

Clinical Practice Guidelines

Feeding of Low Birth Weight Neonates

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Table 1: Summary of recommendations for feeding of low birth weight neonates

S.No.	Recommendations	Strength of recommendations	Quality of evidence
1.	Mother's own milk is strongly recommended for feeding the low birth weight infant. <i>Specific nutrient supplementation needs to be made in preterm very low birth weight infants (see below).</i>	Strong	Not graded
2.	(a). If mother's own milk is not available, pasteurized donor human milk from human milk bank, should be used for feeding low birth weight infants. <i>Applicable to settings with facilities for providing donor milk; associated with lower weight gain, linear growth and head growth and hence need monitoring and possibly fortification.</i> (b). If donor human milk is not available, formula milk is to be considered. <i>Formula milk will incur a higher cost and may also be associated with higher risk of necrotizing enterocolitis and sepsis.</i>	Strong, Conditional	Moderate
3.	Early trophic feeding started within 24 hours of life is recommended in preterm LBW neonates. <i>The recommendation may not be generalized to extreme preterm or extreme low birth weight neonates and those with intrauterine growth restriction for lack of sufficient evidence in this group of patients.</i>	Strong, Conditional	Low
4.	Stable preterm very low birthweight infants may preferably be initiated on progressive enteral feeding from the first day of life. <i>This recommendation may not be generalized to extreme preterm or extreme low birth weight neonates and those with intrauterine growth restriction.</i>	Strong, Conditional	Moderate
5.	Daily feed volumes are to be increased by 30-40mL/kg in stable preterm very low birth weight infants with no signs of feed intolerance.	Strong	High
6.	In the absence of other signs of feed intolerance in preterm LBW neonates, neither routine prefeed abdominal circumference nor prefeed gastric residue estimation is recommended for assessment of tolerance to enteral feeds.	Weak	Low

7.	Preterm infants who cannot feed directly from the breast should be fed by cup, <i>paladai</i> or <i>katori-spoon</i> , rather than by bottle, to fasten the transition to direct breast feeding.	Weak	Low
8.	Preterm very low birth weight infants who do not accept cup, <i>paladai</i> or <i>katori-spoon</i> feeds should be fed by either nasogastric or orogastric route of tube feeding.	Weak	Very low
9.	Intra-gastric route of tube feeding is preferred over transpyloric route in preterm infants	Weak	Low to moderate
10.	Continuous feeding is not recommended as a routine strategy for feeding preterm low birth weight infants receiving intragastric tube feeding.	Weak	Low to moderate
11.	Preterm low birth weight infants with birthweight >1250 grams and on cup, <i>paladai</i> or <i>katori-spoon</i> feeds or intragastric tube feeding may be given feeds every three hours.	Weak	Low to very low
12.	Checking of position of feeding tube (NG/OG) after placement and before commencement of first feed is recommended in LBW infants. <i>Of the available methods, abdominal x-ray seems to be the best method for checking the position of feeding tube.</i>	Weak, Conditional	Low
13.	Erythromycin is not to be used routinely for the management of feed intolerance in preterm LBW infants.	Weak	Very low
14.	Multi-nutrient fortification of breast milk can be initiated in preterm LBW infants with birthweight <1800 g and receiving enteral feeds of at least 50-80 mL/kg/day <i>For resource limited settings, fortification may be commenced only for those infants who fail to gain weight despite adequate breast milk feeding.</i>	Weak	Low to moderate
15.	Routine supplementation of docosahexaenoic acid (DHA) / long chain polyunsaturated fatty acid (LC-PUFA) is NOT recommended in preterm LBW infants.	Weak	Low
16.	Routine oral or intramuscular supplementation of vitamin A is NOT recommended in LBW infants.	Weak	Low

17.	Oral iron supplements in a daily dose of 2–4 mg/kg of elemental iron is recommended in LBW infants from 2-4 weeks of life to 12 months of age.	Weak	Low
18.	Multi-strain probiotics may be initiated in preterm low birth weight infants from as early as day 1 of life and continued until 36-37 weeks post-menstrual age or discharge (whichever is earlier), <i>in neonatal units with high baseline incidence of necrotizing enterocolitis.</i>	Weak, Conditional	Moderate
19.	VLBW infants should be given vitamin D supplements at a dose ranging from 400 IU to 1000 IU per day from the day of reaching full enteral feeds to 6 months of age.	Strong	Moderate