

SUPPLEMENTARY FEEDING OF BREASTFED BABIES IN THE POSTNATAL PERIOD

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Implement strategies that will result in the establishment of lactation.
- Avoid non-medical use of formula and promote confidence in mothers who are able to supply adequate nutrition for their newborns.
- Prevent hypoglycaemia, excessive weight loss, hypernatraemic dehydration or any other complications related to delayed or suboptimal onset of lactation.
- Provide nutritional support to infants who are unwell while their mothers are establishing lactation.

2. PATIENT

- Inpatient women and newborns or on the Midwifery Support program or under the care of the Midwifery Group Practice program

3. STAFF

- Medical, midwifery and nursing staff
- Student midwives under direct supervision of a registered midwife

4. EQUIPMENT (AS REQUIRED)

- Well cleaned and dried spoon
- Well cleaned and dried small cup suitable for feeding
- Sterile bottle/teat
- Expressed breast milk (EBM)
- Infant formula

5. CLINICAL PRACTICE

Indication for supplementation:

- Neonatal conditions (Appendix 1) (1)
- Maternal conditions (Appendix 1) (1)
- Maternal request

Assessment:

- Ongoing assessment of breastfeeding evaluating baby's hydration, milk transfer and maternal breast changes
- Complete the Breastfeeding Assessment Tool (found in the Maternal Care Pathway) to evaluate position, latch and milk transfer. If any issues of concern are identified a plan of action is to be arranged. This includes a written breastfeeding plan to be devised and explained to the woman. A copy of the plan given to the woman and placed in her medical record. This is to be reviewed daily by the Senior/designated midwife or CMC Lactation consultant.
- Review by Medical and Paediatric if required.

CLINICAL POLICIES, PROCEDURES & GUIDELINES

Approved by Quality & Patient Care Committee
3 March 2016

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Process for all indications:

- Complete consent for Complementary/ Supplementary Feeding of Breastfed Newborns
- Include type of feed, volume require, frequency, duration, method and indication for supplement
- Complete medical order due to identification of condition as per Acceptable Medical Reasons for Supplementation (Appendix 1) (1)
- Include in order type of feed, volume required, frequency, duration and method
- Support/increase maternal milk supply and facilitate effective expressing techniques and frequency (hand / electric breast pump)
- Ensure unrestricted skin to skin contact

Counselling:

- Support/increase maternal milk supply:
 - Unrestricted skin to skin contact
 - Unrestricted access to the breast and frequent breastfeeds. Maintaining and promoting a minimum 8-10 feeds in 24 hours
 - Facilitate effective expressing techniques and frequency (hand/electric breast pump)post breastfeeds
 - Discuss with mother the reasons for recommending extra feeds
- Discus and a plan will be implemented to reduce supplementation to encourage adequate lactation and assist with hydration for the newborn.
- Identify the family's history for risk factors such as atopy if using formula
- Consent should be obtained prior to initiating **every** supplementary feed.
- Provide the woman with a written breastfeeding plan and written information on expressing and storage of Breast milk and as well as how to increase supply
- Counsel the mother regarding the risks of supplementary feeding in the absence of acceptable medical indication and document appropriately
- Obtain consent and document amounts and frequency of feeds given
- Volumes offered and method (See daily volume requirements above)

Type of supplementation offered:

- Use of expressed human milk is the first choice
- Offer formula only if medically indicated.
- Consider risk factors, including family history of atopy may influence type of supplementation offered

Recommended daily volume requirements

- Offer appropriate volumes per feed based on the average reported intake of colostrum by healthy breastfed babies (2):

0 – 24 hours	2 – 10mls
24 – 48 hours	5 – 15mls
48 – 72 hours	15 – 30mls
72 – 96 hours	30 – 60mls

- Discuss the individual management of any baby greater than 72hrs old requiring supplementary feeds with CMC Lactation Consultant

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Method of administration:

- Use a spoon or cup as the first method of preference in administration.
- Ensure the newborn is alert and correctly positioned upright.
- Ensure adequate safety of administration at all times.
- Ensure adequate demonstration and instruction and understanding from the woman

Documentation:

- Document all supplementary feedings. Include the content, volume and method.
- Document acceptable medical indication and/ or reason for the supplementary feed. This should be clearly documented in the Neonatal Care Pathway and patients clinical notes.
- Discuss and explain consent for a supplementary feed. Explain consent and obtain permission from the woman/carer.

6. DOCUMENTATION

- Consent form
- Maternal Care pathway
- Neonatal Care pathway
- Integrated clinical notes
- ObstetriX

7. EDUCATIONAL NOTES

- **Supplementary feed:** where a breastfed infant has been given one or more fluid feeds, including infant formula (2)
- **Expressed breast milk** is considered a supplementary feed (2)
- **Hypoallergenic / Hydrolysed formula:** cow's milk based formula that has been processed to break down most of the proteins which cause symptoms in cow's milk allergic children (2)
- Counsel regarding risks of supplementary feeding of breast milk substitutes in the absence of a medical indication
- Newborns should not receive supplementary feeds without a well-documented acceptable medical reason (1) (Appendix 1)
- Maternal request for supplementary feeds is clearly documented in the integrated notes (1) (Appendix 1)
- Supplementary feeds are provided in addition of breastfeeding, this includes expressed breast milk or breast milk substitutes (2,3)
- Supplementary feeding should *be* timely (3).
- The introduction of artificial formula in the early weeks of life increases the risk of early breastfeeding cessation (3)
- Offering supplementary feeds – water, glucose or infant formula – when there is no medical reason has been shown to adversely affect the establishment and maintenance of successful breastfeeding (2)
- Any food given prior to six months, the recommended duration of exclusive breastfeeding, is defined as supplementary (2)
- The Royal Hospital for Women is a baby friendly environment (Baby Friendly Initiative Accredited Facility) that supports the NSW Breastfeeding Policy Directive (4) The breastfeeding policies endorses the World Health Organization (WHO) (4) Ten Steps to Successful Breastfeeding, in particular step 6 "Give newborn infants no food or drink unless medically indicated" (4)

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- Appropriate evaluation and minimal intervention is required to ensure good outcomes for mother and baby (2)
- Healthy term babies rarely need supplementation in the first 48hrs.
- Early and frequent feeds increase the efficiency of milk secretion and helps maintain infant's baby's normal body temperature, reduces energy expenditure and maintains blood glucose levels (5)
- Prolonged separation of the mother and infant immediately following birth can have an adverse effect on the initiation of breastfeeding.
- Clinical conditions not covered in (Appendix 1) (1) may also necessitate short or long term supplementation (1)
These include:
 - Inadequate intake by the newborn accompanied by a delayed onset in Lactogenesis II (onset from 72-120 hours) as evidenced by weight loss of > 10 %, delayed bowel movements or continued meconium stools at 120 hours (6,7)
 - Primary glandular insufficiency as evidenced by poor breast growth in pregnancy and minimal indications of milk production (7)
 - History of breast pathology or breast surgery resulting in insufficient milk production to meet baby's nutritional needs (7)
- Pasteurised donor human milk is preferable to other supplement (2)
- Protein hydrolysate formulas are preferable to standard artificial milks for short term supplementation as they avoid exposure to cow's milk proteins, reduce bilirubin levels more rapidly and may better convey the psychological message that the supplement is a temporary measure (2)
- No method of supplemental feeding is without potential risk or benefits.
- Bottle/teat usage is of concern due to the distinct differences in the tongue and jaw movements and differences in regulating milk flow.
- Careful consideration needs to be weighed up before a decision is made to introduce a bottle to newborns who are currently establishing breastfeeding (5)
- Inappropriate supplementation may undermine a mother's confidence about her ability to meet her baby's nutritional needs i.e. giving supplementation to infants due to mother's fatigue (2,3)
- To optimise exclusive breastfeeding it is preferable to give supplementary feeds to the infant by cup or spoon.

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Breastfeeding – Protection, Promotion and Support
- Breastfeeding – Risks of Delayed Lactogenesis 2, Early Intervention and Management
- Spoon and Cup Feeding – Alternative Feeding Methods in the Early Postnatal Period
- Breastfeeding Support Unit
- Weight Loss Day 4-6. Greater than 10% of birth weight in breastfed full term (> 37 weeks gestation) neonates

9. RISK RATING

- Medium

10. NATIONAL STANDARD

- Standard RH – Reducing Harm

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11. REFERENCES

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REVISION & APPROVAL HISTORY

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Reviewed Lactation CNC, March 2012, Endorsed LOPS Committee April 2012
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Approved Patient Care Committee 3/4/08
Reviewed 2007/08
Approved Quality Council 20/9/04
Reviewed by Lactation CNC July 2004
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APPENDIX 1 (1)

Excerpt from Acceptable Medical Reasons for Use of Breast-Milk Substitutes (WHO, 2009) Infant Conditions

Infants who should not receive breast milk or any other milk except specialized formula

- Infants with classic galactosemia: a special galactose-free formula is needed.
- Infants with maple-syrup urine disease: a special formula free of leucine, isoleucine and valine is needed.
- Infants with phenylketonuria: a special phenylalanine-free formula is needed (some breastfeeding is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but who may need other food in addition to breastmilk for a limited period

- Infants born weighing less than 1500g (very low birth weight).
- Infants born at less than 32 weeks of gestational age (very pre-term).
- Newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand (such as those who are pre-term, small for gestational age or have experienced significant intrapartum hypoxic/ischaemic stress, those who are ill and those whose mothers are diabetic⁵ if their blood sugar fails to respond to optimal breastfeeding or breast-milk feeding).

Maternal Conditions

Mothers who are affected by any of the conditions listed below should receive treatment according to standard guidelines.

Maternal conditions that may justify permanent avoidance of breastfeeding

- HIV infection¹: if replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS).⁶

Maternal conditions that may justify temporary avoidance of breastfeeding

- Severe illness that prevents a mother from caring for her infant, for example sepsis
- Herpes simplex virus type 1 (HSV-1): direct contact between lesions on the mother's breasts and the infant's mouth should be avoided until all active lesions have resolved
- Maternal medication:
 - Sedating psychotherapeutic drugs, anti-epileptic drugs and opioids and their combinations may cause side effects such as drowsiness and respiratory depression and are better avoided if a safer alternative is available;⁷
 - Radioactive iodine-131 is better avoided given that safer alternatives are available – a mother can resume breastfeeding about two months after receiving this substance;
 - Excessive use of topical iodine or iodophors (e.g., povidone-iodine), especially on open wounds or mucous membranes, can result in thyroid suppression or electrolyte abnormalities in the breastfed infant and should be avoided;
 - Cytotoxic therapy requires that a mother stops breastfeeding during therapy

Maternal conditions during which breastfeeding can still continue, although health problems may be of concern

- Breast abscess: breastfeeding should continue on the unaffected breast; feeding from the affected breast can resume once treatment has started.⁸
- Hepatitis B: infants should be given hepatitis B vaccine within the first 48 hours or as soon as possible thereafter.⁹
- Hepatitis C.
- Mastitis: if breastfeeding is very painful milk must be removed by expression to prevent progression of the condition.⁸
- Tuberculosis: mother and baby should be managed according to national tuberculosis guidelines.¹⁰
- Substance use:¹¹
 - Maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies;
 - Alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby.

Mothers should be encouraged not to use these substances, and given opportunities and support to abstain.