

Breastfeeding Antenatal Expression of Colostrum Procedure Cairns & Hinterland Health Service District

Custodian/Review Officer: Lactation Consultants, IWHU, CBH
Diabetes Educator, CBH
Nurse/Midwife Educator, IWHU, CBH

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Applicable To: All district clinical staff
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Authority: District Executive Director of Medical Services

Approving Officer

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Name Neil Beaton

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Accreditation References:
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1.1.1, 1.1.2, 1.1.4, 1.2.1, 1.3.1, 1.4.1

1 Purpose

This procedure describes the processes to facilitate exclusive breast feeding for neonates at risk of receiving artificial formula by providing education to mothers on the techniques of antenatal expression of colostrum undertaken on behalf of Queensland Health.

2 Scope

This procedure relates to all district clinical staff

3 Procedure

PRINCIPLE:

Babies at risk of receiving artificial formula include:

- Women with Diabetes in pregnancy
- Cleft lip and/or palate diagnosed at 18-20 week scan
- Other conditions that may indicate the possibility of early feeding problems

Babies born to mothers with diabetes in pregnancy - either pre-existing (Type 1 or Type 2) Diabetes Mellitus (DM) or Gestational Diabetes (GDM) - are at risk of developing hypoglycaemia in the first hours after birth.

If the baby is unable to feed soon after birth and colostrum is unable to be expressed, the baby is likely to be fed artificial milk to ensure stable levels of blood sugar. Research has indicated that artificial milk contains bovine serum albumin which is associated with generating an auto-immune response. This autoimmune response has been associated with an increased risk of Type 1 DM for the infant particularly where there is also a family history of Type 1 DM. Antenatal expression of colostrum will allow storage of a small amount of colostrum which will reduce the use of artificial milk with babies at increased risk of Type 1 DM.

Antenatal expression of colostrum will increase the mother's awareness of how her breasts function and increase the mother's confidence with breastfeeding. Babies diagnosed antenatally with cleft lip and/or palate

will also benefit from having an available supply of stored colostrum.

OBJECTIVES:

- Observation of the WHO and UNICEF's "10 Steps to Successful Breastfeeding" Step 6. "Give new-born infants no food or drink other than breast milk unless **medically** indicated" or it is mother's choice
- To develop the skill of hand expression of breast milk
- To encourage a generous supply of colostrum
- To have colostrum readily available for the baby in the early hours after birth
- To provide the baby with the opportunity to breastfeed (if desired or possible)
- To establish and maintain a good milk supply for the baby to receive the recognised health benefits of breast milk

PROCESS:

Up to 32 weeks gestation:

- Ensure parents are aware of the specific health benefits of colostrum and breast milk
- Encourage attendance at parent education sessions

32-35 weeks gestation:

- Use information leaflets and other instructional aids to discuss the principles of breast massage and hand expression of colostrum/milk. Demonstrate the technique if applicable, encourage mother to become familiar with her breasts

36 weeks onwards:

- Practice of technique and demonstration with the option to collect colostrum
- Supply mother with sterile containers (specimen jars/syringes with caps) for colostrum and identification labels

Technique:

- Pay attention to personal hygiene: wash hands prior to expressing
- Suggest expressing after bath or shower as heat may increase flow of colostrum
- Sit in an upright position, lean forward slightly, use both breasts twice
- It should be comfortable: contact midwife or lactation consultant if uncomfortable
- Start with breast massage to encourage let down reflex
- Make a C-shape with hand around edge of areola
- Gently and rhythmically roll thumb towards end of nipple
- When colostrum drips quite easily it is a suitable time to start collecting and storing colostrum. Sterile containers are provided with labels
- Move hand position around areola to drain all areas
- Swap to other breast when flow slows down
- Use both breasts at least twice each session
- Colostrum can be collected at two or three sessions during the same day; ensure collection container is stored in the refrigerator between sessions
- At the end of the collecting day the colostrum can be frozen. * Attach an identifying (name) label to the container and include the date of expressing
- The colostrum can be frozen until the time comes for the baby's birth

- Frozen breast milk may be stored as follows
 - Freezer compartment inside refrigerator 2 weeks
 - Freezer compartment with separate door 3 months
 - Deep freeze (-18°C or lower) 6-12 months.

At Birth:

- Place baby in skin-to-skin contact with the mother as soon as possible following birth, (if desired by the mother) and encourage mothers to recognise when their babies are ready to feed
- When baby is ready to feed offer help, if needed, to ensure good positioning and attachment
- Monitor blood glucose levels as indicated and use fresh or defrosted colostrum if necessary
- Establish good expressing routine to build up an abundant milk supply

4 Supporting Documents

Evidence based Information (MANDATORY for Clinical Procedures):

Elliot JP, Flaherty JF. **The use of breast stimulation to prevent postdate pregnancy.** *American Journal of Obstetrics and Gynecology.* 1984 Jul15;149(6):628-32

Hartman Peter and Cregan Mark, Department of Biochemistry, University of W.A. **Symposium; Human Lactogenesis 11:Mechanisms, Determinants and Consequences Lactogenesis and the effects of Insulin-Dependant Diabetes Mellitus and Prematurity** *Arch Dis Child* 2004; 89: 267-271.

Kavanagh J; Kelly AJ; Thomas J. **Breast stimulation for cervical ripening and induction of labour.** *Cochrane Rev Abstract* 2004. Copyright The Cochrane Review Collaboration

Mayer EJ, Hamman RF, Gay EC, Lezolute DC, Savitz DA, and Klingensmith GI. **Reduced risk of IDDM among breastfed children.** *Diabetes* 1998; 37: 1625-32.

Oscroft R. **Antenatal Expression of Colostrum** *Practising Midwife* 2001 Apr; 1 (1): 32-5. Review.

Schellpfeffer MA, Hoyle D, Johnson JW. **Antepartal uterine hypercontractility secondary to nipple stimulation.** *Obste Gynecol.* 1985 Apr;65(4):588-91

Tenore JL. **Methods of cervical ripening and induction of labour.** *American Family Physician.* 2003 May15;67 (10):2123-8

Viegas OA, Arulkumaran S, Gibb DM, Ratnam SS. **Nipple stimulation in late pregnancy causing uterine hyperstimulation and profound fetal bradycardia.** *Br J Obstet Gynaecol.* 1984 Apr; 91(4):364



Authorising Policy and Standard/s:

- Baby Friendly Health Initiative QH Policy
<http://www.health.qld.gov.au/breastfeeding/bfhi.asp>

5 Consultation

Key stakeholders who reviewed this version are:

Deborah Schafer – Lactation Consultant CBH

Mary Mulcahy – Lactation Consultant CBH

Rita Ball – Nurse/Midwife Educator, Women’s Health CBH

Catherine Smith – A/Regional Maternity Services Coordinator CBH

Tony Pappas - Diabetes Educator CBH

6 Procedure Revision and Approval History

Version No	Modified by	Amendments authorised by	Approved by
2.0	Deborah Schafer	Jocelyn Rogers (A/DEDON)	Neil Beaton (DEDOMS)

7 Audit Strategy (optional)

Level of risk	Low
Audit strategy	PRIME incidents will be monitored Post-natal follow-up client satisfaction survey
Audit tool attached	N/A
Audit date	12 months
Audit responsibility	Lactation consultants, midwives
Key Elements / Indicators / Outcomes	Follow up with breast feeding statistics comparison to see if objectives of this procedure have been met.