ENTERAL FEEDING - INITIATION AND PROGRESSION

Breast milk is the preferred feed. Consent for pasteurised donor human milk (PDHM) can be sought for all neonates <32 weeks gestation and/or <1500grams where breast milk is unavailable or mothers choose not to breastfeed. Other infants with a risk of feed intolerance will be considered for PDHM on an individual basis by Consultant/SR.

On occasion’s where there is very high demand for PDHM, usage will be restricted to neonates <32 weeks gestation and/or <1500grams and any other neonate prioritised by SR/Consultant to protect the most at risk infants.

PDHM is usually fed up until a corrected gestation of 32-34 weeks unless demand for PDHM is high; then recipients of PDHM will be reviewed by PREM Milk Bank/Consultants on an individual basis and supply restricted to prioritise the highest risk infants to retain supply.

Refer to Perron Rotary Expressed Milk Bank

Ready to use formula is used when neonates are not receiving breast milk or pasteurised donor milk. Feeding is by breastfeed, bottle-feed, intermittent or continuous gavage feed.

ENTERAL NUTRITION should be commenced and gradually increased as early as possible in the presence of clinical stability. Infants who are hemodynamically unstable or unstable with sepsis normally have feeds withheld.

<table>
<thead>
<tr>
<th>TABLE 1. STANDARDISED ENTERAL FEEDING SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIRTH GESTATION</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>&lt;26 WK</td>
</tr>
<tr>
<td>26 TO &lt;32 WK</td>
</tr>
<tr>
<td>≥32 WK</td>
</tr>
</tbody>
</table>
KEY POINTS:

- **Sepsis:** In unstable patients with sepsis, consider withholding feeds until 24 to 48 hours of antibiotic therapy is completed, the blood pressure is stable without inotropes or colloidal support, and respiratory assistance is back to the baseline levels before clinical deterioration occurred.

- **Blood Transfusion:** In infants thought to be at high risk of NEC, consideration may be given to ceasing feeds for 4 hours prior to giving a blood transfusion and to resuming feeds 4 hours after its completion. If feeds are ceased, replacement IV fluids may be required.

- **PDA:** Tolerance of small feeds is not compromised by Ibuprofen; small feeds may be continued during Ibuprofen therapy for PDA.

- **NEC (≥Stage II):** Feeds are withheld for a minimum of 7 days.

**EARLY TROPHIC FEEDS**

Early trophic feeds maintain gut integrity and are encouraged for all infants when EBM or PDHM is available. If unable to grade up feeds, consider trophic feeds of $\leq 10$ mL/kg/d (i.e. 1-2 mL/kg 4 to 6 hourly).

**FROZEN V FRESH BREAST MILK (KEMH)**

All preterm infants are to receive breastmilk preferably in the order in which it is expressed. This ensures that all infants receive the nutritional and immunological benefits of colostrum and early milk. For most infants, this milk will have been frozen. Early milk has higher protein concentration and freezing milk may reduce or eliminate CMV. Fresh milk can be used if frozen milk (mother’s own) is not readily available and as breastfeeds are introduced.

**BREAST MILK FORTIFICATION**

*Human milk is usually fortified for infants with gestational age <35 weeks.* Human milk fortifier may be added once enteral milk intakes of 100ml/kg/day are achieved. Refer to Breast milk fortification and preterm formula.

**FORMULA**

When EBM and/or PDHM are not options, infant formula is the only choice. When parental permission has been given for formula:

<table>
<thead>
<tr>
<th>&lt;35 WEEKS</th>
<th>Commence as per Table I. using Preterm Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥35 WEEKS</td>
<td>Use Term formula (Preterm or an enriched Term Formula may be required for some infants – referral to the dietitian is recommended)</td>
</tr>
</tbody>
</table>

**HYPOGLYCAEMIA** - Refer to NCCU Clinical Guidelines Section 10 Metabolic Management

**Hypoglycaemia**
TERM NEONATES
Breast feeding is promoted and actively encouraged for all neonates. The first breastfeed should be offered within the first few hours after birth if no contraindications. Term formula may be required if breast milk is unavailable. If judged appropriate by the Neonatologist, near term and term infants (≥36 weeks), could commence on full feeds ± breastfeeding if appropriate.

Refer to KEMH O&G Clinical Guidelines Section B: 8: Newborn Feeding at http://www.kemh.health.wa.gov.au/development/manuals/O&G_guidelines/sectionb/index.htm#8

GUIDELINES FOR MANAGING SIGNS OF FEED INTOLERANCE

VITAMIN AND MINERAL SUPPLEMENTATION

VITAMIN D SUPPLEMENT: ALL infants born <35 weeks gestation on full feeds (unfortified or fortified EBM/PDHM or term/preterm formula) require a daily vitamin D supplement (Cholecalciferol) until discharge.

Infants fed fortified EBM/PDHM or formula and the daily Vitamin D supplement meet their nutritional requirement for Vitamin D₁₁,₁₂.

Only infants fed unfortified EBM/PDHM require the daily vitamin D supplement AND Pentavite (see multivitamin supplement below) to meet their nutritional requirement for Vitamin D.

For VITAMIN D DOSE, refer to Neonatal Clinical Guidelines, Neonatal Drug Protocols

Vitamin D supplementation is usually ceased at discharge - ONLY infants of Vitamin D deficient mothers who are breastfed need Vitamin D supplementation after discharge, according to the hospital guidelines

MULTIVITAMIN SUPPLEMENT: Infants born <35 weeks gestation on full UNFORTIFIED EBM/PDHM require Pentavite (in addition to the Vitamin D supplement) until discharge to help meet their requirement for Vitamin D and to help meet their requirement for other micronutrients. Multivitamins are ceased at discharge. Pentavite is NOT required for infants receiving fortified EBM/PDHM or infant formula. See Pentavite see Vitamin and Mineral Supplements

IRON SUPPLEMENT: Iron supplements are not required for infants receiving infant formula or fortifier containing iron. All other infants born <35 weeks gestation on full milk feeds, starting not before 4 weeks of age, should receive iron supplements until 4 months corrected age.

For IRON DOSE (Ferrous Sulphate), refer to Neonatal Clinical Guidelines, Neonatal Medication Protocols
REFERENCES: