

# Nutrition Discharge Planning Instructions

**NICU HEALTHCARE PROFESSIONAL: PROVIDE THIS FORM TO PEDIATRICIAN AND ATTACH GROWTH CHART**

<b>Patient Name:</b>	<b>DOB:</b>	<b>Discharge Date:</b>
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**This patient is at nutrition risk, requiring a specialized nutrition plan due to (select all that apply):**

- |  |   |
|--|---|
| <input type="checkbox"/> Prematurity (early or late preterm) _____ GA<br><input type="checkbox"/> Very or extremely low birth weight _____ g<br><input type="checkbox"/> Intrauterine growth restriction<br><input type="checkbox"/> Extrauterine growth restriction<br><input type="checkbox"/> Suboptimal weight gain<br><input type="checkbox"/> Low phosphorus and/or high alkaline phosphatase<br><input type="checkbox"/> Radiologic evidence of bone demineralization | <input type="checkbox"/> Low BUN (indicator of protein status)<br><input type="checkbox"/> Prolonged parenteral nutrition<br><input type="checkbox"/> Volume restriction<br><input type="checkbox"/> History of feedings with term formula or unfortified human milk (HM)<br><input type="checkbox"/> Chronic use of mineral wasting medications<br><input type="checkbox"/> Other: _____ |
|--|---|

## Discharge Feeding Plan and Recommendations

**Method of Feeding (select all that apply):**

- Breast    
  Bottle    
  Both Breast and Bottle    
  Other: \_\_\_\_\_

Human Milk-Fed	Formula-Fed
<input type="checkbox"/> <b>Human Milk + Similac Human Milk Fortifier (SHMF)</b> <b>Recipe: _____ mL HM + _____ packets of SHMF</b> <input type="radio"/> All feedings OR <input type="radio"/> Alternate human milk & HM+SHMF  <input type="checkbox"/> <b>Human Milk + Similac Special Care 30 (SSC 30)</b> <input type="radio"/> _____ (volume) SSC 30 per day  <input type="checkbox"/> <b>Human milk + formula feedings _____ times per day of:</b> <input type="radio"/> Similac Special Care 20 <input type="radio"/> Similac Special Care 24 <input type="radio"/> Similac Special Care 24 High Protein <input type="radio"/> Similac NeoSure ____ Cal/fl oz  <input type="checkbox"/> <b>Other</b> <input type="radio"/> _____	<input type="checkbox"/> <b>Similac Special Care 20</b> <input type="checkbox"/> <b>Similac Special Care 24</b> <input type="checkbox"/> <b>Similac Special Care 24 High Protein</b> <input type="checkbox"/> <b>Similac NeoSure, Ready-to-feed or per mixing instructions, below:</b> <input type="radio"/> 20 Cal/fl oz (4-1/2 fl oz water + 2 scoops) <input type="radio"/> 22 Cal/fl oz (2 fl oz water + 1 scoop) <input type="radio"/> 24 Cal/fl oz (5-1/2 fl oz water + 3 scoops) <input type="radio"/> 26 Cal/fl oz (5 fl oz water + 3 scoops) <input type="radio"/> 27 Cal/fl oz (8 fl oz water + 5 scoops) <input type="radio"/> 28 Cal/fl oz (3 fl oz water + 2 scoops) <input type="radio"/> 30 Cal/fl oz (7 fl oz water + 5 scoops)  <small>Abbott Nutrition data on calorically dense feedings is limited. Hypocaloric and hypercaloric formulas should be used under the direction of a health care professional.          27 Cal/fl oz or more calorically dense formula may not supply enough water for some infants. Hydration status should be monitored and water supplied from other sources if necessary.          For improved tolerance, it is best to increase caloric density slowly, by 2 to 4 Cal/fl oz increments.</small>

**Recommendations:**

Infant should continue above feeding recommendation until:

- Date: \_\_\_\_\_, or Length of time: \_\_\_\_\_ (weeks/months)

OR

- Achieved weight: \_\_\_\_\_ kg / \_\_\_\_\_ percentile

Then, transition to: \_\_\_\_\_

Infants requiring human milk fortification or Similac Special Care at discharge, are at high nutrition risk and would likely benefit from transition to preterm discharge formula (i.e. Similac NeoSure).<sup>1,2</sup> SSC and HMF products are not intended for feeding low-birth-weight infants after they reach a weight of 3600 g (approximately 8 lb) or as directed by a physician. **Preterm infants may benefit from use of or supplementation with Similac NeoSure up to 1 year corrected gestational age.<sup>3</sup>**

<b>Signature of NICU Healthcare Professional (Physician, NNP, RD, or RN)</b>	<b>Date/Time</b>
Telephone: (     )	Email:
Fax: (     )	Pager:

# Feeding Considerations for the Human Milk-Fed Preterm Infant Ready for Discharge

Decisions regarding what to feed the human milk-fed preterm infant after discharge should be individualized to support optimal growth through the first 12 months of life.<sup>4</sup> Nutrition risk factors can be found on the opposite side of the form.

## Options for nutrient dense feedings for the preterm infant post discharge 2 kg VLBW infant at discharge receiving 120 Cal/kg/d

Human Milk / Abbott Nutrition Product (Daily average, Cal/fl oz)	Protein (g/kg/d)	Calcium (mg/kg/d)	Phosphorus (mg/kg/d)
<b>Nutritional Recommendation<sup>5</sup> for infants with no nutritional deficits*</b>	2.5 – 3.1	70 – 140	35 – 90
HM alternated with NeoSure RTF (21)	<b>2.5</b>	<b>85</b>	<b>50</b>
HM alternated with HM + SHMF Powder (22)	2.3	<b>129</b>	<b>74</b>
HM alternated with Similac <sup>®</sup> Special Care <sup>®</sup> 24 RTF (22)	<b>2.7</b>	<b>136</b>	<b>76</b>
HM + 60 mL/d Similac <sup>®</sup> Special Care <sup>®</sup> “booster” <sup>†</sup>	2.1	<b>84</b>	<b>47</b>
HM + SHMF Powder (24)	<b>2.8</b>	<b>205</b>	<b>118</b>

Feedings adapted from Groh-Wargo and Thompson, 2014. Data generated from WebNova Nutrition Calculator; Abbott Nutrition; November 2017.

\* Infants who have accumulated nutritional deficits (typically VLBW infants and especially ELBW infants) have nutritional needs which exceed the intake recommendations above.<sup>4</sup>

According to the AAP, “Strong consideration should be given to fortification of human milk for a minimum of 12 weeks for those infants who weigh less than 1250 g at birth and/or have incurred intrauterine or extrauterine growth restriction, because they represent the highest nutritional risk categories.”<sup>4</sup>

### Unfortified Human Milk Complications Include:<sup>6</sup>

- Slow growth
- Body composition changes
- Low bone mineral accretion

### Human Milk enriched with Preterm Discharge Formula Powder:

- Regimen is a popular option, but, does not meet minimal nutrient recommendations

### Considerations for discontinuing human milk fortification and/or supplementation include:<sup>6</sup>

- Correction of extrauterine growth restriction
- Normalization of biochemical indices
- Attainment of term-corrected age
- Passage of 12 weeks

**Infants requiring human milk fortification or Similac Special Care after hospital discharge, are at high nutrition risk and would likely benefit from transition to preterm discharge formula (i.e. Similac NeoSure).<sup>1,2</sup>**

**Similac NeoSure supports excellent growth in premature babies, better gains in weight, length and head circumference when compared to premature babies fed term infant formulas.<sup>3</sup>**

<sup>†</sup> Abbott Nutrition data on calorically dense feedings is limited. Hypocaloric and hypercaloric formulas should be used under the direction of a health care professional.

**References:** 1. Groh-Wargo S et al. Body composition in preterm infants who are fed long-chain polyunsaturated fatty acids: a prospective, randomized controlled trial. *Pediatr Res.* 2005;57:712-718. 2. O'Connor DL et al. Growth and development in preterm infants fed long-chain polyunsaturated fatty acids: a prospective, randomized controlled trial. *Pediatrics.* 2001;108:359-371. 3. Carver JD, Wu PY, Hall RT, et al. Growth of preterm infants fed nutrient-enriched or term formula after hospital discharge. *Pediatrics.* 2001; 107: 683-689. 4. American Academy of Pediatrics Committee on Nutrition. Nutritional Needs of the Preterm Infant. In: Kleinman RE, Greer FR, eds. *Pediatric Nutrition.* 7th ed. Elk Grove Village, IL: American Academy of Pediatrics;2014:109. 5. Lapillonne A, O'Connor DL, Wang D, et al. Nutritional recommendations for the late-preterm infant and the preterm infant after hospital discharge. *J Pediatr.* 2013;162:S90-100. 6. Groh-Wargo S, Thompson M. Managing the human-milk-fed, preterm, VLBW infant at NICU discharge: the sprinkles dilemma. *JCAN.* 2014;6:262-269.