

East of England Neonatal Operational Delivery Network

NEONATAL PASSPORT

Assistance Cards

Feeding



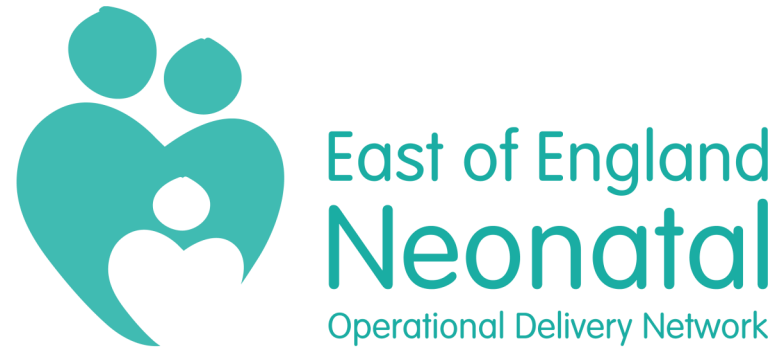
East of England
Neonatal
Operational Delivery Network

Collaborative working to deliver high quality care to our babies and their families



Acknowledgement

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Assessing feeding readiness and Infant led feeding



Aim

Parents are able to assess baby's readiness at each feed and understand the importance of cue based (responsive/infant led) feeding.

Resources

Unit based 'readiness to feed' documentation

Learning points

- The transition to oral feeding is a complex developmental process that might take time
- There is the potential for feeding to become a distressing and stressful process for premature babies
- A high proportion of premature babies are referred for feeding difficulties at a later stage of feeding development (i.e. at weaning age) due to food aversion etc.
- It is important that feeding on the neonatal unit is a positive and stress free experience for both babies and parents so that future difficulties can be lessened or avoided
- Infant led feeding can help to make feeding a pleasurable experience for babies
- Babies are not usually ready to feed orally until 34 weeks gestation (for bottle fed babies; breast fed babies may be ready earlier than this), some babies will benefit from introducing non-nutritive sucking (on a dummy or gloved finger) earlier than this.
- Talk to parents about the ways a baby will communicate they are hungry (feeding readiness cues, please see separate document) and that crying is often the last way a baby will communicate they are hungry:
 - * Alert
 - * Rooting
 - * Hands to mouth

Assessing feeding readiness and Infant led feeding

- Demonstrate the best way to position baby for feeding (elevated side-lying) is recommended as best practice for bottle fed babies
- Talk about quality of baby's feeding and whether they are sustaining an effective suck-swallow-breath pattern
- Discuss continuing to read baby's cues throughout the feed and how to identify whether baby needs a break or needs to stop completely. Signs that baby has had enough may include;
 - * Falling asleep
 - * Slowing of pace
 - * Facial expression
 - * Pushing teat out
 - * Turning away
 - * Fussing/crying
- Emphasise QUALITY NOT QUANTITY. Discuss how baby;
 - * Can have a top-up via tube
 - * May take more in next feed
- Discuss feeding techniques such as;
 - * Positioning
 - * Pacing
 - * Cheek/chin support



How do I know my baby is ready for a breast / bottle feed?

Up until now, you will have been used to feeding your baby to a schedule, or by the clock; every 1, 2 or 3 hours. When your baby is ready to start feeding by mouth, you will need to begin looking out for signs that they are ready for the breast or bottle. To start with your baby will not wake up at every feed. Babies feed more effectively when they have been given the opportunity to wake naturally, so we need to listen to them and follow their lead. If your baby is asleep at around the time their feed is due, they can be fed via tube.

However, if your baby is starting to stir and showing some of the cues in the pictures on the right then it is a good time to offer a breast or bottle. Crying uses up extra energy that is needed for the feed itself, so it is better to offer a feed as soon as your baby begins to show early cues.

Here is a video link from the Best Beginnings “Small Wonders” project, which shows hunger cues and explains how babies move from tube to breast feeding:

www.youtube.com/watch?v=2_wA7rwA1Ro&t=63s

Feeding can be tiring for babies at first, so your baby may fall asleep or come away from the breast or bottle before he has taken enough milk. However, it is important that feeding remains enjoyable and that we listen to babies when they say they can't manage any more. There is no such thing as a “lazy baby” - your baby will be able to complete a breast / bottle feed when they are ready. Your nurse will be able to help you decide whether or not your baby needs a top up of milk through the tube, and how much to give.

Developed by Women's and Newborn Services
Royal Brisbane and Women's Hospital

Early Cues - “I’m hungry”



Stirring



Mouth opening



Turning head
Seeking/rooting

Mid Cues - “I’m really hungry”



Stretching



Increasing physical
movement



Hand to mouth

Late Cues - “Calm me, then feed me”



Crying



Agitated body
movements



Colour turning red

Time to calm crying baby

- Cuddling
- Skin-to-skin on chest
- Talking
- Stroking

Introducing bottle feeding

There are several different types of bottle teats available on the unit and you may even have already brought your own. However, babies on the neonatal unit usually need to use a teat with a small feed hole or slow flow to start with, whilst they learn to co-ordinate sucking, swallowing and breathing. When your baby is ready to move onto a faster flow, we will encourage you to bring in your own bottles and teats in preparation for discharge home. It is also usually recommended that babies on the neonatal unit start bottle feeding in an “elevated side lying” position, as research shows that babies are more stable in this position and can therefore feed more effectively.

Here is a video link from the Best Beginnings “Small Wonders” project, which explains how babies move from tube to bottle feeding:

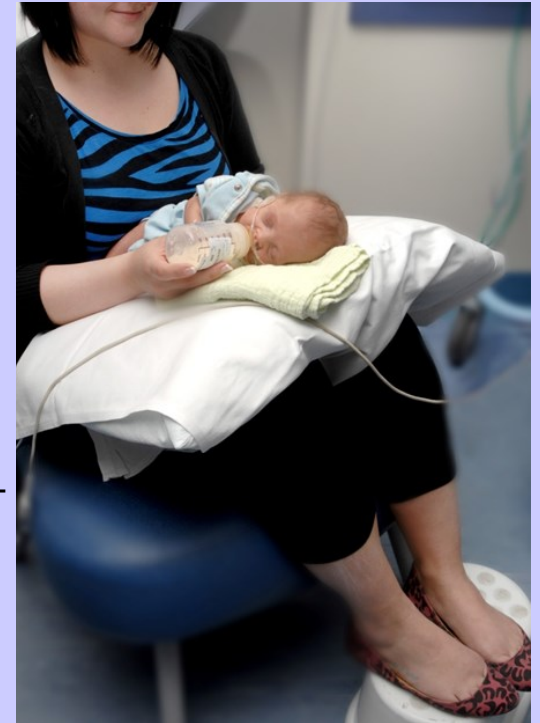
www.youtube.com/watch?v=Fk-LThcxytY

Even in elevated side lying (see picture on the right) and with a slow flow teat, some babies will find it difficult to manage the flow of milk. Your baby may need you to help them to take a break from sucking and swallowing, and catch up with their breathing by gently removing the bottle from their mouth every few sucks. Signs that your baby is not coping with the flow of milk and needs a little rest are:

- Dribbling or spitting milk
- Raising eyebrows with each swallow
- Noisy gulping
- Trying to pull away from the teat
- Coughing

If your baby starts to look very tired or falls asleep, pushes the teat out of his mouth or pulls his head away then he is telling you that he has managed as much as he can for that feed. It will take some time before your baby will be able to finish bottles completely. The milk that is left over can be put down his feeding tube. It is important that feeding is a positive experience for you both, so try to focus on the enjoyment of your baby’s feed rather than how much he takes.

Members of staff will support you with finding the best position and the most appropriate teat for your baby. They will also be happy to answer any questions or concerns you have about feeding your baby. You may be referred to a lactation consultant, breastfeeding specialist, or speech and language therapist for specialist support with breast or bottle feeding.



Breast Feeding & Breast Milk

Health Benefits for Mothers & Babies

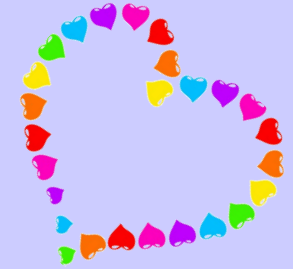


For Baby

- Your milk is UNIQUE! It is especially made for your baby and their specific needs
- It protects your baby from infections as it contains anti-infective factors and immunoglobulins
- For sick and premature babies it reduces the risk of necrotizing entero-colitis
- Particularly for premature babies-it promotes visual acuity
- It promotes growth, maturation and development of organ systems
- It reduces the risk of gastro-intestinal, urinary tract, respiratory and ear infections
- It is easily absorbed in the gut
- Lowers the risk of diabetes
- Improved developmental and cognitive outcomes
- Reduces allergies
- Reduces risk of obesity and cardiovascular disease in later life
- Reduces the risk of Sudden Infant Death Syndrome (S.I.D.S)

Breast Feeding & Breast Milk

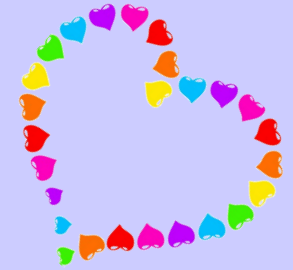
Health Benefits for Mothers & Babies



For Mother

- Reduced risk of ovarian cancer
- Promotes stronger bones in later life and reduces risk of osteoporosis and fractures
- Helps you (not all), to lose weight readily
- Evidence to suggest breast feeding protects against negative mood
- The confidence to know that you are doing a wonderful job in supporting your baby

Breast Massage and Hand Expressing Technique

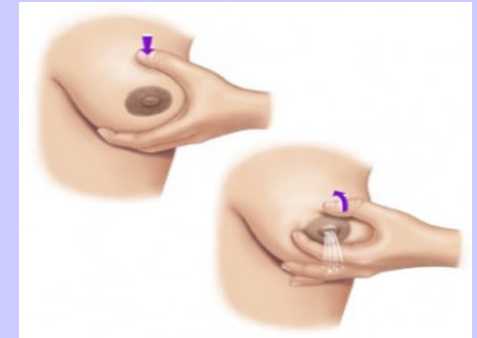


- **GETTING READY**—Colostrum is the milk you produce in **SMALL AMOUNTS** in the first couple of days
- Gentle breast massage can be used at any time—it helps to stimulate your milk flow & make expressing easier
- Wash your hands & sit in a comfortable position
- Some mothers find that having a picture, video or a bonding square with their baby's scent can be help with expressing
- Use the colostrum collection syringes provided
- Lightly stroke, massage and roll the knuckles downwards over the breast with nipple stimulation
- Position your thumb & fingers in a “C” shape—2/3 cms back from the nipple



Video link below is from the Baby Friendly Initiative

- <https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/breastfeeding-resources/hand-expression-video/>
- If you experience any discomfort—please seek advice



A combination of breast massage, hand expressing and the electric breast pump is used to stimulate the breasts and obtain breast milk

How to increase your milk supply:
A combination of breast massage, hand
expressing & breast pump



- A member of the team should have shown you how to sterilise the expressing equipment prior to use & how to put it all together. Ensure that you understand how the pump works & refer to the instructions attached to the pump—if not....ASK.
- Ensure you are comfortable & have washed your hands—start with gentle breast massage to stimulate your milk making hormones prior to pump use
- 2 sets of equipment are given, as double pumping increases your milk production & is time efficient
- “hands-free” bra method of expressing, enables you to reduce the tension in your shoulders & massage your breasts at the same time, which will help to increase your milk volumes & save you time
- Ensure well-fitting breast shells/flanges—**pumping should be comfortable with no pain & minimal or no areolar tissue being pulled in the tunnel of the breastshield**
- Aim to express at least 8-10 times every 24 hrs including once between midnight—6 am. This is a really important session as your milk producing hormones are higher at night
- Avoid gaps of longer than 4 hours during the day and 6 hours overnight between expressing
- Pump next to your baby if possible or look at photos/videos, have bonding squares
- Increase your milk supply with skin to skin/kangaroo care or comfort holding with your baby
- Partner to massage your shoulders prior to pumping, can help to stimulate the milk ejection reflex
- Record your milk volumes in the expressing log provided, on your phone or any apps available—as it is important to see your milk volumes increasing
- If you have **any** concerns with expressing, please speak to a health-care professional
-
- **EXPRESSING CAN BE CHALLENGING, AVOID ROUTINE & TALK TO STAFF, WE CAN HELP**



Expressing using breast pump and Storage of breast milk

- Expressing logs are available if mum's feel will help and encouraged if milk supply is low
- Advise mum how much milk to put in each container depending on condition of baby
- Discuss importance of labelling milk with name, unit number, date and time of expression
- Before freezing milk ask mum's to always check with a nurse if fresh is needed to be left out
- Demonstrate cleaning and storage kit according to unit policy

Hand expression of Breast milk



Aim

That all babies on NNU will have breast milk available once they are ready to commence feeds and parents understand the process of hand expression

Resources

- Colostrum kit
- Collection bottles
- Labels
- Knitted breast

Learning points

- Show the mother the syringes and kit to collect milk
- Ensure she knows colostrum is only a small amount of fluid but the most important thing that she can give her baby
- Explain the importance of stimulating oxytocin to flow and suggest things that will help this process e.g. Having baby near/gentle breast massage/use of something to remind mother of baby
- Explain to a mother how she will find the right spot for her to put her fingers and express milk by placing fingers 2-3 cm back from the base of the nipple using the knitted breast describe where the milk ducts are positioned.
- Place finger(s) and thumb in a C shape, opposite each other
- Compress and release in a steady rhythm without sliding fingers on skin
- Move round breast once flow slows, ensure she knows to move around whole of breast
- Once flow slows/ceases move to other breast
- Explain that she will be shown how to use the breast pump as well

When will my baby be ready to start bottle or breast feeding?

Whether you choose to feed your baby by breast or bottle is your decision. If you would like to both breast and bottle feed your baby, we advise you to ensure you are confident with breast feeding, before introducing the bottle.

When your baby first starts to feed by mouth, there will be no expectation for him to take a large volume of milk. Instead, the focus will be on encouraging your baby to explore the nipple or teat and develop an enjoyment of feeding. At the same time they will be building up the stamina for feeding, whilst they learn the complex skill of co-ordinating sucking, swallowing and breathing. The nasogastric tube will stay in as long as your baby needs it and will be able to breast or bottle feed normally with it in place.

To be able to start feeding by breast or bottle, your baby will need to be able to:

- Comfortably manage milk in their stomach
- Showing signs of waking for feeds and having periods of wakefulness when they are calm and alert
- Be able to demonstrate stable breathing and heart rate when in skin-to-skin and during cares
- Be breathing on their own, or stable on low levels of oxygen support
- Showing hunger cues (see pictures on following page)
- Is able to suck rhythmically on a dummy or finger and swallow their own saliva.

There is no lower age limit for introducing breast feeding, as long as your baby is showing the skills listed above. However, bottle feeds will not be introduced until your baby is at least 34 weeks gestation, because bottle feeding requires more co-ordination of skills. If you have decided to bottle feed your baby, you will be given the opportunity to give the first feed, as this is an important milestone for you both.



How can I help my baby to get ready to feed by breast or bottle?

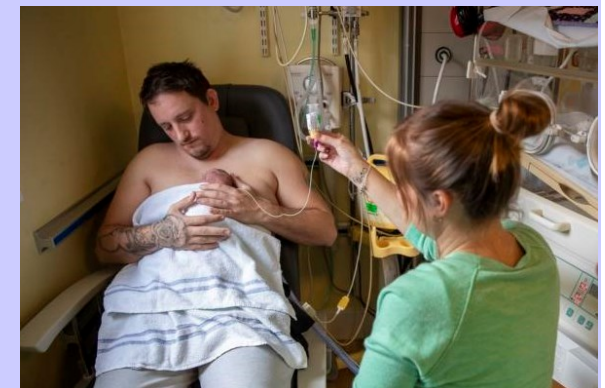
Feeding is not just about nutrition, it is a social time that is important for providing comfort and building a relationship with your baby. Even before your baby is ready to start breast or bottle feeding, you can begin to support their feeding journey:

- Expressing your milk will prepare your body for the day that your baby is ready to breastfeed
- Giving gentle mouth care helps to keep your baby's mouth clean, moist and comfortable. Using expressed breast milk for mouth care will also give your baby some nice taste experiences
- Leaving a used breast pad or muslin that you have worn close to your body in your baby's cot will help him to become familiar with your unique smell, when you are not able to be near him
- Positioning your baby in the cot with his hand close to his mouth allows him to experience positive touch around his face and lips, and perhaps the opportunity to suck if he wants to
- Holding your baby in skin-to-skin, or offering comforting touch during tube feeds will help your baby to feel more calm and relaxed. She will also begin to learn about your touch and smell. She might start to lick your chest, or move down towards your nipple which will help you to learn when she is getting ready to feed by mouth. Your baby will also digest her milk more comfortably when tube-fed in skin-to-skin
- Offering your baby a dummy to suck on during tube feeds can help your baby to associate sucking with having a full tummy. Sucking increases the production of saliva, so that your baby can practise sucking and swallowing, and can also help to make digestion more comfortable
- Observing your baby during tube feeds will help you to learn how he copes with milk in his tummy – does he wake up for feeds, how does he show he is hungry / full / windy, is he more comfortable if the milk is delivered more slowly?

Photo credit: Bliss website



Photo credit: Bliss website



Positioning at- Latching on to breast



Aim

Mums to have an understanding of when their baby is correctly positioned at the breast

Resources

Nil

Learning points

- Reiterate importance of skin to skin
- Principles of positioning
 - * Baby held close
 - * Baby held/supported with head and body in line
 - * Baby held with nose opposite nipple
- The process of attachment
 - * Watch for baby to have a wide open mouth
 - * Mother moves her baby to her breast, with baby's head tilted back and chin leading
 - * Bottom lip touches breast well away from the base of the nipple and nipple aimed towards the rear of the roof of baby's mouth
- During feeding check;
 - * Mother's comfortable during feed-suckling does not cause pain
 - * Baby's mouth is wide open
 - * Baby's chin indents the breast
 - * Baby's cheeks are full and round
 - * Areola-if any is visible then more will be visible above the baby's top lip

Principles of Developmental Care

Aim

To provide information so parents understand and can assist with the developmental care of their baby

Resources

Nil

Learning points

The neonatal unit can be a loud and bright place which makes it difficult for babies to rest, grow and get better. Developmental care helps the neonatal unit be more 'baby friendly'

- A preterm infant's brain continues to develop after birth in suboptimal environment and this process can be impacted by all aspects of the baby's NICU hospitalisation
- Providing developmental care is essential for infant neuroprotection and optimal neurodevelopment/musculoskeletal outcomes
- Even if baby term/post term, the NICU environment is not best suited to normal development
- To understand the impact of preterm birth on brain development on infant outcomes
- To identify aspects of the NICU environment and day to day procedures that impact brain development and infant outcomes

Developmental care includes:

- Environment-light/noise
- Positioning
- Skin to skin cuddles
- Understanding baby cues
- Managing pain and discomfort
- Olfactory
- Encourage parents to read to their baby
- Having at least 2 hours in the day of 'quiet time' for parents to be with their baby without bright light, noise and procedures





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