

Supplementary Material

Table S1 Clinical characteristics of participants by randomisation group

Infants (<i>n</i> = 92)	Whole Cohort (<i>n</i> =92)		<1000g (<i>n</i> = 44)		≥1000g (<i>n</i> = 48)	
	Std Protein <i>n</i> = 49	Higher Protein <i>n</i> = 43	Std Protein <i>n</i> = 20	Higher Protein <i>n</i> = 24	Std Protein <i>n</i> = 29	Higher Protein <i>n</i> = 19
Gestational age (weeks)	28 (27, 29)	27 (25, 29)	26.5 (25.3, 28)	25.5 (24.3, 27.8)	28 (28, 29)	29 (28, 30)
Recruitment hospital						
Women's and Children's Hospital	43	37	18	20	25	17
Flinders Medical Centre	6	6	2	4	4	2
Male infants	21	19	5	14	16	5
Birth anthropometry						
Weight (g)	1056, 289	1012, 315	787, 146	789, 165	1242, 203	1294, 219
Length (cm)†	35.6, 3.4(<i>n</i> = 48)	35.7,3.5	32.4, 2.8 (<i>n</i> = 19)	33.4, 2.7	37.7, 1.9	38.6, 1.7
Head circumference (cm)	25.6, 2	25.3, 2.5	23.8, 1.4	23.8, 2.1 (<i>n</i> = 23)	26.8, 1.4	27, 1.6
Caesarean section	32	27	16	15	16	12
Multiple births (number of infants)	20	4	7	3	13	1
Mothers (<i>n</i> = 80)						
Age (years)	<i>n</i> = 39 30, 5	<i>n</i> = 41 29, 6	<i>n</i> = 16 31, 6	<i>n</i> = 23 31, 6	<i>n</i> = 23 30, 5	<i>n</i> = 18 28, 5
Smoked during pregnancy	6	9	3	5	3	4
Previous preterm birth	5	6	0	1	5	5
Received antenatal steroids	45	36 (<i>n</i> = 42)	15	20	21	15
Received IVF	8	3	2	2	6	1
Completed Secondary Education §	26	31	11	19	15	12

Data are presented as median (interquartile range), *N*, Mean, SD.

Abbreviations: IVF, *in vitro* fertilisation

† *n* = 91 infants

‡ Mothers of twins were categorised according to the BW of the first born, if weight categories of the 2 infants differed

§ *n* = 79 mothers

Table S2 Infant outcomes by randomisation group

Clinical Outcomes	Whole cohort (n = 92)		<1000g (n = 44)		≥1000g (n = 48)	
	Std	Higher	Std	Higher	Std	Higher
	Protein n = 49	Protein n = 43	Protein n= 20	Protein n= 24	Protein n = 29	Protein n = 19
Chronic lung disease †	17	20	12	17	5	3
Received corticosteroid treatment	17	14	11	12	6	2
Confirmed necrotizing enterocolitis	5	3	4	3	1	0
Intraventricular haemorrhage ‡	13	10	4	6	9	4
Sepsis	7	6	4	4	3	2
Nasal CPAP	14	12	3	6	11	6
Length of stay §	74, 16	77, 21	84, 12	90, 15	66, 15	61, 16
Post-menstrual age at discharge or EDD (weeks)	38 (37, 40)	38 (37, 39)	39 (38, 40)	39 (38, 40)	38 (37, 39)	37 (36, 38)
Growth outcomes						
Weight gain ¶ (g/day)	28.6, 5.7	29.1, 4.7	26.4, 5	27.4, 4.3	30.1, 5.7	31.3, 4.4
Intrauterine weight gain (g/kg/day)(26)						
Weight gain ¶ (g/kg/day)	16.3, 1.9	16.6, 2	17, 1.6	16.8, 1.8	15.8, 1.9	16.3, 2.3
Weight gain before 34 weeks PMA (g/day)	25.5, 6	24.6, 6.4	22.7, 5.4	22, 5.9	27.5, 5.6	28, 5.5
Weight gain after 34 weeks PMA (g/day)	29.3, 6.9	31.3, 6	29, 5.9	29.09, 5	29.5, 7.6	33.1, 6.7
Length gain (cm/week)	1.1, 0.2	1.2, 0.1	1.1, 0.1	1.2, 0.1	1.1, 0.2	1.2, 0.2
Head circumference gain (cm/week)	1, 0.2	1, 0.1	1, 0.1	1, 0.1	1, 0.2	1, 0.2
Discharge weight (grams)	2647, 374	2753, 331	2565, 492	2742, 358	2703, 260	2768, 302
Dietary Outcomes						
Age study fortifier commenced (days)	13 (10, 16)	13 (10, 18)	14 (12, 18)	18 (11, 22)	11 (8, 16)	10 (8, 13)
Age enteral feeds commenced (days)	3 (2, 5)	3 (2, 4)	4 (3, 5)	4 3, 5	3 (2, 5)	3 (2, 4)
Days to reach full enteral feeds (days)	15 (12, 18)	17 (11, 23)	16 (14, 24)	21 (16, 27)	13 (11, 17)	12 (8, 14)
HMF introduced (ml/kg enteral intake)	120 (93, 141)	120 (96, 156)	99 (90, 132)	111 (74, 151)	137 (105, 149)	131 (108, 157)
Days on parenteral nutrition (days)	16 (12, 29)	17 (10, 25)	24 (15, 31)	32 (16, 27)	14 (9, 17)	11 (7, 15)
Days on intravenous lipid (days)	12 (8, 19)	11 (7, 16)	15 (10, 23)	16 (10, 23)	10 (6, 14)	7 (4, 10)
Human milk as a proportion of measured enteral intake (number of infants)						
>80%	23	26	8	14	15	12
20% to 80%	23	11	10	6	13	5
<20%	3	6	2	4	1	2

Data are presented as N, Mean, SD and median (interquartile range).

Abbreviations: CPAP, continuous positive airway pressure; EDD, estimated due date; HMF, human milk fortifier

† As defined by requirement for supplemental oxygen at 36 weeks post-menstrual age; ‡ n = 91 infants; §To discharge home or estimated due date, whichever came first.; ¶ **Weight gain from when birth weight regained and maintained 2 days**