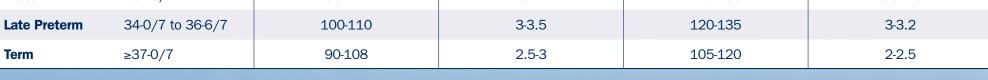
## **Malnutrition Indicators in Preterm and Neonatal Populations**<sup>4</sup>

Primary Indica	ators Requ	iring One <u>Inc</u>	dicator						
Indicator		Mild Malnutrition		Moderate Malnutrition		Severe Malnutrition		Use of Indicator	
Decline in weight-for-age z score		Decline of 0.8-1.2 SD		Decline of >1.2-2 SD		Decline of >2 SD		Not appropriate for first 2 weeks of life	
Weight gain velocity		<75% of expected rate of weight gain to maintain growth rate		<50% of expected rate of weight gain to maintain growth rate		<25% of expected rate of weight gain to maintain growth rate		Not appropriate for first 2 weeks of life	
Nutrient intake		≥3-5 consecutive days of protein/energy intake ≤75% of estimated needs		≥5-7 consecutive days of protein/energy intake ≤75% of estimated needs		≥7 consecutive days of protein/energy intake ≤75% of estimated needs		Preferred indicator during first 2 weeks of life	
Primary Indica	ators Requ	iring Two or	More Indicato	ors					
Indicator		Mild Malnutrition		Moderate Malnutrition		Severe Malnutrition		Use of Indicator	
Days to regain birthweight		15-18		19-21		>21		Use in conjunction with nutrient intake	
Linear growth velocity		<75% of expected rate of linear gain to maintain expected growth rate		<50% of expected rate of linear gain to maintain expected growth rate		<25% of expected rate of linear gain to maintain expected growth rate		Not appropriate for first 2 weeks of life May be deferred in critically ill, unstable infants Use in conjunction with another indicator when accurate length measurement available	
Decline in length-for-age z score		Decline of 0.8-1.2 SD		Decline of >1.2-2 SD		Decline of >2 SD		Not appropriate for first 2 weeks of life May be deferred in critically ill, unstable infants Use in conjunction with another indicator when accurate length measurement available	
Recommended	d Parenter	al and Entera	al Energy and	Protein Intak	es			1	
			Pare		nteral		Enteral		eral
Infant Age	Week		Energy Goals (kcal/kg)		Protein Goals (g/kg)		Energy Goals (kcal/kg)		Protein Goals (g/kg)
Preterm	eterm <34-0/7		85-111		3-4		110-130		3.5-4.5
1 - t - <b>D</b> - t		1.000/7		110		0.5	100.105		222





SD=standard deviation. Expected weight gain velocity, expected linear growth velocity, and z scores can be determined using the online calculator PediTools (www.peditools.org).

**Reference: 1.** Reprinted from *Journal of the Academy of Nutrition and Dietetics*, Goldberg DL, Becker PJ, Brigham K, et al. Author(s), Identifying Malnutrition in Preterm and Neonatal Populations: Recommended Indicators. Article in Press https://doi.org/10.1016/j.jand. 2017.10.006 Pages 1-11, 2018, with permission from Elsevier and Academy of Nutrition and Dietetics.

