

<p style="color: #D9534F; font-weight: bold;">Name of Hospital</p> <p style="color: #D9534F; font-weight: bold;">Neonatal Parenteral Nutrition Prescription</p> <p style="color: #D9534F; font-weight: bold; font-size: 1.2em;">TERM CONCENTRATED</p> <p style="color: #D9534F; font-weight: bold; font-size: 1.2em;">24 hour bag</p> <p style="color: #D9534F; font-weight: bold; font-size: 0.8em;">E of E Term Concentrated PNPx (July 2022 –version 12)</p> <p style="color: #D9534F; font-weight: bold; font-size: 0.8em;">Page 1 of 2</p>	<p>Name Hospital No.</p> <p>Date of Birth NHS Number</p> <p>Address</p> <p>Consultant</p>
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Instructions for Completing Parenteral Nutrition Prescription
FOR ADMINISTRATION VIA CENTRAL LINE ONLY

Birth Gestation	Ward	Aqueous and lipid component will provide the following							
<ul style="list-style-type: none"> Enter one date only in each column. Days of PN means number of days the baby is on PN e.g day 1 on initiation of PN. Indicate the total PN volume, volume of aqueous PN (round up to the nearest aqueous PN volume on the table), volume of lipid, volume of enteral feed, other infusion volumes and total fluid volume required. Circle STD if the electrolytes requirements are the same as the standard formula. If not, fill in the specific electrolytes requirements. Inclusion of trace elements is dependent on PN supplier. Check label for inclusion. Composition dependent on manufacturer Non-standard electrolytes should only be requested where there is a clear clinical need. Maximum nitrogen to be prescribed is 0.36g/kg/day (2.5gAA/kg/day) provided by 115ml/kg/day of term concentrated formula. If more IV fluid is required, change to Term Standard formulation or 5% glucose or 10% glucose can be used. 	Total volume (ml/kg)	50	60	70	80	90	100	110	115
	TERM CONCENTRATED Aqueous Parenteral Nutrition Formula								
	ml/kg	45	50	60	70	80	85	95	100
	Amino acid (g/kg)	1.12	1.25	1.5	1.75	2.0	2.13	2.4	2.5
	Nitrogen (g/kg)	0.16	0.18	0.22	0.25	0.29	0.31	0.34	0.36
	Glucose (g/kg)	6.3	7.0	8.4	9.8	11.2	11.9	13.3	14.0
	Sodium (mmol/kg)	1.35	1.5	1.8	2.1	2.4	2.55	2.85	3.0
	Potassium (mmol/kg)	0.9	1.0	1.2	1.4	1.6	1.7	1.9	2.0
	Calcium (mmol/kg)	0.43	0.48	0.57	0.66	0.76	0.81	0.89	0.94
	Magnesium (mmol/kg)	0.09	0.1	0.12	0.14	0.16	0.17	0.19	0.2
	Phosphate (mmol/kg)	0.33	0.37	0.44	0.52	0.59	0.63	0.7	0.74
	Chloride (mmol/kg)	1.17	1.3	1.56	1.82	2.1	2.21	2.5	2.6
	Acetate (mmol/kg)	0.58	0.65	0.77	0.9	1.0	1.1	1.22	1.29
	Trace elements (ml/kg)								
	Lipid Parenteral Nutrition Formula								
Lipid (g/kg)	0.85	1.7	1.7	1.7	1.7	2.5	2.5	2.5	
Lipid volume (ml/kg)	5	10	10	10	10	15	15	15	
Phosphate (mmol/kg)	0.07	0.14	0.14	0.14	0.14	0.21	0.21	0.21	
Aqueous and lipid component will provide the following									
Total phosphate (mmol/kg)	0.4	0.51	0.58	0.66	0.73	0.84	0.91	0.95	

Date						
Days of Parenteral Nutrition						
Working Weight (kg)						
Volume of Aqueous PN (ml/kg)						
Volume of Lipid PN (ml/kg) Intralipid 20%/SMOF* <small>*delete as appropriate</small>						
Total PN Volume (ml/kg)						
Volume of enteral feed (ml/kg)						
Other infusion (ml/kg)						
Total fluid volume (ml/kg)						
Sodium (mmol/kg)	STD	STD	STD	STD	STD	STD
Potassium (mmol/kg)	STD	STD	STD	STD	STD	STD
Calcium (mmol/kg)	STD	STD	STD	STD	STD	STD
Magnesium (mmol/kg)	STD	STD	STD	STD	STD	STD
Total Phosphate (mmol/kg)	STD	STD	STD	STD	STD	STD
Chloride (mmol/kg)	STD	STD	STD	STD	STD	STD
Prescriber's Signature						
Prescriber's Name & Bleep						
Screened by						

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Name	Hospital No.								
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PHARMACY DEPARTMENT SECTION							
Date							
Total volume of Aqueous PN to be infused							
Total volume of Lipid to be infused							
Ordered by							
Order number							
Checked by							
Maximum infusion rate of aqueous PN (ml/hour)							
Maximum infusion rate of lipid (ml/hour)							

WARD ADMINISTRATION RECORD							
Aqueous PN - date infusion started							
Aqueous PN - time infusion started							
Set up by							
Checked by							
Lipid - date infusion started							
Lipid - time infusion started							
Set up by							
Checked by							

BATCH NUMBER RECORDS							
Batch number of aqueous PN							
Batch number of Lipid							
Batch number recorded by							

Additional Information:		
Date	Comment	Initial & sign

Please note:
 Lipid syringes from ITH will be provided with the following formulation:
 Intralipid/SMOFLipid 20% 37.5ml
 Vitlipid N Infant 10ml
 Solivito N (WFI 10ml) 2.5ml
 20ml/kg would then provide:
 Solivito 1ml/kg/Vitlipid N 4ml/kg/Lipid 3.4g/kg

- Solivito will be added to aqueous PN if lipid is not prescribed. It will be added as 1ml/kg/day where possible.
- Trace elements will be added as 0.74ml/100ml to aqueous phase.
- Maximum licensed dose of SMOF is 3g/kg/day.
- Aqueous PN solution of glucose concentration >12.5% or osmolality >900mOsm/L must be infused via central line.
- Lipid syringes must be changed every 24 hours.
- Minimum overage for aqueous PN is 100ml and for lipid is 10ml (syringe).
- Chloride will be capped at 6mmol/kg/day unless otherwise specified. Aim for Chloride:Acetate molar ratio of 2:1. Seek clarification if acetate provided exceeds chloride. Chloride value will vary if any of the electrolytes is not ordered as standard. If a specific Chloride value is required, cross off "STD" and fill in the specific Chloride requirement.

Recommended intake for stable growth (ESPGHAN 2018)

Energy kcal/kg/day	75-85kcal/kg/day
Lipid g/kg/day	3g/kg/day
Nitrogen g/kg/day	0.36g/kg/day
Amino acid g/kg/day	1.5-3g/kg/day
Carbohydrate g/kg/day	7.2-14.4g/kg/day
Sodium mmol/kg/day	2-3 mmol/kg/day
Potassium mmol/kg/day	1-3 mmol/kg/day
Calcium mmol/kg/day	0.8-1.5 mmol/kg/day
Magnesium mmol/kg/day	0.1-0.2 mmol/kg/day
Phosphate mmol/kg/day	0.7-1.3 mmol/kg/day
Chloride mmol/kg/day	2-4 mmol/kg/day