

Women, Children & Families Division

Infant Feeding Antenatal Colostrum Harvesting

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CONTENTS

No.	Header	Page Number
1.	Introduction	3
2.	Aim	3
3.	Eligibility	3
4.	Contraindications	3
5.	Process	4
6.	When to Start Colostrum Harvesting	4
7.	How to hand express	5
8.	Storage of Colostrum	5
9.	Transporting antenatally expressed colostrums to hospital	6
10.	References	6
11.	Associated documents	6
12.	Acknowledgements	6
	Appendix One – Contra-indications checklist for women wishing to antenatally express colostrums	7
	Appendix Two - Pathway for Antenatal Expressing for women with Diabetes, Hypertension on medication and Pregnant with Twins/multiples	7

1. Introduction

This guideline is to be used by clinical staff to provide support for women planning to hand express colostrums antenatally.

It is well researched that exclusive breastfeeding for the first 6 months of life has many health benefits for both mother and baby. Colostrum has many benefits including being rich in antibodies, protective against infection, high in protein, easy to digest and helps maintain blood sugars.

Risk factors in the early neonatal period can make supplementation with formula more common, in particular for babies of mothers with diabetes, hypertension on medication and multiple pregnancies as these babies can have trouble controlling their blood sugars

NHS Tayside supports UNICEF Baby Friendly Initiative (BFI) standards around supplementation only when clinically indicated.

2. Aim

- ➤ To provide staff with education and guidance when supporting women with High risk pregnancies to hand express colostrum from 36wks pregnant. Low risk women should be advised to express from 37wks pregnant.
- > To improve ease, comfort and skill around the technique of hand expressing
- > To give women the confidence in their ability to breastfeed
- > To optimise breastfeeding initiation rates and maintenance
- > To reduce supplementation with formula milk unless clinically indicate

Guideline

3. Eligibility

Any expectant mother could potentially express their colostrum from 36 to 37 weeks providing it is done with the guidance of a midwifery/medical professional. Antenatal hand expression of colostrum is particularly useful if the baby is at risk from low blood sugar in the first few hours/days after birth.

Staff should refer to the contra-indications checklist at the end of the guide and recorded in the data collection book along with consent.

- Women with diabetes in pregnancy (pre-existing or gestational)
- > Women with hypertension on medication
- Women expecting twins/multiples
- Babies diagnosed with cleft lip/palate
- Babies diagnosed with a congenital condition such as Down's Syndrome or cardiac complication
- Infants known to have intrauterine growth restriction
- Mothers having an elective caesarean section
- Women with breast hypoplasia
- Women with hyperandrogenesis (polycystic ovary disease)
- Women who have had reductive breast surgery or breast augmentation
- > Women with multiple sclerosis
- Mothers with raised BMI
- Mothers with a previously challenging breastfeeding history

4. Contraindications

Antenatal expressing is **not** recommended in the following incidences:

> Women less than 36 wks pregnant

- Women known to have a cervical suture
- Women who are known to have cervical incompetence
- Women who have had threatened or actual preterm labour
- Women who have polyhydramnios
- Women who have had contractions, vaginal bleeding or premature rupture of membranes in current pregnancy
- Known placenta praevia
- Unstable Lie

5. Process

Educate midwifery staff in effective information giving.

All women with diabetes, hypertension on medication or expecting twins/multiples should have a conversation with the clinic midwife about infant feeding and colostrums harvesting at 34wk appointment. And are given an antenatal expressing pack at 36 week appointment.

This pack should contain:

- Sterile Syringes with bung
- Labels with Name, CHI, date and time of expressing
- Patient information leaflet
- Spoons or galipots can also be included to aid collection of colostrums if syringes are proving difficult for collection

Ensure any woman wishing to hand express antenatally is taught effective technique by using breast model or other appropriate and relevant educational information.

Points of reference

- Off to a good start http://www.healthscotland.com/uploads/documents/120-0ff%20to%20a%20good%20start-March2020-English.pdf
- Parent Club website https://www.parentclub.scot/
- UNICEF Baby Friendly Initiative hand expressing video https://www.bing.com/videos/search?q=unicef+baby+friendly+hand+expressing+video&q pvt=unicef+baby+friendly+hand+expressing+video&FORM=VDRE
- NHS Tayside Maternity Services Infant Feeding page http://staffnet.tayside.scot.nhs.uk/OurWebsites/WomenChildrenandFamiliesDivision/PR OD 334886
- Patient information leaflet http://staffnet.tayside.scot.nhs.uk/NHSTaysideDocs/groups/pil/documents/documents/pr od_317139.pdf

Provide women wishing to hand express antenatally with the relevant information. Including discussion about hand hygiene prior to hand expressing. Information contained in Patient Information Leaflet (PIL).

6. When to Start Colostrum Harvesting

- ➤ It is recommended to start colostrum harvesting between 36-37 weeks gestation.
- > Aim to express 2 -3 times in a 24 hr period
- Start by gently massaging each breast prior to expressing
- > Total time once proficient should only be 5-10 minutes each session
- > The use of a breast pump is not advised at this stage, hand expressing only
- Painless Braxton Hicks are acceptable whilst hand expressing but if they continue or become regular and painful, seek advice from the midwife

7. How to Hand Express

Step 1

Start off by encouraging your milk to flow – being near your baby will help. To express by hand, start by gently massaging your breast and nipple to stimulate the hormones needed to release milk.



Step 2

Position your thumb and fingers in a 'C' shape, 2 to 3 cm back from the base of your nipple.



Step 3

Gently press and release, press and release, and keep repeating until your milk starts to flow. This may take a few minutes.



Step 4

When the flow slows down, move your fingers round to a different part of your breast and start again.

If your baby only feeds from one breast, you could express from the other.



8. Storage of Colostrum

- A new syringe should be used for each expression. Ensure cap is on the end of the syringe once completed
- Each syringe should be labelled with the woman's own name, CHI and date and time of expression
- ➤ Each syringe should then be placed in the plastic bag provided and sealed and stored at the back of the fridge to a maximum temperature of 4'C and can be kept for up to 5 days in the fridge
- ➤ If not using straight away, antenatally expressed colostrums should be stored in the freezer with a temp below -18°C within 30 minutes of expressing

9. Transporting antenatally expressed colostrum to hospital

- When transporting frozen colostrum to hospital to hospital, place in a cool bag or a poly bag packed with cool blocks or ice
- > Staff on the ward should then take the colostrum and use the appropriate storage facilities either freezer if not being used straight away or fridge if using within 24 hrs
- Local guidance on the storage of breast milk in hospital should then be followed

10. References

Forster, D. A., Moorhead, A. M., Jacobs, S. E., Davis, P. G., Walker, S. P., McEgan, K. M., ... Amir, L. H. (2017). Advising women with diabetes in pregnancy to express breastmilk in late pregnancy (Diabetes and Antenatal Milk Expressing [DAME]): A multicentre, unblinded, randomised controlled trial. *The Lancet*, 389(10085), 2204-2213. DOI: 10.1016/S0140-6736(17)31373-9

 $\underline{https://www.bapm.org/resources/identification-and-management-neonatal-hypoglycaemia-full-term-infant-\%E2\%80\%93-framework-practice}$

UNICEF (2017) guide to the Unicef UK Baby Friendly Initiative Standards. London: https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2014/02/Guide-to-the-Unicef-UK-Baby-Friendly-Initiative-Standards.pdf

11. Associated Documents

- NHS Tayside Infant Feeding Policy http://staffnet.tayside.scot.nhs.uk/NHSTaysideDocs/groups/working_safely/documents/docs_027645.pdf
- NHS Tayside Management of Babies at Risk Of Hypoglycaemia http://staffnet.tayside.scot.nhs.uk/NHSTaysideDocs/groups/women_reproductive_health/documents/documents/prod_146529.pdf

12. Acknowledgements

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- Shirley Berry NHS Lothian Infant Feeding Advisor Neonatal Unit

Appendix One – Contra-indications checklist for women wishing to antenatally express colostrums

Appendix Two - Pathway for Antenatal Expressing for women with Diabetes, Hypertension on medication and Pregnant with Twins/multiples

Appendix 1- Contra-indications checklist for women wishing to antenatally express colostrum

Name of Woman			
Address			
Contact Number			
Verbal consent	YES	NO	•••••
Parity/EDD		/	•••••
Risk factor			
Booked Delivery Date if k	nown		
Over 36 weeks pregnant			
No cervical incompetence	2		
Does not have cervical su	ture		
Has not had threatened o	or actual preterm labour		
Does not have polyhydra	mnios		•
No vaginal bleeding			•
Date Antenatal Expressin	g Pack given		
Signature of midwife givi	ng the pack	••••	•••

Appendix 2- Pathway for Antenatal Expressing for women with Diabetes, Hypertension on medication and Pregnant with Twins/multiples

