

## NICU Feeding Guidelines

### Feeding initiation

- Goal is to initiate feeds within 24 hours of admission, preferably no later than 24-48 hours of life to prevent gut atrophy, facilitate GI maturation, and shorten time to full feeds. Special consideration may be given to infants in the following categories:
  - Infants with a known structural GI abnormality, signs of obstruction, or NEC
  - Infants on high dose pressors/shock
  - Infants with a symptomatic PDA
  - Infants on ECMO
  - Infants receiving therapeutic hypothermia; feeding may be initiated as soon as 2 hours after rewarming if stable.
- Consider delaying feeding initiation up to 48 hours if mother wishes to provide breast milk and is actively pumping.
- If fresh colostrum or breast milk is available it may be provided via oral swabs while the infant is NPO. Please refer to Colostrum/Breast Milk as Oral Immune Therapy policy.

### Feeding choice

- Mother's breast milk (MBM) is the feeding of choice for all infants.
- If MBM is not available, pasteurized donor human milk (PDHM) can be provided to infants who meet criteria once parental consent is obtained.
- Criteria for use of PDHM:
  - Infants  $\leq$  1500 grams at birth and/or  $\leq$  30 weeks gestation and continue until 34 weeks CGA or until tolerance of full feeds are established for 1 week
  - Infants  $>$  1500 grams with a history of NEC, abdominal wall defects, bowel resection/short bowel syndrome, or infants with significant feeding intolerance with formula until full feeds are established for 1 week
- Infants who do not meet the above criteria for PDHM and do not have MBM should be initiated on feeds of Enfamil Premature 24 High Protein (birth weight  $<$ 2kg) or Enfacare 22 (birth weight  $>$ 2kg).

### Feeding advancement

- Feedings should be advanced according to the feeding protocol based on the infant's current weight.
- Infants who have already been initiated on the feeding protocol and are made NPO for  $\leq$ 48 hours may resume feeds at the volume/strength last tolerated.
- Infants who have demonstrated severe feeding intolerance while advancing on the feeding protocol or have had prolonged NPO status due to extensive GI surgery or complications may be advanced according to the conservative feeding protocol for high-risk infants.
- Gastric residual volumes should be checked for all infants receiving gastric feeds and managed according to the feeding tolerance algorithm.

# Feeding Protocol

<b>Weight ≤1000 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	1	
2	1	
3	2	0.5
4	2	0.5
5	2	0.5
6	3	1
7	4	1
8	5	1.5
9	6	2
10	7*	2.5*
11	8**	3**
12	10	3.5
13	12	4

<b>Weight 1001-1250 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	2	0.5
2	2	0.5
3	2	0.5
4	4	1
5	7	2
6	10*	3*
7	13**	4**
8	16	5
9	19	6
10	22	7

<b>Weight 1251-1500 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	3	1
2	3	1
3	6	2
4	9	3
5	12*	4*
6	15**	5**
7	18	6
8	21	7
9	24	8

<b>Weight 1501-1750 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	4	1
2	8	2
3	12	3
4	16*	4*
5	20**	5**
6	24	7
7	28	9
8	32	11

<b>Weight 1751-2000 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	5	2
2	10	3
3	15	4
4	20*	6*
5	25**	8**
6	30	10
7	35	12

\*Consider fortifying with HMF to 22 kcals/oz

\*\*Consider fortifying with HMF to 24 kcals/oz

## Conservative Feeding Protocol for High-Risk Infants

**Indications:** Infants previously on full or partial feeds who have demonstrated severe feeding intolerance and/or have had prolonged NPO status due to extensive GI surgery or complications.

<b>Weight ≤1000 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	1	
2	1	
3	1	
4	2	0.5
5	2	0.5
6	2	0.5
7	2	0.5
8	3	1
9	4	1
10	5	1.5
11	6*	2*
12	8	2.5
13	10**	3**
14	12	4

<b>Weight 1001-1250 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	1	
2	1	
3	1	
4	2	0.5
5	2	0.5
6	2	0.5
7	2	0.5
8	4	1
9	7	2
10	10	3
11	13*	4*
12	16	5
13	19**	6**
14	22	7

<b>Weight 1251-1500 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	2	0.5
2	2	0.5
3	2	0.5
4	3	1
5	3	1
6	3	1
7	3	1
8	6	2
9	9	3
10	12	4
11	16*	5*
12	19	6
13	22**	7**
14	25	8

<b>Weight 1501-1750 grams</b>		
Feeding Day	Bolus feeds (ml q 3 hours)	Continuous Feeds (ml/hr)
1	2	0.5
2	2	0.5
3	2	0.5
4	4	1
5	4	1
6	4	1
7	4	1
8	8	2
9	11	3
10	15	4
11	19*	5*
12	23	7
13	27**	9**
14	31	11

<b>Weight 1751-2000 grams</b>		
<b>Feeding Day</b>	<b>Bolus feeds (ml q 3 hours)</b>	<b>Continuous Feeds (ml/hr)</b>
1	3	1
2	3	1
3	3	1
4	5	2
5	5	2
6	5	2
7	5	2
8	10	3
9	15	4
10	20	6
11	25*	8*
12	30	10
13	35**	12**
14	40	14

**\*Consider fortifying with HMF to 22 kcals/oz**

**\*\*Consider fortifying with HMF to 24 kcals/oz**