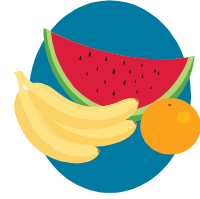




## Feeding Milestones by Developmental Age



### Neonate:

- ♥ Sucking is observed at 15-18 weeks gestational, however; a stable rhythm does not develop until 34-35 weeks gestational.
- ♥ Sucking pads develop in utero at 38 weeks
- ♥ Suck-Swallow-Breath Synchrony (SSB) evolves at 31-33 weeks and stabilizes at 38 weeks gestation
- ♥ **Swallow:** suck:swallow ratio is 1:1 for nutritive suck and 6-8:1 for non-nutritive suck, with approximately 7 to 8 sucks per burst
- ♥ **Food types:** liquid, introduce nipple feeding between 33-34 weeks, every 3 hours (8 times per day), the proper flow rate is critical
- ♥ **Respiratory:** low volume and reserves may cause infant to require frequent pauses

### 0-1 month:

- ♥ **Swallow:** suckle pattern develops, suck:swallow ratio is 1:1
- ♥ **Reflex:** root reflex, suckling reflex, swallow reflex, cough reflex, gag reflex, transverse tongue reflex and tongue protrusion reflex
- ♥ **Respiration:** preferred nasal breather with "belly breathing"
- ♥ **Food types:** liquids only, 2-6 oz per feeding, 6 or more times a day
- ♥ **Motor:** lip, tongue and jaw are one unit, requires the feeder to provide stability

### 1-3 months:

- ♥ **Swallow:** suckle pattern is still active, suck:swallow ratio is 2,3:1
- ♥ **Reflex:** same as 0-1 month
- ♥ **Respiration:** same as 0-1 month
- ♥ **Food types:** same as 0-1 month
- ♥ **Motor:** hand moves to mouth, lifts head, jaw and tongue movements increase, shoulder stability increases which assists with oral motor control
- ♥ **Cognitive:** visual fixation and tracking while feeding

### 3-5 months:

- ♥ **Swallow:** transition to suck pattern
- ♥ **Reflex:** root reflex disappears, tongue protrusion reflex becomes more evident
- ♥ **Respiration:** begin to suck with decreased pauses
- ♥ **Food types:** 6-8 oz of liquid per feeding, may introduce purees

- ♥ **Motor:** oral cavity enlarges, tongue and lips become more differentiated, epiglottis descends providing less airway protection, root and Phasic bite begin to diminish, use of both hands on bottle
- ♥ **Cognitive:** visual recognition of parents as feeders

#### 6-9 months:

- ♥ **Swallow:** initiates swallow without suckle, may use tongue thrust to complete this task
- ♥ **Reflex:** suck reflex emerges along with phasic bite
- ♥ **Respiration:** increased lung development allows for longer SSB cycle with bottle
- ♥ **Food types:** increase flow of nipple, introduce purees and cup drinking
- ♥ **Motor:** hand-mouth movement increases in coordination, lips are more active during feeding preventing oral loss, upper lip used to retrieve bolus from spoon, increased jaw and tongue movements, uses rotary chewing, finger feeding emerges
- ♥ **Cognitive:** object permanence develops

#### 10-12 months:

- ♥ **Swallow:** a true suck develops
- ♥ **Reflex:** munching pattern begins to emerge
- ♥ **Respiratory:** tolerates drinking longer secondary to greater air support (lung volume)
- ♥ **Food types:** liquids and purees along with introduction of ground and mashed table foods
- ♥ **Motor:** increased lateralization with tongue/jaw/lips, food is transferred across oral cavity midline, teeth are used to clean lower lip, sustained bite for soft foods, independent with finger feeding

#### 12-15 months:

- ♥ **Swallow:** full cup use, use of tongue/jaw to stabilize cup, straw drinking develops
- ♥ **Reflex:** munching pattern improves as well as tongue lateralization
- ♥ **Respiration:** well coordinated SSB though sometimes coughing may occur (adult like respiratory control)
- ♥ **Food type:** coarsely chopped table foods
- ♥ **Motor:** rotary jaw movement, feed self with a spoon, holds and tips bottle independently, lips closure during swallow improves, tongue and jaw develop independent movements from each other

#### 18 months:

- ♥ **Swallow:** tongue tip elevates, adequate lip closure for cup drinking
- ♥ **Reflex:** rotary chewing emerges
- ♥ **Food type:** can eat meat and raw vegetables along with previous foods
- ♥ **Motor:** controlled and sustained bite with hard solids, self-feeding continues to be refined
- ♥ **Cognitive:** attention and persistence in feeding improves

#### 21-24 months:

- ♥ **Reflex:** graded jaw movements emerge
- ♥ **Motor:** able to grade jaw opening to thickness of foods, transfers food from side to side in oral cavity without stopping at midline, full internal jaw stability present, uses one hand on cup while drinking, retrieves drink without assistance from water source, uses fork during meal
- ♥ **Cognitive:** distinguishes between edible and nonedible substances

Information gathered from the following sources:

*Daily Baby & Toddler Nutrition Needs*, Baby Zone

*Developmental Self-Feeding Checklist*, Therapy skill builders

*Feeding and Swallowing, Disorders in Infancy Assessment and Management*, Wolf and Glass

*Pediatric Dysphagia: Management of the Whole Child*, Angela Mansolillo, MA/CCC, SLP, BRS-S

*Pediatric Dysphagia: NICU to community*, MSCC with Rickard, Fawx, and Farbarino

*The Carolina Curriculum for Infants and Toddlers with Special Needs*, Johnson-Martin, Attermeier, & Hacker