NEONATAL PARENTERAL NUTRITION GUIDELINES

NUTRIENT	AVERAGE REQUIREMENT*	MAXIMUM
Amino Acid	2.5-3.25 gm/kg/day Start with 0.5-1 mg/kg/day and increase by 0.5-1 gm/kg/day	3.5 mg/kg/day
Dextrose	<17.5 gm/kg/day (5-12 mg/kg/min)	D12.5 - peripheral IV line D30 - central IV line
Fat Emulsion	2.5-3 gm/kg/day Start with 0.5-1 gm/kg/day and increase by 0.5-1 gm/kg/day to 2.5-3 gm/kg/day EFA supplementation 0.5-1 gm/kg/day	4 gm/kg/day Do not infuse faster than 0.16 gm/kg/hour if ≤33 wk, 0.3 gm/kg/hour >33 wk
Na^+	2-7 mEq/kg/day	23 mEq/kg/day or 154 mEq/L
K^+	1-3 mEq/kg/day	12 mEq/kg/day** 40 mEq/L - peripheral IV line 100 mEq/L - central IV line
Ca^{++} 1 gm calcium gluconate = 90 mg elemental Ca^{++} = 5 mEq elemental Ca^{++} 1 mEq Ca^{++} = 20 mg calcium	0.5-4.5 mEq/kg/day (usual 0.5-2.5 mEq/kg/day)	12 mEq/kg/day
Mg^{++}	0.25 mEq/kg/day	0.5 mEq/kg/day**
P	1.5-3 mM/kg/day Phosphorus will be added as the potassium salt (3 mM Na phosphate provides 3 mM P/4 mEq Na and 3 mM K phosphate provides 3 mM P/4.4 mEq K); the balance of sodium and potassium will be added as chloride or acetate as specified	The maximum dose will be limited by the amount of Ca^{++} contained in the PN solution; see precipitation guidelines in the NICU

* Assumes no monitored toxicity
** A higher dose requires either Nutrition Support Pharmacist or NICU staff physician approval