

# PROGRESSION TO SUCK FEEDING IN PRETERM BABIES

**Demonstrating feeding cues in kangaroo mother care (KMC)/skin-to-skin contact**

- Tolerating gentle handling
- Tolerating enteral feeds
- Stable respiratory system
- If bottle feeding: >34 weeks

## BREASTFEEDING

- Offer opportunity to breastfeed whenever baby showing clear feeding cues (irrespective of scheduled feed time)
- Support mother to be available in baby's wakeful periods
- Continue with NGT support

- Use breastfeeding assessment chart (see **Table 1**) to assess effectiveness of feed and to determine if top-up required
- Test position of NGT and top-up feed

Minimum of 3 grade D, E, F breast feeds in 24 hrs

NO

Breast feeds assessed as A, B or C

YES

YES

## BOTTLE FEEDING

- Ideally parents should offer first bottle feed
- Offer bottle feed with slow-flow teat. Baby placed in elevated side-lying position
- Pace baby regularly by lowering or removing teat
- **Stop** if signs of sensitivity observed e.g., loss of interest, fatigue, grimacing, irritability, finger splay, decreased SpO<sub>2</sub>, colour changes, increased respiratory rate
- Give remaining feed via NGT

- Use bottle feeding assessment chart (see **Table 2**) to assess bottle feed
- Test position of NGT and top-up required amount of milk

YES

Bottle feeds assessed grade 1, 2, 3

NO

Minimum of 3 grade 4-5 bottle feeds in 24 hrs

YES

## Modified responsive feeding

- NGT remain *in situ*
- Mother to be present ≥3 consecutive feeds
- If feeding cues observed offer breast/bottle feed as per mother's choice of feeding method
- If no feeding cues attempt gentle rousing
  - if still no sustained feeding cues, give 3-hrly amount by NGT
- **DO NOT leave >3 hr between feeds**
- Breastfeeding:
  - weigh every 48 hrs to ensure adequate growth
  - monitor urine and stool output
- Bottle feeding:
  - assess bottle feeds with assessment chart
    - if signs of sensitivity observed, stop; give remaining feed via NGT
  - weigh twice weekly
- Consider transition home with Neonatal Community Outreach Team (NCOT)

Breastfeeding assessment score E and/or F at each feed for 48 hrs (8–12 times/day)

NO

If baby not rousing regularly (<3-hrly) return to modified responsive feeding and repass NGT

NO

Bottle feeding assessment score 5 at each feed for 48 hrs (8–10 times/day)

YES

## RESPONSIVE FEEDING

- **Always** follow feeding cues and baby's communication at feed times
- Aim 8–12 feeds/day of baby's desired frequency/volume/duration
- Room-in
- Remove NGT
- Transition to home with neonatal community outreach team support as required

**4-hrly feeds are NOT appropriate for preterm or term babies – this is not a physiological feeding pattern, it can cause stress, fatigue, respiratory distress, reflux and aspiration, and may contribute to long-term sensory based feeding difficulties e.g. feeding aversions**

**Table 1: Breastfeeding assessment chart for babies receiving special/transitional care**

Score	Category at 10 min	Action
A	<ul style="list-style-type: none"> <li>Offered breast: not interested, remained sleepy</li> </ul>	<ul style="list-style-type: none"> <li>Full top-up (preferably EBM)</li> </ul>
B	<ul style="list-style-type: none"> <li>Interested in feeding: licking and nuzzling, but does not latch</li> </ul>	<ul style="list-style-type: none"> <li>Full top-up (preferably EBM)</li> </ul>
C	<ul style="list-style-type: none"> <li>Latches, has few sucks then comes off breast</li> <li>repeats pattern for several minutes/falls asleep within few minutes of latching</li> </ul>	<ul style="list-style-type: none"> <li>Full top-up (preferably EBM)</li> </ul>
D	<ul style="list-style-type: none"> <li>Latches, starts sucking and swallowing but:                             <ul style="list-style-type: none"> <li>sucking is shallow for most of feed (&gt;2 suck/sec)</li> <li>short sucking bursts</li> <li>long pauses (mum feels need to encourage to restart sucking)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Half–full top-up (preferably EBM) – depending on weight gain, milk supply and wet and dirty nappies</li> <li>If receiving phototherapy/excessive weight loss – give full top-up</li> </ul>
E	<ul style="list-style-type: none"> <li>Latches well</li> <li>Rhythmic sucking and swallowing (see below)</li> <li>Feed duration 5–10 min</li> </ul>	<ul style="list-style-type: none"> <li>Half top-up (preferably EBM)                             <ul style="list-style-type: none"> <li>consider not topping up if mother is available for next feed</li> </ul> </li> <li>If score A–E at next feed: offer top-up feed as indicated above</li> <li>If receiving phototherapy/excessive weight loss – give full top-up</li> </ul>
F	<ul style="list-style-type: none"> <li>Effective latch and rhythmic sucking and swallowing (see below)</li> <li>Duration 10–40 min/breast</li> <li>&gt;1 breast may be taken</li> </ul>	<ul style="list-style-type: none"> <li>Second breast can be offered, but no top-up required provided:                             <ul style="list-style-type: none"> <li>wakes naturally to feed ≥8 times/day</li> <li>expected number and colour of wet and dirty nappies</li> <li>gaining weight (weight check every 48 hr)</li> <li>milk supply increasing</li> </ul> </li> </ul>

#### **Signs of effective breastfeeding**

- Effective latch
- latches within few seconds of trying, with wide open mouth
- no nipple pain after 10–20 sec
- chin pressed against breast
- head tipped back slightly, nose lightly touching breast
- some areola seen above top lip, but not below bottom lip
- rounded cheeks (not sucked in)
- remains attached throughout feed
- nipple looks rounded (not pinched) at end of feed
- Rhythmic sucking and swallowing
- rapid sucks (≥2 sucks/sec) at first, slowing to regular bursts of rhythmic sucking
- deep jaw drops (1 suck/sec) before brief pause for most of feed
- Eyes open at start of feed
- Remains calm and relaxed as feed progresses
- Baby removes self from breast when no longer wants milk, and looks relaxed and sleepy

**Table 2: Bottle feeding assessment chart for babies receiving special/transitional care**

Score	Category best describes baby's response to bottle feed	Action
1	<ul style="list-style-type: none"> <li>• Moves back to <b>OR</b> remains in a quiet and/or deep sleep with no feeding cues observed</li> </ul>	<ul style="list-style-type: none"> <li>• Give feed by NGT</li> </ul>
2	<ul style="list-style-type: none"> <li>• Latches to teat and begins to suck</li> <li>• sucking bursts are short with longer pauses to breathe <b>OR</b></li> <li>• sucking bursts require very frequent pacing to help slow milk flow</li> <li>• baby shows signs of wanting to stop and/or falls asleep within first 5 min of feed, follow <b>Action</b></li> </ul>	<ul style="list-style-type: none"> <li>• Stop feed</li> <li>• Give remaining feed by NGT</li> </ul>
3	<ul style="list-style-type: none"> <li>• Latches to teat and begins to suck</li> <li>• sucking bursts are short with longer pauses to breathe <b>OR</b></li> <li>• sucking bursts need regular pacing to help slow milk flow</li> <li>• baby shows signs of wanting to stop within 15–20 min of the bottle feed – pause feed and watch baby – if baby shows no more feeding cues, follow <b>Action</b></li> </ul>	
4	<ul style="list-style-type: none"> <li>• Latches to teat and begins to suck</li> <li>• sucking bursts become longer with shorter pauses to breathe <b>OR</b></li> <li>• sucking bursts need some pacing to help slow milk flow</li> <li>• baby shows signs of wanting to stop within 15–20 min of feed. Pause feed and watch baby – if baby shows no more feeding cues, follow <b>Action</b></li> </ul>	
5	<ul style="list-style-type: none"> <li>• Latches to teat and begins to suck</li> <li>• regular bursts of rhythmical sucking, swallowing, and breathing together with occasional pacing to help slow milk flow</li> <li>• baby is calm and awake or moves to a quiet sleep when they have finished feed</li> </ul>	<ul style="list-style-type: none"> <li>• No feed by NGT</li> </ul>

**Supportive strategies to prepare for bottle feeding:**

- Skin-to-skin contact
- Positive touch
- Mouth care with EBM
- Non-nutritive sucking
- Held in skin-to-skin contact during NGT feeds

**Early feeding cues:**

- Stirring
- Mouth opening/tongue moving
- Turning head/rooting
- Stretching
- Bringing hands to mouth

**Signs of sensitivity (pause and stop cues) during bottle feed:**

- Finger splay
- Grimacing
- Crying
- Yawning
- Hiccoughing
- Arching body
- Turning head away/loss of interest
- Tires and/or moves to a quiet sleep
- Dribbling milk from mouth
- Colour change to face, lips, nose/fingertips

**Supportive interventions during bottle feed:**

- Cue-based responsive feeding
- Elevated side-lying feeding position
- Slow flow teat
- Pacing

**Babies receiving non-invasive respiratory support in NNU**

- Due to developmental, physiological, anatomical, respiratory and/or neurological difficulties, transition to suck feeding may be more complex – possible impact on baby's feeding and swallowing
- Caution recommended as lack of guidance and varied opinion in literature
- Request speech and language therapy assessment, with input from parents/carers/MDT