Tables

Table 1. Content of the fatty acids in the DHA and control interventions

	Group	
Percentage by weight of total fatty acids	DHA Intervention oil	Control High oleic sunflower oil
C 10:0 Capric	1.0	0.0
C 12:0 Lauric	4.3	0.0
C 14:0 Myristic	14.0	0.1
C 16:0 Palmitic	12.2	5.2
C 16:1 Palmitoleic	1.9	0.1
C 18:0 Stearic	0.7	3.8
C 18:1 n-9 Oleic	18.9	58.9
C 18:2 n-6 Linoleic	1.3	29.2
C18:3 n-6 Gamma linolenic	0.4	0.3
C 18:3 n-3 α-linolenic	< 0.1	1.2
C 20:1 Eicosenoic	< 0.1	0.3
C 20:4 n-6 Arachidonic	< 0.1	0.0
C 20:5 n-3 Eicosapentaenoic	< 0.1	0.0
C 22:0 Behenic	0.2	0.7
C 22:6 n-3 Docosahexaenoic	44.3	0.0
C 24:1 Nervonic	0.1	0.0

Table 2. Characteristics of preterm infants

Characteristics of preterm infants and their mothers	Group DHA n = 55	Group Control n = 55	*P* Value
Maternal age, y	29 [19, 44]	32 [16, 43]	0.58
Caesarean section, n (%)	51 (96)	52 (98)	1.00
Antenatal steroid, n (%)	24 (45)	22 (42)	0.85
At birth			
Gestational age, wk	30.1 ± 1.6	30.3 ± 1.5	0.49
Small for gestational age, n (%)	7 (13)	9 (16)	0.59
Twins, n (%)	13 (26)	20 (36)	0.30
Male gender, n (%)	28 (51)	25 (46)	0.70
APGAR score min 5, n (%)			
< 7	3 (6)	3 (6)	
≥ 7	50 (94)	50 (94)	1.00
Weight, g	1295 ± 131	1231(150)	0.02
Length, cm	38.1 ± 1.7	37.5 ± 2.4	0.15
Head circumference, cm	27.6 ± 1.4	27.2 ± 1.6	0.19
At baseline (initiation of enteral feeding)			
Corrected gestational age, wk	30.8 ± 1.9	31.1 ± 1.6	0.36
Postnatal age, h	134 [8, 361]	120 [24, 579]	0.80
Severity of disease (CRIB score)	2.0 [1, 9]	3.0 [1, 11]	0.65

Weight, g	1138 ± 145	1097 ± 162	0.17
Length, cm	38.4 ± 1.5	38.0 ± 2.0	0.22
Head circumference, cm	27.6 ± 1.3	27.2 ± 1.4	0.23
Fatty acid profile in erythrocytes, %wt/total wt	n = 50	n = 44	
Lauric	0.43 [0.40, 6.63]	0.38 [0.03, 8.08]	0.90
Myristic	0.71 [0.19, 9.90]	0.74 [0.25, 10.88]	0.65
Palmitic	33.57 [7.83, 49.11]	32.44 [8.36, 47.73]	0.33
Palmitoleic	1.07 [0.28, 1.91]	1.05 [0.32, 2.57]	0.86
Stearic	17.13 [3.72, 21.44]	16.87 [4.25, 21.81]	0.64
Oleic	17.25 [12.98, 62.40]	16.08 [10.89, 61.42]	0.03
Linoleic	5.16 [1.88, 19.52]	5.27 [2.78, 18.86]	0.86
Alpha-Linolenic	0.11 [0.04, 3.89]	0.13 [0.04, 3.75]	0.75
Arachidonic	12.63 [1.41, 23.68]	18.22 [0.80, 24.16]	0.02
Eicosapentaenoic	0.53 [0.05, 1.09]	0.64 [0.06, 1.17]	0.04
Nervonic	2.71 [0.35, 4.65]	2.92 [0.45, 5.23]	0.09
Docosahexaenoic	2.35 [0.13, 6.42]	3.22 [0.11, 5.77]	0.11

Data are presented as mean ± SD or median [range], unless otherwise stated.

n (%) are frequency and percentage of patients.

DHA, Docosahexaenoic acid; CRIB, Clinical Risk Index for Babies with weight at born <1500 g; %wt/total wt, Percentage by weight of total fatty acids.

Table 3. Model of logistic regression to adjust the effect of DHA on severe ROP for confounders

Variable	OR	95% confidence interval		*P* Value
		Lower	Upper	
Gestational age at birth, wk	1.375	0.421	4.495	0.60
Apnea events, n	0.694	0.488	0.987	0.04
Male gender	5.755	0.594	55.797	0.13
Sepsis diagnosis	12.736	0.034	4729	0.40
Human milk intake, yes	0.211	0.009	4.858	0.33
Mechanical ventilation, h	1.007	0.999	1.015	0.10
DHA+EPA in erythrocytes, %wt/wt	0.257	0.059	1.113	0.07
AA in erythrocytes, %wt/wt	1.216	0.927	1.595	0.16
Group DHA*	0.098	0.011	0.886	0.04

*Compared with control group

AA, Arachidonic acid; DHA+EPA, Sum of docosahexaenoic and eicosapentaenoic acid; %wt/total wt, Percentage by weight of total fatty acids.

Table 4. Clinical evolution and medication of the preterm infants during hospital stay

	Group		*P* Value
Clinical entities and medication	DHA n = 55	Control n = 55	
Respiratory distress syndrome, n (%)	50 (94)	51 (96)	1.00
Severe asphyxia at birth, n (%)	4 (8)	3 (6)	1.00
Apnea, n (%)	20 (37)	19 (36)	1.00
Events of apnea, n	3 [1, 11]	6 [1, 18]	0.03
Phase III mechanical ventilation, n (%)	35 (66)	34 (64)	1.00
Duration, h	96 [8, 456]	144 [12, 1464]	0.08
Reintubation, n (%)	12 (22)	16 (29)	0.51
Events of reintubations, n	1 [1, 5]	2 [1, 8]	0.12
$SpO_2 \geq 95\%$, n (%)	50 (94)	52 (98)	0.25
Duration, h	193 [2, 982]	244 [4, 1369]	0.51
$SpO_2 < 85\%$, n (%)	18 (34)	23 (43)	0.43
Duration, h	12 [1, 144]	8 [2, 204]	0.50
Chronic lung disease, n (%)	11 (21)	13 (25)	0.82
Sepsis, n (%)	51 (98)	47 (89)	0.11
Persistence of ductus arteriosus, n (%)	10 (19)	14 (26)	0.48
Cumulated dose of postnatal steroids, mg	0.7 [0.18, 18.0]	1.25 [0.21, 9.0]	0.59
Cumulated dose of NSAID, mg	10 [2.4, 11]	12.4 [0.5, 75]	0.97
Erythropoietin, n (%)	20 (38)	26 (49)	0.33
Cumulative dose, IU	2415 [250, 8644]	2125 [235, 7000]	0.91

Red blood cell transfusions, n	3 [1, 10]	2 [1, 9]	0.24
Surfactant, n (%)	41 (77)	39 (75)	0.82
Total parenteral nutrition, n (%)	37 (70)	40 (76)	0.66
Duration, days	14.0 [3.0, 43.0]	16.0 [4.0, 50.0]	0.262
Human milk intake, n (%)	8 (15)	4 (8)	0.36
mL/kg/d	16.6 [1.6, 61.7]	10.1 [0.7, 62.0]	0.65
Duration, days	5 [1, 10]	5 [1, 10]	1.000

Data are presented as median [range] unless otherwise stated.

n (%) are frequency and percentage of patients.

NSAID, Nonsteroidal anti-inflammatory drug: ibuprofen and ketorolac; SpO_2, Oxygen saturation measured with pulse oximeter.