GUIDELINE

Enteral Feeding: Initiation and Progression

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Mothers own breast milk is the preferred feed for infants[1].

For infants of mother's who choose not to breast feed their infant or cannot supply enough milk for their infant then the options include pasteurised donor human milk (PDHM) for those infants who meet the criteria or infant formula. Privately sourced expressed breast milk will not be accepted due to the safety risks associated with this milk[23].

Preterm infants are to receive their own mother's breast milk preferably in the order in which it is expressed. This ensures that infants receive the nutritional and immunological benefits of colostrum and early milk. Mothers often produce more milk than is required by their infants in the first few days of life. When this occurs, the surplus early milk is frozen and defrosted and used before fresh milk expressed later in lactation, as early milk has higher protein concentration and evidence suggests freezing milk may reduce or eliminate CMV[2,3]. Mother's own fresh milk can be used if frozen milk is not readily available and as breastfeeds are introduced.

Pasteurised Donor Human Milk (PDHM) can be sought for all neonates ≤ 32+6 weeks gestation and/or ≤ 1500grams when 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. PDHM is usually fed up until a corrected gestation of 34 weeks unless demand for PDHM is high. Use of PDHM is subject to parental consent. For further information refer to Perron Rotary Expressed Milk (PREM) Bank.

Term infants should be offered their first breastfeed within the first few hours after birth if no contraindications.

Enteral feeding should be commenced and gradually increased as early as possible in the presence of clinical stability, according to the following Standardised Enteral Feeding Schedule:[4-7]

Standardised Enteral Feeding Schedule[8]		
Birth Gestation	**Day 1 Of Feeding If EBM Or PDHM Available**	**Grading Up**
< 26 wk	≤ 10 mL/kg/d (i.e. 1-2 mL/kg 4 to 6 hourly) then ≤ 20 mL/kg/d (i.e. 1-2 mL/kg 2 hourly), then progress →	↑ 20-25 mL/kg/d
26 - 31^{+6} wk	≤ 20 mL/kg/d (i.e. 1-2 mL/kg 2 hourly), then progress →	↑ 20-25 mL/kg/d
32 - 34^{+6} wk	60 mL/kg/day maximum if stable, then progress (initially, a proportion of total fluid given IV may be required →	↑ 30-35 mL/kg/d
≥35 wk	May commence full feeds ± breast feeding if appropriate	

More rapid feed increments are at the discretion of the attending neonatologist[9-11].

Early trophic feeds maintain gut integrity[12,13] and are encouraged for all infants when EBM or PDHM is available. If unable to grade up feeds, consider trophic feeds of **≤10 mL/kg/d** (i.e. 1-2 mL/kg 4 to 6 hourly).

All infants below 32 weeks gestation are to receive 0.2mL of EBM orally with each feed as available (in addition to ordered feed amount)[14]. In women who are unable/choose not to lactate, PDHM (with parental consent) is to be used instead. Infants on continuous milk feeds are to receive 0.2 mL of EBM orally, 2 hourly[14]. This is to continue until suck feeds commence.

Withholding of feeds is necessary for Infants who are haemodynamically unstable or unstable with sepsis:

- **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.
- **NEC (> Stage II)**: Feeds are withheld for a minimum of 7 days.
- **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[15]. If feeds are ceased, replacement IV fluids may be required.
- **PDA**: Small feeds may be continued during Indomethacin therapy for PDA.

Breast milk is fortified with human milk fortifier[16-20] for preterm infants < 35 weeks gestation once breast milk intakes of 100 mL/kg/day are achieved and with term formula for older infants with growth failure.

Breast milk and formula fortified or supplemented with other nutritional products may be required for some preterm and term infants – referral to the dietitian is recommended. Refer to Milk Room: Breast Milk Fortification and Preterm Formula.

Infant formula is used when mother's own breast milk and/or PDHM are not options. When parental permission has been given for formula:

<35 Weeks	Commence as per above Standardised Feeding Schedule using Term Formula and progress as tolerated. Transition to Preterm Formula when tolerating full oral feeds.
>35 Weeks	Commence as per above Standardised Feeding Schedule using Term Formula and progress as tolerated.

Formula and modular feeds designed to manage specific medical conditions are available – referral to the Neonatal Dietitian is recommended. Refer to Milk Room: Breast Milk Fortification and Preterm Formula.

Hypoglycaemia

Refer to Hypoglycaemia guideline.

Related CAHS internal policies, procedures and guidelines

Neonatology Clinical Guidelines

- Hypoglycaemia
- Milk Room: Breast Milk Fortification and Preterm Formula
- Pasteurised Donor Human Milk (PDHM)

References and related external legislation, policies, and guidelines

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This document can be made available in alternative formats on request.

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