



A Set Up for Success

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In Utero

- Babies suck swallow about 800 - 1,000 ml's of amniotic fluid a day in the last trimester (27-33 oz)
- Flavanoids in the amniotic fluid allow for taste and smell experience and exploration
- Muscles are developing and strengthening through movements
- Motor mapping of sucking, swallowing and suck-swallow skills occurs



NICU Environment

- Multiple episodes of negative experiences and severely limited positive experiences
- The brain is learning through a bombarded environment of negative stimulation and experiences, leaving the infant at risk for learning everything to their mouth and throat is negative
- Baby needs to learn how to suck, to swallow, and then breathe in this challenging environment



Build Feeding Skills From the Very Beginning

- **Minimize negative oral tactile and olfactory stimulation**

- Provide comfort measures or buffers during any stressful procedure
 - Containment
 - Positioning
 - 2-man cares
- Suction only as needed
- Limit tape exposure whenever possible
- Careful cleaning of isolette
 - Vent portholes while cleaning
 - Clean while baby is out of isolette



Build Positive Touch and Smell Experiences

- **Maximize positive oral facial stimulation**
 - Skin to skin as much as possible
 - Both parents
 - Provide positive smells
 - Scent cloths and lovey dolls
 - Positive Oral Facial Stimulation
 - Graded, loving touch to face and mouth
 - Kisses
 - Cheek to cheek snuggles
 - Massage
 - Swaddled or nestled against family during gavage feedings
 - Practice Play
 - Non-nutritive breast feeding
 - Non-nutritive sucking
 - Hand to mouth activities
 - Oral motor stimulation



Build Positive Taste Experiences

- Controlled Experiences
 - Colostrum swabbing, as soon as available
 - 0.2 ml's 4x/day for 7-10 days
 - Once sprinting or off CPAP
 - NNS breastfeeding, 31-33+wks
 - True breastfeeding, 33-34+wks
 - Breast and bottle feeding, 34+wks



Pre Feeding Therapy

- Feeding therapist introduces micro tastes to build sucking and swallowing skills and build the coordination between the two
- Amount offered is gradually increased to the size of a small bolus as swallowing strength and coordination improves
- Graded presentation prepares the infant to swallow a true bolus at the breast or bottle (stream of milk across the tongue and into throat)
- If swallowing difficulties are identified, therapeutic strength and coordination trials are provided by feeding therapist with associate RN and family involvement as appropriate

Benefits

- Builds safe motor skills around feeding with controlled bolus presentations
 - Initially only pure breast milk is used for safety
 - Can use fortified breast milk after safe swallow skills has been established
- Positive taste and smell stimulation and experience
- Parent and infant bonding
 - Increase in participation and nurturing

Infant Driven Feeding

(Cue Based Feeding)

Assessment of the baby on both their readiness to feed AND quality of the feeding :

- Provide constant analysis of readiness to feed
 - Evaluation throughout the feed for cues to initiate the feed as well as maintain the oral presentation
- Accurately assess quality of the feeding
 - Implications for home success
 - Implications for discharge needs



Infant Driven Feeding - Readiness

Score	Description	Examples
1	Drowsy, alert or fussy prior to cares. Rooting &/or hands to mouth. Awakens at scheduled feeding time. Good tone	Awakens at scheduled feeding time or prior to care and maintains an alert state. Extremities held up against gravity without support (flexion). Legs kicking.
2	Drowsy or alert once handled. Some rooting or takes pacifier. Adequate tone	Able to maintain an alert state. Extremities to midline. Some movement, not necessarily vigorous.
3	Briefly alert with cares. No hunger behaviors. No change in tone	Minimal to no movement against gravity with loss of tone during cares. Minimal rooting or sucking, tires quickly.
4	Sleeping throughout cares. No hunger cues. No change in tone	No movement.
5	Needs increased O ₂ with cares. Spelling with cares	Spells with cares and handling.

Infant Driven Feeding - Quality

Score	Description	Examples
1	Nipples with a strong coordinated suck throughout feeding	Exhibits mature well-coordinated suck-swallow breathe (1-1-1) throughout feeding. Sucking bursts of 10+ sucks per burst with only brief pauses between bursts. Volume > Minimum
2	Nipples with strong coordinated suck initially, but tires with progression	Exhibits transitional suck pattern with sucks of 6-10 bursts. May fatigue, requiring up to 30 minutes. Volume = Minimum
3	Nipples with consistent suck, difficulty coordinating swallow; some loss of liquid, or difficulty pacing	Exhibits immature suck pattern with 3-5 sucks per bursts and variable. Breathes and swallows before and after bursts. External pacing needed. May have a poor seal with spillage. 1-2 dips in vitals but no alarms or intervention needed. Volume < Minimum (remainder gavaged)

Infant Driven Feeding - Quality

Score	Description	Examples
4	Nipples with a weak/inconsistent suck. May require some rest breaks	Exhibits disorganized, weak or inconsistent suck. Little to no rhythm. Rest breaks needed. Gulping, drooling, multiple swallows. 2+ self resolving spells. 1 spell with intervention (removing bottle, patting back, etc). Volume < Minimum (remainder gavaged)
5	Unable to coordinate suck/swallow/breathe pattern. May result in frequent A/Bs or significant amounts of liquid loss	Unable to coordinate suck/swallow/breathe despite pacing. Frequent or significant A/Bs, tachypnea, reliance on “catch” breaths. 2+ spells with intervention needed. Increase in O ₂ or blow by oxygen needed for recovery. Volume = Minimum (remainder gavaged)

Questions??

