nutritional composition of breast milk varies greatly among mothers.

## Recommendations

- Slow feeding and easy fatigue are common problems after discharge.
- Feed on demand every 1.5-3 hours; preterm infants may require a schedule for feedings (e.g., every 3 hours).
- If supplementation is required at discharge due to prematurity, poor growth, inadequate volume intake, or fluid restriction:
  - 2-4 feedings per day with premature transitional formula (22kcal/oz), and remainder as breastfeeding (preferred method); OR
  - Add premature transitional formula powder (Enfamil EnfaCare Lipil 22 or Similac NeoSure 22) to expressed breast milk to make 24-30 kcal/oz (call dietitian for recommendations and recipe).
- Infants <34 weeks or BW<1800g should receive a multivitamin (1mL/day) and an iron supplement (2 mg/kg/day) for the first year of life (can be given as 1mL of MVI with Fe).
- All term breastfeeding infants should receive Vitamin D (400 IU/day) as 1mL of MVI.
- Infants who have birthweight <1500g and are discharged on unfortified human milk may be at risk for nutritional insufficiency (growth failure and metabolic bone disease).
  - Evaluate at 2-4 weeks post-discharge and as needed thereafter: weight, length, FOC, serum phosphorous and alkaline phosphatase activity.

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- If poor growth or abnormal laboratory results, recommend neonatal dietitian consult to assess need for supplementation or further evaluation.

## **Growth Outcomes**

- Very low-birthweight infants fed human milk initially have slower early growth, but have improved Bayley mental developmental index scores.
- Early catch-up growth for length (<9 months) and head circumference (<4 months).