

LOCAL OPERATING PROCEDURE – CLINICAL

Approved Quality & Patient Safety Committee March 2019 Review March 2024

ALTERNATIVE FEEDING METHODS IN THE EARLY 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

- Provide an alternative feeding method for a neonate unable to directly breastfeed, which supports Baby Friendly Health Initiative (BFHI) standards
- To decrease the use of artificial teats in a breastfed neonate(s), as this may interfere with the establishment of breastfeeding

2. PATIENT

• Neonate(s)

3. STAFF

- Nursing and midwifery staff
- Student midwives under supervision of a registered midwife
- Clinical Midwifery Consultant 2 (CMC2) Lactation

4. EQUIPMENT

- Washed and dried plastic spoon
- Washed and dried medicine cup
- Breastmilk syringe and cap

5. CLINICAL PRACTICE

- Commence the breastfeeding assessment form found in the maternal clinical pathways for Normal Vaginal Birth/Caesarean Birth within 24 hours of birth
- Encourage unrestricted skin-to-skin contact
- Facilitate neonate-led attachment
- Support unrestricted and untimed breastfeeds
- Implement a written breastfeeding plan if a woman is experiencing breastfeeding difficulties
- Demonstrate hand expressing techniques
- Assist with the use of the electric breast pump, if indicated, and provide education to the woman on use and cleaning of equipment
- Store expressed breastmilk as per SESLHD leaflet on 'Expressing and Storing Breastmilk' <u>https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/Planning_and_Population_H</u> <u>ealth/Health_Promotion/Healthy_Weight/docs/breastfeeding/Breastfeeding_Expressing_SESL</u> <u>HD.pdf</u>
- Identify requirement for supplementation in addition to breastfeeding
- Determine if there is an acceptable medical reason for supplementation (Appendix 1)
- Obtain verbal and written consent for 'Supplementary Formula Feeding of Breastfed Newborn' if using formula

Spoon/cup feeding

- Perform hand hygiene as per NSW Health Infection Prevention and Control Policy
- Provide supplementation with spoon and/or cup feeding. Determine the use of a spoon or cup dependent on the volume and viscosity of milk and neonate's alertness
- Provide written information about spoon/cup feeding to woman/carer RHW Spoon/cup feeding information for parents (Located on P Drive)
- Administer spoon and/or cup feed as per Appendix 2
- Assess woman/carer's understanding and comfort with the practical aspects of spoon or cup feeding
- Document indication for use, feed and outcome in neonatal care plan and maternal and neonatal medical record.
- Revise feeding plan as required



ALTERNATIVE FEEDING METHODS IN THE EARLY POSTNATAL PERIOD cont'd

Syringe and finger feeding:

- Perform hand hygiene as per NSW Health Infection Prevention and Control Policy
- Ensure woman/care's nails are short to reduce trauma
- Wrap neonate securely
- Use the woman/carer's index finger to stimulate neonate's lips until mouth opens. Sucking should draw the finger into the neonate's mouth. The woman/carer's fingertip should reach the junction of the neonatal hard/soft palate with finger pad uppermost
- Insert syringe gently into corner of neonate's mouth alongside the woman/carer's finger and the slowly depress the plunger as neonate sucks and swallows
- Use gloves to feed neonate when using this method, if performed by staff
- Assess woman/carer's understanding and comfort with this method of feeding
- Document indication for use, feed and outcome in neonatal care plan and maternal and neonatal medical record
- Revise feeding plan as required

6. DOCUMENTATION

- Medical records
- Maternal Clinical pathway
- Neonatal Care Plan
- Consent for Supplementary Formula Feeding of Breastfed Newborn

7. EDUCATIONAL NOTES

- The Royal Hospital for Women is a BFHI facility and abides by 'The Ten Steps to Successful Breastfeeding'
- Step nine of the 'Ten Steps to Successful Breastfeeding' states 'Give no artificial teats or dummies to breastfeeding infants'
- When considering an alternative feeding method, issues to consider include:
 - Cost and availability
 - Ease of use and cleaning
 - Adequate volume which can be fed in 20-30 minutes
 - Maternal preference
 - o Expertise of healthcare staff
 - o Length of anticipated use
 - Method enhances development of breastfeeding skill
- An optimal supplemental feeding device has not yet been identified. No method is without potential risk or benefit
- Spoon/Cup feeding allows the neonate to control feeding pace
- Spoon/Cup feeding has been shown to be safe for term and preterm neonates and may help preserve breastfeeding duration when multiple supplements are required
- Possible contra indications to spoon/cup feeding include:
 - Neonate has a poor gag reflex
 - Neonate is lethargic or excessively sleepy
 - Neonate has a poor suck
 - Neonate has a marked neurological deficit
- Distinct differences in jaw and tongue movement and faster flow may result in higher than necessary volumes of feeds when using a bottle and teat
- Artificial teats require less vacuum application than the human nipple, are shaped differently, present a rigid stimulus to the mouth and produce a fast flow rate that may overwhelm some neonates



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8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- NSW Health PD2017-013 Infection Prevention and Control Policy
- NSW Health PD2010_019 Breast Milk: Safe Management
- NSW Health PD2018_034 Breastfeeding in NSW: Promotion, Protection and Support
- SESLHD Care of Infant Feeding Equipment within SESLHD Facilities
- Breastfeeding Delayed Onset Lactogenesis II, Early Intervention and Management
- Breastfeeding Protection, Promotion and Support
- Supplementary Feeding of a Breastfed Neonate in the Postpartum Period
- Weight Loss (Day 4-6) > 10% Of Birthweight in a Breastfed Neonate ≥ 37 Weeks Gestation
- Formula Feeding for a Neonate

9. RISK RATING

• Low

10. NATIONAL STANDARD

• Standard 5 - Comprehensive Care

11. REFERENCES

- 1. Australian Breastfeeding Association, Cup feeding, ABA, South Melbourne https://www.breastfeeding.asn.au/bfinfo/cup-feeding
- Australian College of Midwives. 2016, Baby Friendly Health Initiative Australia. BFHI Handbook for Maternity Facilities, Australia <u>https://www.midwives.org.au/sites/default/files/uploaded-content/website-</u> content/BFHI/bfhi handbook for maternity facilities v3 20161028 0.pdf
- Australian Government National Health and Medical Research Council Department of Health and ageing. Eat for Health. Infant Feeding Guidelines Summary. NHMRC: Commonwealth of Australia 2012 <u>http://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n56_infant_feeding_guide_ lines.pdf</u>
- 4. Flint A, New K, Davies MW 2016, Cup feeding versus other forms of supplemental enteral feeding for newborn infants unable to fully breastfeed (Review), *Cochrane Database of Systematic Reviews*, issue 8

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005092.pub3/epdf/full

- Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C. 2017, ABM Protocol #3, 'Supplementary Feedings in the Healthy Term Breastfed Neonate', *Breastfeeding Medicine*, vol. 12, no. 3 <u>https://www.ncbi.nlm.nih.gov/pubmed/28294631</u>
- 6. King Edward Memorial Hospital. 2018, 'Finger feeding using a fine tube or syringe', King Edward Memorial Hospital, Government of Western Australia North Metropolitan Health Service Woman and Newborn Health Service, Western Australia https://kemh.health.wa.gov.au/~/media/Files/Hospitals/WNHS/For%20health%20professionals/Clinical%20guidelines/OG/WNHS.OG.BreastfeedingFingerFeedingTubeSyringe.pdf
- McKinney CM, Glass RP, Coffey P, Rue T, Vaughn MG, & Cunningham M. 2016, 'Feeding Neonates by Cup: A Systematic Review of the Literature', *Maternal and child health journal*, vol. 20. no. 8, 1620-33 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5091933/pdf/nihms772859.pdf



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8. Moore ER, Bergman N, Anderson GC & Medley N. 2016, 'Early skin-to-skin contact for mothers and their healthy newborn infants (Review)', *Cochrane Database of Systematic Reviews*, no.11

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003519.pub4/epdf/full

- Walker M. 2015, 'Formula Supplementation of Breastfed Infants. Helpful or Hazardous?' Infant, Child and Adolescent Nutrition, vol 7, no. 4, pp.198-207 https://journals.sagepub.com/doi/pdf/10.1177/1941406415591208
- 10. World Health Organization, 2018, Ten Steps to successful breastfeeding (revised 2018), WHO, Geneva <u>http://www.who.int/nutrition/bfhi/ten-steps/en/</u>

REVISION & APPROVAL HISTORY

Reviewed and endorsed Maternity Services LOPs 8/3/19 – previously titled *Spoon and Cup Feeding – Alternative Feeding Methods in the Early Postnatal Period* Approved Quality & Patient Care Committee 3/3/16 Reviewed and endorsed Lactation Working Party February 2016 Approved Quality & Patient Safety Committee 17/5/12 Obstetric LOPs April 2012 (reviewed by Lactation CNC) (previously titled: *Breastfeeding Spoon and Cup Feeding Guideline*) Approved Patient Care Committee March 2008 Reviewed & endorsed Maternity Services Clinical Committee 11/12/07 Replaced: *Spoon-feeding* approved 20/10/03 and *Cup Feeding* approved 20/10/03

FOR REVIEW: MARCH 2024

..../Appendices

APPENDIX 1

Acceptable Medical Reasons for Use of Breastmilk Substitutes

NEONATAL CONDITIONS

Neonates with the following conditions should not receive breastmilk or any other milk except specialised formula:

- · Classic galactosemia: a special galactose-free formula is needed.
- Maple syrup urine disease: a special formula free of leucine, isoleucine and valine is needed.
- Phenylketonuria: a special phenylalanine-free formula is needed, though some breastfeeding is possible, under careful monitoring.

Neonates with the following conditions for whom breastmilk remains the best feeding option but who may need other food in addition to breastmilk for a limited period:

- very low birth weight neonates i.e. those born weighing < 1500g
- very preterm neonates i.e. those born < 32 weeks gestational age
- neonates who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand. This includes those who are preterm, small for gestational age or who have experienced significant intrapartum hypoxic/ischaemic stress, as well as those who are ill and those whose mothers are diabetic if their blood sugar fails to respond to optimal breastfeeding or breastmilk feeding

MATERNAL CONDITIONS

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

Mothers with HIV - may need to avoid breastfeeding

- The most appropriate neonatal feeding option for a HIV-infected mother depends on the individual circumstances of mother and neonate, including the mother's health status, but should also take into consideration the health services available and the counselling and support the mother is likely to receive.
- When replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS)⁶, avoidance of all breastfeeding by HIV-infected women is recommended.
- Mixed feeding in the first six months of life i.e. breastfeeding while also giving other fluids, formula
 or foods, should always be avoided by HIV-infected mothers.

Mothers with the following conditions may need to avoid breastfeeding temporarily:

- Severe illness that prevents a mother from caring for her neonate e.g. sepsis.
- Herpes simplex virus: Direct contact between lesions on the mother's breasts and the neonate's mouth should be avoided until all active lesions have resolved.
- Herpes zoster (shingles): Direct contact between lesions on the mother's breasts and the neonate's mouth should be avoided until all active lesions have resolved.
- Maternal use of the following medication including:
 - sedating psychotherapeutic drugs, anti-epileptic drugs, opioids and their combinations, as these may cause side effects such as drowsiness and respiratory depression, and are better avoided if a safer alternative is available⁷
 - radioactive iodine-131. This 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 iodophor e.g. povidone-iodine, especially on open wounds or mucous membranes, as this can result in thyroid suppression or electrolyte abnormalities in the breastfed neonate, and should be avoided.
 - o cytotoxic chemotherapy requires a mother to cease breastfeeding during therapy.

Mothers with the following conditions can continue breastfeeding, 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 started⁸
- Hepatitis B: Neonates should be given hepatitis B vaccine within the first 48 hours or as soon as possible thereafter⁹
- Hepatitis C
- Mastitis: If breastfeeding is very painful, breastmilk must be removed by expression to prevent progression of the condition⁸
- Tuberculosis: Mother and neonate should be managed according to national tuberculosis guidelines¹⁰

- Substance use¹¹:
 - Nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants have been demonstrated to have harmful effects on breastfed neonates.
 - Alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the neonate.
 - Mothers should be encouraged not to use these substances and given opportunities and support to abstain. Mothers who choose not to cease their use of these substances or who are unable to do so should seek individual advice on the risks and benefits of breastfeeding depending on their individual circumstances. For mothers who use these substances in short episodes, consideration may be given to avoiding breastfeeding temporarily during this time.

ADDENDUM FOR AUSTRALIA

The list above was developed by the World Health Organization (WHO) for global use. There are some situations and more recent recommendations which are not included above, but are listed below that are considered by BFHI to be acceptable medical reasons for the use of breastmilk substitutes in Australia.

Primary Inadequate Breastmilk Supply

- Breast surgery: Women who have had breast surgery, such as breast reduction with nipple relocation, may find it necessary to use a breastmilk substitute to supplement their neonate's intake and ensure adequate nutrition.
- Bilateral breast hypoplasia: Every attempt should be made to stimulate an adequate milk supply, but if unsuccessful, the neonate may need a breastmilk substitute to supplement intake and ensure adequate nutrition.

HIV Infection

The World Health Organization (WHO) have released updated guidelines; *Guidelines on HIV and Infant Feeding, 2010, Principles and recommendations for infant feeding in the context of HIV and a summary of Evidence, Geneva WHO; 2010.* If a decision is made to use replacement feeding it must be acceptable, feasible, affordable, sustainable and safe (AFASS). An individual decision should be made in consultation with each mother, taking into account her circumstances and viral load.

Hepatitis B

Under the current Hepatitis B recommended prophylaxis, breastfeeding is not a risk factor for motherto-child transmission¹²

Adapted from BFHI Handbook for Maternity Facilities. Baby Friendly Health Initiative, Australia Updated 2016

REFERENCES

- 1. Technical updates of the guidelines on Integrated Management of Childhood Illness (IMCI). Evidence and recommendations for further adaptations. Geneva, WHO, 2005.
- 2. Evidence on the long-term effects of breastfeeding: systematic reviews and meta-analyses. Geneva, WHO, 2007.
- 3. León-Cava N et al. Quantifying the benefits of breastfeeding: a summary of the evidence. Washington, DC, Pan American Health Organization, 2002 <u>http://www.paho.org/English/AD/FCH/BOB-Main.htm</u> accessed 26 June 2008
- 4. Resolution WHA39.28. Infant and Young Child Feeding. In: Thirty-ninth World Health Assembly, Geneva, 5–16 May 1986. Volume 1. Resolutions and records. Final. Geneva, WHO, 1986 (WHA39/1986/REC/1), Annex 6:122–135.
- 5. Hypoglycaemia of the newborn: review of the literature. Geneva, WHO, 1997 (WHO/CHD/97.1) http://whglibdoc.who.int/hg/1997/WHO_CHD_97.1.pdf accessed 24 June 2008
- HIV and infant feeding: update based on the technical consultation held on behalf of the Inter-Agency Task Team (IATT) on Prevention of HIV Infection in Pregnant Women, Mothers and their Infants, Geneva, 25–27 October 2006. Geneva, WHO 2007 <u>http://whqlibdoc.who.int/publications/2007/9789241595964</u> eng.pdf accessed 23 June 2008
- 7. Breastfeeding and maternal medication: recommendations for drugs in the Eleventh WHO Model List of Essential Drugs. Geneva, WHO 2003.
- Mastitis: causes and management. Geneva, WHO 2000 (WHO/FCH/CAH/00.13) <u>http://whqlibdoc.who.int/hq/2000/WHO_FCH_CAH_00.13.pdf</u> accessed 24 June 2008
- 9. Hepatitis B and breastfeeding. Geneva, WHO, 1996. (Update No. 22)
- 10. Breastfeeding and Maternal tuberculosis. Geneva, WHO 1998 (Update No. 23).
- Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn. Commissioned by the Ministerial Council on Drug Strategy under the Cost Shared Funding Model. NSW Department of Health, North Sydney, Australia, 2006.
- 12. National Centre for Immunisation Research and Surveillance. Hepatitis B vaccines for Australians | NCIRS Factsheet. http://www.ncirs.edu.au/assets/provider_resources/fact-sheets/hepatitis-B-fact-sheet.pdf accessed 19 July 2016

APPENDIX 2

Spoon/Cup Feeding Information for Parents

Spoon/cup feeding provides a safe alternative method to bottles and teats when your baby is unable to breastfeed effectively or requires additional fluids.

It can also be used if you are temporarily separated or unable to breastfeed your baby.

When medically indicated, expressed breastmilk is the first choice, or at your request a breastmilk substitute (formula) may be given.

A written and signed consent for a breastmilk substitute is required at The Royal Hospital for Women. Spoon size will be determined by your midwife.

The cup used should be small, soft-sprouted and smooth-edged e.g. small medicine cup washed well and dried

How to spoon/cup feed

- Wash your hands
- Ensure your baby is awake and alert prior to starting a spoon/cup feed
- Half fill the clean and dry spoon/cup with expressed breastmilk/breastmilk substitute
- Wrap your baby securely to prevent his/her hands from knocking the spoon/cup
- Place a bib under your baby's chin as your baby may dribble some of the milk
- Hold your baby in a sitting position supporting his/her shoulders and neck so that you are both comfortable
- Keep your baby in an upright position throughout the feed
- Place the spoon/cup so the rim is gently resting on your baby's lower lip
- Tilt the spoon/cup until the milk is at the rim
- Allow your baby to begin with small sips. Do not pour milk into your baby's mouth
- Your baby will open his/her mouth and begin to sip or lap up the milk with his/her tongue. You will hear swallowing
- Leave the spoon/cup in place while your baby is feeding actively
- Your baby will regulate the pace and volume of the feed
- Remove the spoon/cup when your baby stops drinking
- Return the spoon/cup when your baby is showing signs of being ready to feed again
- Repeat this process until the feed is finished, usually within 20-30 minutes
- Following the feed, wash your hands and the spoon/cup in hot soapy water. Rinse and dry. The spoon/cup can be stored in a clean container (with a lid) in the fridge for later use

References

- 1. Australian Breastfeeding Association, Cup- feeding, 2016 <u>https://www.breastfeeding.asn.au/bfinfo/cup-feeding</u>
- 2. Australian Government National Health and Medical Research Council Department of Health and ageing. Eat for Health. Infant Feeding Guidelines Summary. NHMRC: Commonwealth of Australia 2013 http://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n56_infant_feeding_guidelines.pdf

