

Patient Details or addressograph ¹ : Name: Date of birth: Unit Number: CHI:		Neonatal Parenteral Nutrition Order Form						
		Week beginning ² :						
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Working weight ³ (g)								
Target daily fluids ⁴ (ml/kg/day)								
Total hourly fluid rate ⁵ (ml/hr)								
Total other continuous infusions ⁶ (ml/hr)								
Weaning regimen ⁷								
Predicted hourly milk (ml/hr) at 6pm ⁸								
Serum Triglyceride Level (Day 4/weekly) ⁹								
SMOF lipid rate (ml/hr) ¹⁰								
Amino acids rate (ml/hr) Predicted at 6pm ¹¹								
Type of Bag: 10% Sodium Free (2.27g) 12.5% Standard (2.88g) 16% Central (3.1g) ¹³								
48 hour (day 1 or 2) or 24 hour bag ¹⁴								
Additional electrolytes needed? ¹⁵		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
Total Sodium ¹⁶	mmol/kg/day							
	mmol/day							
Total Potassium ¹⁶	mmol/kg/day							
	mmol/day							
Total Calcium ¹⁶	mmol/kg/day)							
	mmol/day							
Total Phosphate ¹⁶	mmol/kg/day)							
	mmol/day							
Comments ¹⁷								
Sign and PRINT NAME ¹⁸								
Pharmacist Check ¹⁹								

Instructions for completing the Neonatal Parenteral Nutrition Order Form

Complete the order form as follows:

1. Document patient details. Use a new order form per patient per week
2. Put Monday's date
3. Confirm working weight
4. Check patients target daily fluid requirement
5. Calculate the hourly fluid rate
6. Calculate the combined hourly rate of any continuous drug infusions that are running
7. State which weaning regimen baby is on - nil by mouth (NBM), trophic or specify weaning regimen
8. Using the feed increment chart calculate predicted hourly milk rate at 6pm
9. Serum triglycerides should be checked on day 4 after starting lipid. Once stable triglycerides should be checked weekly.
10. Calculate the SMOF lipid rate as per Table 2 or Table 3. Remember to check most recent serum triglyceride level in case adjustment needed
11. Calculate the predicted amino acid rate at 6pm (target daily fluid rate minus drug infusions, minus milk and minus lipid)
12. If the patients daily fluid requirement is not met with PN, infusions and milk calculate rate of additional fluid required to meet requirements
13. Specify which PN bag is required- 10% sodium free (2.27g), 12.5% standard (2.88g) or 16% central (3.1g).
14. Specify if day 1 or day 2 of 48 hour bag or 24 hour bag.
15. State if additional electrolytes are required. **For potassium additions do not exceed 4mmol/100ml peripherally.**
16. Using the rate calculated in step 10 work out what electrolytes baby will already receive per day using Table 1. If additional electrolytes are needed order the **total** amount you want the baby to receive. Check to ensure final concentration of electrolytes do not exceed stability as per Table 5.
17. Include any other information you would like to communicate in the comments box.
18. Sign and Print
19. Clinical pharmacist will sign after they have checked order form and scan to pharmacy Aseptic.

At weekends pharmacy must be phoned on 22906 if any changes are needed

Table 1. Nutritional Content of PN per 100mls

	Sodium Free 10%	Standard 12.5%	Central 16%
Protein (g)	2.27	2.88	3.1
Amino Acid (g)	2.56	3.2	3.4
Sodium (mmol)	0	3.2	4.0
Potassium (mmol)	1.62	1.31	0
Phosphate (mmol)	0.6	1.62	0.8
Calcium (mmol)	0.6	1.62	0.8
Magnesium (mmol)	0.17	0.17	0.2
Glucose (g)	10	12.5	16
Energy (kcal)	49	62	76

Table 2. SMOF lipid

Starting SMOF lipid	SMOF lipid rate
Day 1	0.5ml/kg/hr
Day 2	0.5ml/kg/hr
Day 3	0.75ml/kg/hr

Table 3. Weaning SMOFvits

When aqueous PN volume is:	SMOF lipid volume should be:
≥90ml/kg	0.75ml/kg/hr
≥60ml/kg	0.5ml/kg/hr
≥30ml/kg	0.25ml/kg/hr
<30ml/kg	stop

Table 4. Maximum rates

	Sodium Free 10% (2.27g)	Standard bag 12.5% (2.88g)	Central bag 16% (3.1g)
Preterm			
Aqueous	125ml/kg	125ml/kg	100ml/kg
Lipid	18ml/kg	18ml/kg	18ml/kg
Term			
Aqueous	110ml/kg	80ml/kg	80ml/kg
Lipid	18ml/kg	18ml/kg	18ml/kg

Table 5. Maximum electrolyte final concentrations per 1000ml

	Standard bag 12.5% (2.88g)	Central bag 15% (3.1g)
Sodium	150mmol/L	200mmol/L
Potassium	150mmol/L	200mmol/L
Calcium	30mmol/L	20mmol/L
Phosphate	40mmol/L	50mmol/L