CONSIDERATIONS FOR HOME USE OF HUMAN MILK FORTIFIER (HMF)

A Decision Aid Developed by Canadian Neonatal Dietitians

Based on the consideration of current evidence (*see references*) and the clinical experience of three Canadian neonatal dietitians.*

WHO IS A CANDIDATE?

Is GA at birth ≤ 28 weeks and/or is birth weight ≤ 1,000 g?

NO → INFANT IS NOT A CANDIDATE FOR POST-DISCHARGE FORTIFICATION WITH HMF

YES ↓

Is TFI < 160 mL/kg/day?

NO → INFANT IS NOT A CANDIDATE FOR POST-DISCHARGE FORTIFICATION WITH HMF

YES ↓

Is there at least 1 of the following risk factors present?

1. Weight gain < 20-30 g/day over past 2 weeks
2. Weight more than 2 major percentile curves below length
3. Suboptimal nutritional biochemical indices:
   - Serum phosphorus < 1.8 mmol/L
   - ALP > 600 IU/L + trending upwards
   - BUN < 3.6 mmol/L
4. Marked bone disease

NO → INFANT IS NOT A CANDIDATE FOR POST-DISCHARGE FORTIFICATION WITH HMF

YES ↓

INFANT IS A CANDIDATE FOR POST-DISCHARGE FORTIFICATION WITH HMF

WHAT TYPE OF FEEDING?

Exclusive EBM feeding

Consider HMF if there is sufficient EBM to meet at least 50% of the infant's needs:

- If enough EBM for all feeds, use powder or concentrated liquid HMF
- If only enough EBM for half the feeds, use EBM and Similac® HMF SC30

Combination of EBM, formula and/or breast milk feedings

- Consider HMF only if EBM ≥ 50% of feeds

HOW MUCH HMF?

- Provide supply that lasts the longest: 4- to 6-week supply of HMF OR enough to last to 42 weeks CGA
- Provide HMF used in hospital
- Do not exceed 1:25 ratio for HMF

Note

For mothers who are exclusively breastfeeding:

- Encourage continued breastfeeding
- Optimize nutritional intake by supplementing with preterm post-discharge formula feedings

Legend

ALP: alkaline phosphatase
BUN: blood urea nitrogen
CGA: corrected gestational age
EBM: expressed breast milk
GA: gestational age
HMF: human milk fortifier
Similac® HMF SC30: Similac® Human Milk Fortifier Special Care® 30
TFI: total fluid intake

WHEN TO STOP?

Is any one of the following criteria fulfilled?

- 40-42 weeks CGA
- Adequate growth velocity for GA
- Excessive growth velocity (> 40 g/day)
- Weight ≥ 3.6 kg
- TFI > 160 mL/kg/day
- Biochemical indices WNL if previously abnormal

NO → **Consult a pediatric outpatient dietitian:**

- Assess further need of HMF
- Assess requirement for nutrition intervention

YES

DISCONTINUE HMF

WHAT TO TRANSITION TO?

Is TFI > 180 mL/kg/day?
Is growth adequate for GA?
Are nutritional biochemical indices normal?

NO TO ANY →

- Feed a combination of EBM bottle feeds and 24 Cal/oz preterm post-discharge formula feeds
- Use preterm, post-discharge formula exclusively if mother is not breastfeeding and EBM is not available

Consult a pediatric outpatient dietitian to assess need for additional follow-up or nutrition intervention

YES TO ALL

Transition to
breastfeeding/unfortified EBM
or
PDF (22 Cal/oz) if BM not available

Legend

BM: breast milk	**HMF**: human milk fortifier
CGA: corrected gestational age	**PDF**: post-discharge formula
EBM: expressed breast milk	**TFI**: total fluid intake
GA: gestational age	**WNL**: within normal limits

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This tool is made available by Abbott Laboratories Co.

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