

# Use of Donor Breast Milk

## Contents

1. Introduction and Who Guideline applies to .....	1
Aim .....	2
Key Points: .....	2
Related documents .....	2
Summary: .....	3
2. Process / Procedure .....	4
2.1 Decision to use Donor Breast Milk .....	4
2.2 Indications: .....	4
2.3 Information about Donor Breast Milk .....	4
2.4 Consent .....	4
2.5 Ordering and transport of Donor Breast Milk .....	5
2.6 Storage: .....	5
2.7 Initiation and progression of feeds: .....	6
2.8 Administering and discarding donor breast milk .....	6
2.9 Weaning from Donor Breast Milk onto formula milk .....	7
3. Education and Training .....	7
4. Monitoring Compliance .....	7
5. Supporting References .....	7
6. Key Words .....	8
Appendix 1 Donor Selection Criteria .....	9
Appendix 2: Example of information that should be shared with parents about donor human milk .....	10
Appendix 3: Baby's record of Donor Breast milk used .....	11
Appendix 4: Donor Breast Milk 'Out of freezer' Folder .....	12
Appendix 5: Notification of baby requiring Donor Breast milk .....	13
Appendix 6: DISCARDED DONOR BREAST MILK DOCUMENTATION .....	14
Appendix 7: Guidance for Transition to Formula Milk from Breast Milk (DEBM or MEBM) .....	15

## **1. Introduction and Who Guideline applies to**

This guideline is aimed at all Health care professionals involved in the care of infants within the Neonatal Service at University Hospitals of Leicester.

Human milk is considered to be the optimal feed for the preterm baby. In particular MEBM has demonstrated significant benefits for sick and preterm infants. Specific health benefits for preterm infants include lower mortality rates, lower rates of infection and necrotising enterocolitis (NEC), improved neurodevelopmental outcomes, lower rates of bronchopulmonary dysplasia (BPD), retinopathy of prematurity (ROP) and fewer hospitalisations in the first year after discharge<sup>1</sup>.

*Delayed nutrition can result in poor growth with long-term complications of parenteral nutrition, dysbiosis of the intestine, poor organ growth and poorer neurological outcomes.*

In the early postnatal period however, there may be insufficient quantities of mothers own milk (MEBM) to meet with the demands of the neonate. It is crucial to continue to support mother with expressing during this vulnerable time. However, whilst there may be a deficit in mother's milk, donor human milk (DEBM) alternate may be considered as an alternate to formula feeding which has known risks of increasing incidents of NEC<sup>2,3</sup>.

## **Aim**

This guideline aims in providing guidance on the use of Donor Human Milk for infants born less than <32 weeks gestation or < 1500 grams or in more mature babies at the consultant's discretion.

## **Key Points:**

- Maternal expressed breast milk (MEBM) remains the best milk for their babies.
- Every effort should be made to help mother's express their colostrum (early milk) as soon as possible following delivery.
- Whilst the baby is receiving buccal colostrum, the mother should be supported to express regularly
- Donated expressed breast milk (DEBM) is an alternative transition milk whilst there is temporary insufficiency of mothers own milk to meet the infants requirements.
- DEBM supports maternal breastfeeding, reduces risk of feed intolerance and necrotising enterocolitis. There is also some evidence to suggest there is increased rate of breast feeding at discharge when compared with formula milk.

## **Related documents;**

[Enteral Nutrition UHL Neonatal Guideline.pdf](#) UHL Trust ref: C23/2023

[Optimisation of the Preterm Infant UHL Neonatal Guideline.pdf](#) UHL Trust ref: C28/2024

[Infant Feeding Policy UHL LLR and Childrens Centre Services.pdf](#) UHL Trust ref: E1/2015

## Summary:

### Eligibility for Donor Human Milk (DEBM)

- All babies born < 32 weeks gestation or 1500 g
- Consider for babies born 32- 34 weeks gestation if at high risk for NEC
- Consultant discretion for other complex high risk patients on a case by case basis

- Administer maternal buccal colostrum as soon as available (preferably within 6 hours of delivery)
- Support mother with expressing own milk
- Obtain verbal and written consent to use DEBM and supply leaflet

Commence trophic feeds with MEBM/DEBM as per nutrition guidelines in the first 24 hours

Increase feeds as per nutrition guidelines  
Add breast milk fortifier at 120 ml/kg/day

STOP DEBM if MEBM is adequately available or 2 weeks after reaching full feeds

### Transition to formula (if required):

- Day 1 – ¼ formula
- Day 2 – ½ formula (Stop human milk fortifier)
- Day 3 – ¾ formula
- Day 4 – full formula

## **2. Process / Procedure**

Donor breast milk is intended to aid establishment of enteral feeds and for a period of up to two weeks of full milk feeds until maternal milk supply is established or the infant is able to tolerate formula milk if indicated. The donor breast milk guideline should be used in conjunction with the Neonatal Enteral Feeding guideline for preterm babies below 34 weeks. The addition of human milk fortifier should be considered when using donor breast milk because of the loss in nutritional content through the freezing and pasteurisation process. This should be considered once feeds are tolerated and the baby is receiving at least 120mls/kg/day.

### **2.1 Decision to use Donor Breast Milk**

Maternal expressed milk should be the first choice of milk nutrition. Donor breast milk is available for a sick baby in the following situations:

- When a mother is unable to express
- When a mother is unable to express sufficient milk
- When a mother is unable to or does not wish to breastfeed (but the baby has a need)

### **2.2 Indications:**

DEBM should only be used when there is insufficient mother's own milk. This should also be used whilst the mother is continuing to receive support with expressing.

- All babies born < 32 weeks gestation or < 1500 grams
- Consider for babies born 32-34 weeks gestation if at high risk for NEC

(Consideration of donor breast milk for any baby outside of these criteria should be discussed with the neonatal consultant)

### **2.3 Information about Donor Breast Milk**

Donor mothers are screened for lifestyle, previous medical history and infections. They are rigorously selected and are excluded if the donor is not suitable (Donor exclusion criteria – appendix 1). Donors are tested for HIV 1 & 2, HTLV 1 & 2, Hepatitis B & C and Syphilis. The donated milk is tested for harmful bacteria before pasteurisation and then is heat treated to a minimum of 62.5 °C for 30 minutes making it safe to feed to sick and vulnerable babies.

Appendix 2 has an example of the information that could be provided to parents during consenting for DEBM. The consent should be taken on a Consent form 2.

### **2.4 Consent**

**(Appendix 2 is an example of what could be shared with parents)**

A registered health professional that has completed in-house training on the use of donor breast is required to obtain informed written consent. The following information and discussion should be provided by the health professional obtaining consent (Consent form 2):

- United Kingdom Association of Milk Banking (UKAMB) information leaflet 'Donor Breast Milk – your questions answered' 2008
- The medical need for donor breast milk
- The advantages of using donor breast milk over formula milk
- Information explaining that donors are healthy breastfeeding mothers who have chosen to donate surplus milk for the benefit of sick and small babies and those donors are screened for HIV 1 & 2, HTLV 1 & 2, Hepatitis B & C and Syphilis
- Information on how donor breast milk has undergone strict procedures, making it a safe product
- Information on length of time used and transition to preterm formula at two weeks.

Documented parents written consent to use donor breast milk should be kept in the baby's record (consent form 2) and on discharge should be kept in the baby's medical records for 30 years.

## 2.5 Ordering and transport of Donor Breast Milk

The nurse in charge of the shift should perform a daily check of the donor EBM levels.

- Guidance on how to order can be found in the donor breast milk resource file.
- The DEBM should be checked upon arrival and the despatch and arrival times should be documented.

**DEBM should not have been out of the freezer for more than 4 hours and on arrival should be still frozen; all of the bottles should be sealed and labelled with expiry date and donor numbers.**

## 2.6 Storage:

- It should be stored in the breast milk freezer in its own compartment.
- Once thawed, it should be handled and stored as Trust/ Unit guidelines.
- The donor's number should be recorded in the baby's notes.
- Once removed from the freezer, it should be defrosted in the fridge and be used within 24 hours.

### Storage of donor breast milk:

Donor breast milk should be stored in the designated freezer at -20°C until required. It is the responsibility of the housekeeper to check and record the freezer and fridge temperature once daily.

- When required donor breast milk should be removed from the freezer, the expiry date, batch number and tamper proof lid should be checked and signed by two registered nurses ([Appendix 4](#)). DEBM must have the date / time of removal documented in the 'out of freezer' folder.
- Donor breast milk must be defrosted slowly over several hours in a fridge at 2 - 4°C and labelled with time and date of removal from freezer.
- Once donor breast milk is defrosted it must never be refrozen and should **NEVER** be defrosted in a microwave.
- Required donor breast milk should be stored in the fridge for a maximum of 24 hours from removal from the freezer. Life of donor breast milk must not exceed this time especially DEBM because pasteurisation slightly alters the natural protective effects of

the milk, reducing the bacteriostatic activity of the milk subsequently any contaminants will grow more quickly, additionally a bottle of donor milk can be opened on many occasions thus increasing the risk of contamination.

- Only staff may access the donor breast milk fridges and freezers
- Donor breast milk freezers must be locked and fridges within the clinical areas must be supervised at all times

## 2.7 Initiation and progression of feeds:

- DEBM should ONLY be used when there is insufficient mother's own milk. It is essential that the benefits of breast milk are discussed and continued support is provided to mothers to express milk.
- Ensure maternal buccal colostrum is given to the baby as soon as possible. DEBM should NOT be given into the buccal mucosa as a replacement for buccal colostrum
- Take consent (to be kept in medical notes) and commence trophic feeds (as per nutrition guidelines) of MEBM/ DEBM ([Appendix 2](#))
- Complete the notification of baby requiring DEBM ([Appendix 5](#)) which should be kept in the DEBM folder
- The progression of feeds with donor breast milk should follow the nutrition guidelines.

## 2.8 Administering and discarding donor breast milk

- One bottle of donor breast milk can be shared between all infants requiring donor breast milk. If fortifier is added to the donor breast milk then this must be clearly stated on the bottle. A separate bottle of donor breast milk will need to be used for any infants that are not prescribed fortifier.
- It is the nurse's responsibility when removing donor breast milk from the fridge to check with another registered staff member, that the expiry date is within 24 hours from removal out of the freezer and consent has been obtained in the baby's care plan ([appendix 2](#)).
- The donor breast milk bottle should be shaken gently to make sure any settle fat content is thoroughly mixed before decanting the infant's
- Donor breast milk needs to be used within 4 hours of leaving the fridge.
- The registered member of staff needs to document the donor number, bottle number, infant's unique number and the volume taken in the donor breast milk record file stored alongside designated DEBM fridge/freezer. The donor breast milk batch and bottle number needs to be recorded in the baby's record of donor breast milk used ([Appendix 4](#)).
- It is the nurse's responsibility to ensure any remaining donor breast milk is returned to the designated DEBM fridge as soon as possible after use.

At the cot side the baby's details on the wristband need to be checked by two registered members of staff (name, date of birth and unit number) to ensure it correlates with the hospital sticker on the donor breast milk box and the consent form in the baby's notes, it is only then the donor breast milk can be administered.

## **Discarding donor breast milk:**

Any expired bottles of donor breast milk should be documented in the discarded donor breast milk folder ([Appendix 6](#)). Any frozen donor breast milk that has expired should be defrosted at room temperature and then discarded as per current procedure for EBM.

## **2.9 Weaning from Donor Breast Milk onto formula milk**

- Stop DEBM once MEBM is adequately available or 2 weeks after reaching full feeds of DEBM. This is because DEBM is nutritionally deficient for preterm babies even with added fortifiers.
- Add breast milk fortifier once 120 ml/kg/day is reached as for MEBM (see feeding guideline and BMF guideline)
- Transitioning to preterm formula should be done after 2 weeks as DEBM is nutritionally deficient for preterm babies even with added fortifier.
- Where MEBM supply is significantly increasing towards providing full nutritional requirements, consider continuing DEBM after 2 weeks full feeds to supplement instead of commencing formula. This may be especially valuable in multiple births.
- The Transition should take place as follows:  
Day 1 –  $\frac{1}{4}$  full formula feeds +  $\frac{3}{4}$  full DEBM feeds  
Day 2 –  $\frac{1}{2}$  full formula feeds +  $\frac{1}{2}$  full DEBM feeds  
Day 3 –  $\frac{3}{4}$  full formula feeds +  $\frac{1}{4}$  full DEBM feeds  
Day 4 – full formula feeds

\*Please Note: fortifier should be discontinued once baby is receiving 50% or more formula feeds

## **3. Education and Training**

None

## **4. Monitoring Compliance**

None

## **5. Supporting References**

1. BAPM: Optimising Early Maternal Breast Milk for Preterm Infants, Nov 2020.  
[https://hubble-live-assets.s3.amazonaws.com/bapm/redactor2\\_assets/files/755/BAPM\\_Preterm\\_MBM\\_Toolkit\\_Final\\_for\\_publication.pdf](https://hubble-live-assets.s3.amazonaws.com/bapm/redactor2_assets/files/755/BAPM_Preterm_MBM_Toolkit_Final_for_publication.pdf)

2. McGuire W, Anthony M Y. Donor human milk versus formula for preventing necrotising enterocolitis in preterm infants: systemic review. Archives of Disease in Childhood – Fetal and Neonatal Edition 2003;88 F11 –F14.
3. ESPGHAN Committee on Nutrition. Arslanoglu S, Corpleejin W, Moro G, et al. J Pediatr Gastroenterol Nutr. 2013 Oct; 57(4):535-42.
4. The Use of Donor Human Milk in Neonates A BAPM Framework for Practice © BAPM, 2023 33

## **6. Key Words**

Breastfeeding, Colostrum, Donated expressed breast milk (DEBM), Maternal expressed breast milk (MEBM), Necrotising enterocolitis

---

**The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs. As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.**

<b>CONTACT AND REVIEW DETAILS</b>			
<b>Guideline Lead (Name and Title)</b> Deepa Panjwani - Consultant Katie Jones - Katie Seaton -		<b>Executive Lead</b> Chief Nurse	
<b>Details of Changes made during review:</b>			
<b>Date</b>	<b>Issue Number</b>	<b>Reviewed By</b>	<b>Description Of Changes (If Any)</b>
June 2023	1	Neonatal Services guidelines group	New document
December 2024	2	Neonatal Services guidelines group Neonatal Governance Group	No changes



## Appendix 1 Donor Selection Criteria

### **Donors are rigorously selected and are excluded if:**

- They are taking any long term medication (except insulin, thyroxine, mini pill and salbutamol)
- They smoke cigarettes
- They consume more than 2 units of alcohol daily
- They use illegal drugs
- They suffer from any chronic illness or systemic disorder
- Have ever received a blood transfusion/received any blood related products
- Had any body piercing or tattoo within the last 3 months
- Mothers who have had sexual partners who have had a previous homosexual relationship
- Mothers who have sexual partners with haemophilia or a blood related clotting disorder who has received clotting factor concentrate
- Mothers who have had sex within the last 12 months with anyone, of any race who has been sexually active in parts of the world where HIV is generalised in its pattern of spread
- Mothers who are commercial sex workers (prostitutes).
- Mothers who belong to a group considered to be at risk of Creutzfeldt Jakob Disease i.e symptomatic patients, asymptomatic individuals at risk from familial forms of CJD linked to genetic mutations, asymptomatic individuals potentially at risk from iatrogenic exposure (growth hormone, dura mater graft or exposure to potentially contaminated instruments).

## **Appendix 2: Example of information that should be shared with parents about donor human milk**

Donor human milk, or donor milk as it is often called, is breastmilk donated to human milk banks by mothers who have a surplus. The donors of the milk are screened to ensure their milk is suitable including by having blood tests. Their milk is also tested for bacteria before being heat treated. Just like with blood donations, the breastmilk is freely donated and its use is tracked and recorded.

In the UK, in common with most countries, donor human milk is available for some babies whose mothers don't have enough of their own breastmilk. Other supplementary feeds include infant formula which is usually made from cow's milk and which may be adapted for different babies' needs for example preterm formula for babies born early. Donor milk is mainly offered on a temporary basis as a supplement to a mother's own milk whilst she is building up her supply. It is mostly needed when babies have been born early or are very small.

The mother's colostrum (first milk) and the milk she produces after a few days are the most suitable first feeds for babies, especially those that are tiny and sick but if there isn't enough, donor milk is usually the preferred supplement in the early days and weeks when being cared for on a neonatal unit. All new mothers of babies on the neonatal unit will be helped to collect their colostrum by being taught how to express it both by hand and using a breast pump. This should happen within a few hours, preferably within 1 hour of the baby being born. Expressing frequently, even if there is very little colostrum being collected at first, helps to ensure more will be available within a day or two. In the meantime, the tiniest of drops are precious and will be fed to the baby as it helps a baby's digestive system, it contains very high amounts of protective substances to protect against infections and it is very nutritious.

The use of donor milk doesn't replace a mother's own milk, except in rare circumstances such as if she is undergoing treatments or taking medicines that make her milk unsuitable or unsafe (such as chemotherapy) or in the case of some maternal infections or conditions. Donor milk doesn't match a mother's own milk because it has been heat treated and may be from a mother with an older baby. In addition, a mother's own milk contains special antibodies made in response to any infections she or her baby are exposed to.

However, donor milk will provide easily digested nutrition as well as very many anti-infective and other active components that help to keep babies healthy and protect them from gut related conditions which can be very serious for tiny infants. All of the antibodies and other special human milk components are not present in formula. However, formula does contain higher amounts of some nutrients that are needed for growth and development and for which premature babies often have a greater need.

For this reason, the use of donor milk for more than a few days may require the addition of extra nutrients added in the form of a fortifier. A mother's own milk is better able to support growth but it may also need fortifier adding depending on how the baby is growing.

Sometimes a specialised formula is also chosen. Local, national and global recommendations support the provision of donor milk, especially for premature babies during their early days and sometimes weeks on a neonatal unit. The next choice is usually preterm formula if the baby was born early. However, parents or those with parental responsibility, will be asked to provide their consent for the use of donor milk or formula.

If you have any questions or need further information to help you decide please ask the doctors or nurses caring for your baby. You can also ask to speak with the staff at the milk bank if you have questions about the milk banking process.

**Appendix 3: Baby's record of Donor Breast milk used**

Date DEBM Commenced:

BABY ID LABEL

BABY'S RECORD OF DONOR BREAST MILK USED						
DATE	DONOR BREAST MILK BATCH NUMBER	DONOR BREAST MILK BOTTLE NUMBER		DATE	DONOR BREAST MILK BATCH NUMBER	DONOR BREAST MILK BOTTLE NUMBER

**TO BE FILED IN BABY'S CASE NOTES**

### Appendix 4: Donor Breast Milk 'Out of freezer' Folder

DHM Batch number	DHM Bottle number	Date	Time (24h)	Nurse 1 Name	Nurse 1 Signature	Nurse 2 Name	Nurse 2 Signature
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				
		/ /	:				

**Appendix 5: Notification of baby requiring Donor Breast milk**

**Baby's name:**.....

**Baby's unit number:**.....

<p style="text-align: center;"><b>Baby's unique number</b></p>
--

**Name of person completing form:**.....

**Donor Breast milk ordered?**    **Yes**    **No**

**Date Donor Breast milk commenced:**

**Appendix 6: DISCARDED DONOR BREAST MILK DOCUMENTATION**

DHM Batch number	DHM Bottle number	Date	Amount in MLS	Reason for Discarding	Nurse Name	Nurse Signature
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				
		/ /				

## **Appendix 7: Guidance for Transition to Formula Milk from Breast Milk (DEBM or MEBM)**

This plan provides new guidance on the transition to cow's milk based formula. This plan applies to infants on DEBM or where there is a limited supply of MEBM. If there is insufficient MEBM for full feeds at the time of transition, DEBM should be considered to make up the short fall. The plan has been developed to minimise the risk of feed intolerance during the transition process and so should only be implemented or altered with agreement of Consultant medical staff.

**INFANTS MUST BE TOLERATING BOLUS FEEDS PRIOR TO COMMENCING WEANING.**

**STOP FORTIFIER ON DAY 2 WHEN BABY IS ON 50% FORMULA**

<b>WEANING DAY</b>	<b>CALCULATED AMOUNTS OF MILK TO GIVE</b>	<b>EXAMPLE FOR: 1.25KG BABY ON 165mls/kg/day 2 HOURLY FEEDS=17MLS PER FEED</b>
DAY ONE	25% FORMULA FEEDS 75% MEBM /DEBM FEEDS	3 feeds of 17 ml Formula 9 feeds of 17 ml MEBM/DEBM
DAY TWO *STOP FORTIFIER*	50% FORMULA FEEDS 50% MEBM/DEBM FEEDS	6 feeds of 17 ml Formula 6 feeds of 17 ml MEBM/ DEBM
DAY THREE	75% FORMULA FEEDS 25% MEBM/DEBM FEEDS	9 feeds of 17 ml Formula 3 feeds of 17 ml MEBM/DEBM
DAY FOUR (Weaning completed)	100% FORMULA FEEDS	12 feeds of 17 ml Formula

**IMPORTANT:** If at any time during the transition process baby shows signs of intolerance (distended abdomen, vomiting, frequent desaturation and bradycardia) then discuss with medical staff; depending on baby's symptoms consider investigation for NEC, or return to previous weaning day. Do not adjust the calculated feeds according to weight gains during the transition period.