

WHEN DRUG FORMULA AND DOSAGE ARE IDENTICAL, THE PHARMACY MAY DISPENSE THE DRUG WHICH IS IN HOSPITAL STOCK REGARDLESS OF TRADE NAME UNLESS I SPECIFICALLY REQUEST "NO SUBSTITUTE." PHYSICIAN MUST DELETE ORDERS NOT DESIRED (DRAW A SINGLE LINE THROUGH THE ORDER). (IF BLANKS NOT FILLED IN, ORDERS CONSIDERED DELETED.)
Orders not to be initiated without physician signature and/or physician telephone authorization.



PARENTERAL NUTRITION INFANT (LESS THAN 1 YEAR) ORDER

Unit(s): NICU

BOLD BORDER AREAS MUST BE FILLED IN

Day # PN:	REFERENCE WEIGHT:	<input type="checkbox"/> Preterm <input type="checkbox"/> Term
CATHETER: <input type="checkbox"/> PERIPHERAL <input type="checkbox"/> PICC <input type="checkbox"/> CENTRAL		
DIAGNOSIS:		

TOTAL DAILY FLUIDS (in ml/day) _____ ml/kg/day x _____ kg	T= _____
MEDICATION DRIPS (in ml/day) Obligatory non-PN IV fluids	M= _____
FAT EMULSION 20% (in ml/day) _____ gm/kg/day x _____ kg x 5 ml/gm	F= _____

MAXIMUM PN VOLUME FOR 24 HOURS
MAX = Total Daily Fluids - Medication Drips - Fat Emulsion
 = _____ ml/day = _____ ml/hr x _____ hr

NOTE: Total PN volume for 24 hr. is based on assumption that patient is NPO (it does not include lipids)

_____ % Dextrose (peripheral line maximum 12.5%)
 _____ gm/kg/day protein OR _____ % pediatric amino acids
 _____ gm protein x _____ kg x 40 = _____ mg of Cysteine
 _____ ml/hr 20% fat x _____ hr

Na	Cl	BUN	} Glucose
K	CO ₂	Creatinine	
Ca: _____	Mg: _____	PO4: _____	

PN HOURLY RATE, DEXTROSE, PROTEIN, LIPIDS:
 PN VOLUME PREPARED WILL BE BASED ON A **24 HOUR NPO VOLUME**. PN AND LIPIDS WILL INFUSE OVER 24 HOURS AT PRESCRIBED RATE, UNLESS OTHERWISE SPECIFIED.

TOTAL PN VOLUME FOR 24 HOURS TO BE MIXED BY

PHARMACY: _____ ml/day

Rate of PN infusion: _____ ml/hr
 Note: Rate assumes pt. is NPO. Titrate PN rate down as enteral feeds increase.

ELECTROLYTES AND MINERALS
ANY BOX LEFT BLANK WILL BE INTERPRETED AS ZERO

Starting Guidelines	mEq/Kg/day		mEq/kg/day
SODIUM CHLORIDE	2		mEq/kg/day
SODIUM ACETATE	0		mEq/kg/day
SODIUM PHOSPHATE*	1		mEq/kg/day
POTASSIUM PHOSPHATE*	2		mEq/kg/day
POTASSIUM CHLORIDE	0		mEq/kg/day
POTASSIUM ACETATE	0		mEq/kg/day
CALCIUM GLUCONATE	2		mEq/kg/day
Goal 3-4.5 mEq/k/day			
MAGNESIUM SULFATE	0.5		mEq/kg/day

(*Sodium or Potassium Phosphate = dose in mEq of Na+ or K+)

PEDIATRIC VITAMINS AND TRACE ELEMENTS WILL BE ADDED PER PROTOCOL UNLESS NOTED BELOW.

REMOVE additives checked below:

<input type="checkbox"/> chromium	<input type="checkbox"/> copper	<input type="checkbox"/> manganese
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____

Optional Additives with Recommended Doses

Ranitidine	2 mg/kg/day		mg/kg/day
Heparin	0.5 unit/ml		units/ml
Selenium**	2 mcg/kg/day		mcg/kg/day
Molybdenum*	0.25 mcg/kg/day		mcg/kg/day
Carnitine**	10 mg/kg/day		mg/kg/day

* Add Molybdenum after day 30 of PN
 **Add Carnitine and Selenium after day 14 of PN

DATE: _____ TIME: _____ LIP SIGNATURE: _____ ID #: _____



Colby Campus • 1321 Colby Ave.
 Pacific Campus • 916 Pacific Ave.
 Pavilion for Women and Children • 900 Pacific Ave.
 Providence Regional Cancer Partnership
 1717 13th Street • Everett, WA 98201

PARENTERAL NUTRITION INFANT (LESS THAN 1 YEAR) ORDER (08/11) GUIDELINES ON BACK

26958 (03/24/11)

PLACE PATIENT LABEL HERE

Patient Name: _____
 Birthdate: _____

DO NOT WRITE OUTSIDE OF BORDER AREA

GUIDELINES FOR NEONATAL AND INFANT (LESS THAN 1 YEAR) PARENTERAL NUTRITION

Total Daily Fluid Guidelines			
Newborn guidelines in ml/kg/day			
	- 25 weeks	26-32 weeks	• 33 weeks
Day 1	100-120	80-100	60-80
Day 2	120-140	100-120	80-100
Day 3	140-160	120-140	100-120

Older Infant	
Less than 10 kg	100 ml/kg
10-20 kg	1000 ml +50 ml/kg for every kg above 10 kg

Nutrient Requirements			
	Preterm	Term	6-12 mos.
Kcal/kg/d	90-120	90-108	80-100
Lipids			
	gm/kg/day		
Begin at	1	1	1
Advance daily as tolerated	1	0.5	
Goal	3	3	2.5-3
Protein			
	gm/kg/day		
Begin at	3	2	2
Advance as tolerated by	0.5-1	1	1
Goal	3.5-4	2.5-3	2-2.5
Dextrose			
	mg/kg/minute		
Begin at	4-6	6-7	6-7
Advance daily as tolerated	2	2	2
Goal	10-12	12-14	12-14

Electrolyte and Mineral Requirements		
	Preterm mEq/kg/day	Term mEq/kg/day
Sodium	3-4.5	2-4
Potassium	2-3	2-4
Chloride	2-3	2-4
Acetate	No specific requirements; add as needed to maintain acid-base balance	
Phosphorus	1.5-2.5 mMol/kg/day	0.5-2 mMol/kg/day
1 mEq K Phos = 1 mEq K + 1.3 mEq phosphate (=0.65 mMol phosphate) = 20 mg Phos		
1 mEq Na Phos = 1 mEq Na + 1.5 mEq phosphate (=0.75 mMol phosphate) = 23 mg Phos		
Magnesium	0.35-0.6	0.25-1
Calcium	3-4.5	0.5-3
1 mEq Calcium = 20 mg Ca = 0.5 mMol Ca		
Optimal Calcium to Phosphate ratio = 1.3-1.7: 1(mg)		

Vitamin Requirements Added Per Protocol			
Dosing	2 ml/kg	Maximum 5 ml	
MVI Pediatric® - content per 5 ml			
Vitamin	Units	Vitamin	Units
A	2300 units	B5	5 mg
D	400 units	B6	1 mg
E	7 mg	B12	1 mcg
B1	1.2 mg	C	80 mg
B2	1.4 mg	Biotin	20 mcg
B3	17 mg	Folic Acid	140 mcg
K	200 mcg		

Trace Elements Added Per Protocol			
	Preterm	Term	Daily Max
Dosing in mcg/kg/day			
Chromium	0.2	0.2	5 mcg
Copper	20	20	300 mcg
Manganese	1	1	50 mcg
Zinc	400	250	5000 mcg
Trace Elements			
Molybdenum	0.25	0.25	5 mcg
Selenium	2	2	30 mcg
Carnitine	10	10	150 mg

KCAL Calculations		
_____ % Dextrose x _____ ml/day x 0.034 =		Kcal/day P N
_____ % Dextrose x _____ ml/day x 0.034 =		Kcal/day Drips
_____ gm/kg/day protein x _____ kg x 4.3 =		Kcal/day Protein
_____ ml/day lipids 20% x 2 =		Kcal/day
Enteral Kcal _____ =		Kcal/day
Total Kcal		Kcal/day
_____ kg		Kcal/kg/day

Heparin Guidelines for PICC Lines	
0.5 units/ml heparin for all rates < 20 ml/hr	
DEXTROSE INFUSION RATE	
_____ % x _____ ml/kg/day 144 = _____ mg/kg/min	
PROTEIN REQUIREMENTS	
_____ gm/kg/day x _____ kg = gm/day _____ ml PN/day x 100 = _____ %	

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