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Norfolk and Norwich University Hospitals NHS
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Use of Donor Breast Milk on the Neonatal Unit

A Clinical Guideline

For Use in:	Neonatal Intensive Care Unit (NICU) and Maternity Department
By:	All Nursing, Midwifery and Medical Staff
For:	Neonates
Division responsible for document:	Women and Children's Services
Key words:	Neonate, Donor Breast Milk
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If Yes - does the strategy/policy deviate from the recommendations of NICE? If so why?	No

Version and Document Control:

Version Number	Date of Update	Change Description	Author
3	01/06/2020	Leaflet removed as appendix to go through Patient Information Forum and be loaded as separate document. Consent removed for to go to Consent Group and again be loaded as separate document.	Susan Harris

This is a Controlled Document

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Definitions of Terms.

DBM	Donor breast milk
EBM	Expressed breast milk
NEC	Necrotising enterocolitis

Quick reference guide for which babies may be suitable for Donor Breast Milk (Table 1)

Premature Infants	More mature infants who fit these criteria:
Babies <30 weeks	Unstable ventilated babies
	Post major abdominal surgery/recovering from necrotising enterocolitis (NEC)
	Consistently Absent/ Reversed End Diastolic Flow on antenatal Doppler studies
	Preterm significantly Small for Gestational Age babies (< 2nd centile and < 34/40 gestation at birth.)
	Haemodynamically unstable babies who have required prolonged inotropic support.
	Hypoxic Ischaemic Encephalopathy (requiring total body cooling)
	In extraordinary circumstances the Infant Feeding Coordinators may request short term use of DBM for specific reasons. They will keep under review any mothers needing to supplement with DBM.

Objectives

- To provide guidance as to which babies should be offered DBM within the neonatal unit and on the post-natal ward.
- To outline the transition from DBM to formula.
- To outline the use, safe storage and traceability of DBM.

Rationale

To protect the culture of breast feeding on the neonatal unit and the Maternity Unit and to minimise both the short and long term risks associated with giving cow's milk protein to neonates.

Potential Benefits

Formula fed very low birth weight babies are at significantly increased risk of NEC when compared with infants exclusively fed breast milk. Data suggests that donor breast milk reduces the risk of necrotising enterocolitis by as much as 79%.[1]

Potential Risks

Donor breast milk (DBM) is a human body fluid and, as such, carries risks of transmission of infective agents. Donors are screened and the milk is pasteurised to minimise risk. Written consent must be obtained for the use of donor breast milk. Handling, testing and documentation of the milk in the donor milk bank and specialist feed unit is carried out according to NICE Guidelines 2010.[2]

Donor breast milk will have a variable nutrient content as seen with maternal expressed breast milk and may not contain optimum nutrients for the growth of preterm infants. Additionally it may be further compromised by heat treatment.[3]

Broad recommendations

The best milk for a baby is its mother's own breast milk.

Nurses, midwives or neonatologists can take the lead equally in emphasising the benefit of exclusive use of human milk for all babies and the particular importance of human milk for the 'at risk' baby. Good joint working and communication are encouraged.

Every effort should be made to support mothers to express their milk as soon as possible following delivery, ideally within the first hour. The medical and nursing staff looking after the baby should ensure this is communicated to the parents and the staff on the delivery suite and/or the postnatal ward and that on-going lactation support is provided.

The use of DBM should be considered for eligible infants where the mother has a short-fall in her milk supply. Full support for lactation should be on-going to enable her milk supply to be increased sufficiently to provide milk for her baby. The use of DBM should be time limited, with clinician's discretion depending upon individual circumstances.

The support of excellent expressing skills is implicit throughout the period of low milk supply. DBM should not be used in place of effective support to establish lactation, but to complement skilled help.

Which babies MAY be eligible for donor breast milk?

For eligibility criteria, please see Table 1

In the event of supplies being limited for these babies, DBM will be allocated at the clinician's discretion.

Consent for use of donor breast milk (DBM)

The nurse or doctor caring for the baby should explain the rationale for using donor breast milk. Written information for parents about donor milk is available in the donor breast milk folder. Use of Donor Breast Milk on the Neonatal Unit (NICU) Trustdocs Id: 17017. Written consent should be obtained from the mother to give DBM to her baby. If she isn't within the hospital then verbal consent can be obtained and then gain written consent when mum is available. The consent form must be kept in the baby's notes.
To be confirmed

How to obtain donor breast milk.

Location	Telephone	Out of Hours
The Rosie Hospital	01223 256931 01223 274171.	
The Hearts Milk Bank	Monday to Friday 9.30-17.30 01582 314130/ 01582 314131	07732019040.
Queen Charlottes and Chelsea Hospital	020 33133559.	
Hellesdon Milk Hub	0300 365 1909	
Working in partnership with the Human Milk Foundation, a regional milk bank hub has been opened at Hellesdon Hospital for the benefit of sick or premature babies and mothers unable to breastfeed. The new milk bank hub will provide a storage location for donor milk prior to treatment as well as for treated milk ready to be issued to hospitals		
If you need any further information regarding Donor Breast Milk Banks please go to the UKAMB website.		

Storage and Usage

Donor breast milk should be stored as directed by the donor milk bank and according to each Unit's policy for all frozen milk.

Milk can be kept in the freezer until it reaches its expiry date.

Milk should always arrive in a frozen state. This must be checked by the member of staff that receives the delivery. If it has started defrosting then it needs to be discarded and the milk bank from where it came should be informed.

Milk must be used within 24 hours of removal from the freezer for defrosting.

Documentation and traceability

Each bottle of donor milk is labelled with a batch number to ensure traceability and expiry date.

Once taken from the freezer the donor milk bottle should be labelled with the name and hospital number of the baby who is to receive it, and the date and time it is removed from the freezer.

A donor breast milk log called the profoma must be filled in for every baby who is given DBM. When each bottle of DBM is removed from freezer, the batch number, the milk bank it came from, the date it is to be used and expiry date needs to be completed on this form. This form is then kept in the baby's notes.

A register is kept with the donor milk which needs to be completed each time a bottle is removed from the freezer. Information includes baby's name, hospital number and date removed.

Donor breast milk sourced from the Rosie Hospital comes with a form which needs completing and then to be placed in the folder that is kept with the donor breast milk. The information from this is used to complete a register and a continuous audit for the usage of donor breast milk. This form is then forwarded back to the Rosie hospital.

How long to use DBM

The use of DBM must be time limited. Every effort must be made to support mother's lactation to enable her milk supply to be increased and the use of DBM be discontinued.

In the event of persistent low milk supply despite on-going optimal lactation support, it would be reasonable to offer DBM until full enteral feeds are achieved. Longer use of DBM may be warranted in individual cases at the consultant's discretion.

Grading on to formula on NICU

Ideally support with DBM will coincide with lactation and growing volumes of maternal milk, allowing this to replace the need for DBM. In the event that there is an insufficient volume of maternal milk, further support with lactation must be offered.

Should the use of formula be required, the following grading plan should be used:

- Start with ¼ formula for 24 hours.
- Increase by ¼ every 24 hours as tolerated i.e. re-grading should take 3 days.
- If the baby shows any signs of intolerance to grading onto formula milk then this process should be stopped and re-assessed.

Can we Fortify DBM?

DBM can be fortified.

Babies Being Transferred to Other Units who are receiving DBM.

A clear feeding plan should be agreed between the referral and receiving units before transfer. If the hospital does accept babies on DBM then a small supply of DBM should be transferred with the infant. It is the responsibility of the receiving hospital to liaise with the Milk Bank for further supplies of milk as required.

Informal Milk Sharing (use of donor milk outside of a registered Milk Bank)

In recent years, increasingly, mothers who are unable to breastfeed or supply enough of their milk for their full term, healthy babies have come to use networks developed through the internet to obtain breastmilk. These connect them with mothers who wish to share or to sell their milk. Human milk, when shared outside milk banks that follow accepted guidelines, does not provide the same safety guarantees and the possibility of serious adverse consequences cannot be ruled out

The main risks of sharing milk are that it is contaminated with pathogenic bacteria as a result of suboptimal collection, storage and transportation or that it contains viruses as a result of the mother having unknown infections which may be transmitted via the milk. These include viral infections such as HIV, Hepatitis or HTLV (Human T Lymphotropic

Virus). In addition, the shared milk may contain medications taken by the mother as well as alcohol, nicotine, drugs and other contaminants.

Harmful bacteria ingested in large quantities through breastmilk may lead to severe infections including septicaemia. Viruses such as HIV and HTLV in breastmilk can cause serious illnesses, some of them manifesting several years after contamination.

Screening of donors, milk testing and appropriate pasteurization, as routinely done in human milk banks, greatly reduces the risks associated with sharing breastmilk

If mothers choose to use human milk that is shared from an informal source, the health care professional should document in the baby's health care record that they have had a discussion about the risks of this decision. They should discuss the points raised above and give a printed copy of this information to the parents. Use of Donor Breast Milk on the Neonatal Unit (NICU) Trustdocs Id: 17017

Clinical audit standards

- Number of babies who receive donor breast milk.
- Indications for use of DBM.
- Incident forms related to use of DBM.
- Number of babies receiving at discretion of Infant Feeding Coordinators.
- Rational for use by term babies.

Summary of development and consultation process undertaken before registration and dissemination.

This guideline was adapted from the Guidelines for the Use of Donor Breast Milk on the Neonatal Unit at Imperial College Healthcare NHS Trust by the authors listed above on behalf of the Neonatal Guidelines Group and Maternity Guidelines Committee has agreed the final content. During its development it has been circulated for comment to Heads of Wards and Departments, The Breastfeeding Core Group and the Neonatal. Any comments received have been incorporated where appropriate into the document.

This guideline is endorsed by Professional Policies, Protocols and Guidelines and Clinical Guidelines Assessment Panel

Distribution list/ dissemination method

- All NICU staff
- Trust Intranet

References/ source documents

1. Boyd CA, Quigley MA, Brocklehurst P (2007). Donor breast milk versus infant formula for preterm infants: systematic review and metaanalysis. Archives of Disease in Childhood; 92: F169-F175.
2. Donor breast milk banks: the operation of donor breast milk bank services. National Institute for Health and Clinical Excellence (NICE) (http://guidance.org.uk/CG93).
3. Wight NE,Donor human milk for preterm infants. Journal of Perinatology; 2001; 21(4): 249-54.

4. King C, 'Preterm infants' In *Clinical Paediatric Dietetics 3rd Ed.* Shaw, V and Lawson, M. Oxford: Blackwell Publishing, 2007.

5. Abdelhamid AE, Chuang SL, Hayes P, Fell JM. In vitro cow's milk protein-specific inflammatory and regulatory cytokine responses in preterm infants with necrotizing enterocolitis and sepsis. Pediatric Research Journal. 2011 Feb;69 (2):165-9. doi: 10.1203/PDR.0b013e31820263e7.

6. Arslanoglu S, Moro GE, Bellù R, Turoli D, De Nisi G, Tonetto P, Bertino E

   Presence of human milk bank is associated with elevated rate of exclusive breastfeeding in VLBW infants. Journal of Perinatal Medicine 1-3 (Nov 2012) Lois DW Arnold (2006).

7. Global health policies that support the use of banked donor human milk: a human rights issue. International Breastfeeding Journal 2006, 1:26 doi:10.1186/1746-4358-1-26.

8 Lois DW Arnold (1999) Use of Banked Donor Milk in the United States, Building Block for Life. Pediatric Nutrition Practice Group, Volume 23 No. 1 Winter 1999.

9. Schanler RJ, Lau C, Hurst NM and Smith EO.(2005) Randomised trial of donor human milk versus preterm formula as substitute for mothers' own milk in the feeding of extremely premature infants. Paediatrics, August 2005, vol,/is 116/2(400-6), 0031-4005; 1098-4275.

10. Douglas B. Tully, PhD, Frances Jones, RN, BScN, IBCLC, and Mary Rose Tully, MPH, IBCLC (2001) Donor Milk: What's in It and What's Not. J Hum Lact 17(2).

11. UNICEF Neonatal Course Handbook, Baby Friendly Initiative.

12. Untalan PB , Keeney SE, Palkowitz KH, Rivera A and Goldman AS.(2009) Heat susceptibility of interleukin-10 and other cytokines in donor human milk. Breastfeeding Medicine vol./is. 4/3(137-44), 1556-8342 (2009 Sep).

13. Bliss Charter (2011) Alternatives to maternal breastmilk, Standard 6.3.

14. The united kingdom association for milk banking (UKAMB).