



Corrigendum: Composition and Functionality of Lipid Emulsions in Parenteral Nutrition: Examining Evidence in Clinical Applications

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Keywords: fatty acids, lipid emulsions, triglycerides, triacylglycerols, parenteral nutrition

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Specialty section:

This article was submitted to
Pharmaceutical Medicine and
Outcomes Research,
a section of the journal
Frontiers in Pharmacology

Received: 04 February 2021

Accepted: 16 February 2021

Published: 16 April 2021

Citation:

Sadu Singh BK, Narayanan SS,
Khor BH, Sahathevan S,
Abdul Gafor AH, Fiaccadori E,
Sundram K and Karupaiah T (2021)
Corrigendum: Composition and
Functionality of Lipid Emulsions in
Parenteral Nutrition: Examining
Evidence in Clinical Applications.
Front. Pharmacol. 12:663960.
doi: 10.3389/fphar.2021.663960

A Corrigendum on

Composition and Functionality of Lipid Emulsions in Parenteral Nutrition: Examining Evidence in Clinical Applications

by Sadu Singh, B. K., Narayanan, S. S., Khor, B. H., Sahathevan, S., Abdul Gafor, A. H., Fiaccadori, E., Sundram, K., and Karupaiah, T. (2020). *Front. Pharmacol.* 11:506. doi: 10.3389/fphar.2020.00506

In the original article, there was a mistake in the legend for **Table 2** as published. Referring to the references cited in the original article **Table 2**, Linseisen et al., 2000 and Driscoll et al., 2009 were missing, while Waitzberg et al., 2006 has to be removed. Therefore, Linseisen et al., 2000 and Driscoll et al., 2009 were added as the reference for the corrected **Table 2**. We added a sentence for the footnote of corrected **Table 2**: “Fatty acids concentration cited in the Table are reported as percentage by weight for the full product profiles but will not add up to 100% as only selected FAs are listed. In addition, a sentence “Data provided is according to manufacturer monograph as per the lipid emulsion product” was added as the footnote for the corrected **Table 2**. The correct legend appears below. The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

References: ^aLinseisen et al., 2000; ^bWanten and Calder 2007; ^cDriscoll et al., 2009; ^dVanek et al., 2012; ^eXu et al., 2012.”

In the original article, there was a mistake in **Table 2** as published. The Lipiderm/Lipoplus[®] detailed fatty acids composition was referred from Linseisen et al., 2000 and this reference was missed out in the original **Table 2**. The authors cross-checked and recalculated the data on fatty acid composition presented in **Table 2** based on one particular cited paper (Vanek et al., 2012), which indicated there are errors in the extrapolation of the data from the primary source (Waitzberg et al., 2006). Therefore the authors acknowledged these errors and amended the data accordingly to reflect percent composition of fatty acids by full profile (Driscoll et al., 2009). The corrected **Table 2** appears

TABLE 2 | Commercially Available Lipid Emulsions in Parenteral Nutrition.

Type of LE	1st generation (1960s–1970s) Soybean oil LE	2nd generation (since 1985)		3rd generation (since 1990s) Olive oil LE	4th generation (since 2000)		
		MCT/LCT physical mixture LE	Structured triglycerides LE		Pure fish oil LE	MCT/SO/FO LE	SO/MCT/OO/ FO LE
Oil source (% by wt)	100% SO	50% SO, 50% CO	64% SO, 36% CO	20% SO, 80% OO	100% FO	50% CO, 40% SO, 10% FO	30% SO, 30% CO, 25% OO, 15% FO
Commercial name	Intralipid® 20%	Lipofundin MCT/ LCT® 20%	Structolipid® 20%	ClinOleic® 20%	Omegaven® 10%	Lipiderm/ Lipoplus® 20%	SMOFLipid® 20%
Ratio of <i>n</i> -6: <i>n</i> -3 PUFAs	7:1 ^{b,d}	7:1 ^{b,d}	7:1 ^{b,d}	9:1 ^{b,d}	1:8 ^{b,d}	2.7:1 ^d	2.5:1 ^{b,d}
Fat content (g/L)	200 ^b	200 ^b	200 ^b	200 ^c	100 ^c	200 ^a	200 ^b
Molecular weight	865 ^b	634 ^b	683 ^b	873 ^b	882 ^b	NA ^b	732 ^b
pH	8.0 ^b	6.5–8.5 ^b	8.0 ^c	7.0–8.0 ^b	7.5–8.7 ^b	6.5–8.5 [*]	8.0 ^b
Osmolality (mOsmol/L)	350 ^b	380 ^b	350 ^b	270 ^b	273 ^b	410 [*]	380 ^b
tocopherol (mg/L)	38 ^d	85 ± 20 ^d	6.9 ^d	32 ^d	150–296 ^d	190 ± 30 ^d	200 ^d
Phytosterols (µg/ml)	439.07 ± 5.72 ^e	278.14 ± 5.09 ^e	345.85 ± 1.64 ^e	274.38 ± 2.6 ^e	NR ^e	NR ^e	207 ^e
FAC (% by weight of total FAs)							
SFA	15 ^b	59.4 ^b	46.3 ^b	14.5 ^b	21.2 ^b	49–58.3 ^{a,c}	36.9 ^c
MUFA							
OA	24 ^b	11 ^b	14 ^b	62.3 ^b	15.1 ^b	7.9–13.4 ^{a,c}	30.8 ^c
PUFA							
LA	44–62 ^{b,d}	27–29.1 ^{b,d}	35 ^{b,d}	18.5–18.7 ^{b,d}	4.4 ^{b,d}	24.4–25.7 ^{a,d}	21.4 ^d
α-LA	4–11 ^{b,d}	4–4.5 ^{b,d}	5 ^{b,d}	2–2.3 ^{b,d}	1.8 ^{b,d}	3.3–3.4 ^{a,d}	2.5 ^d
AA	0.1 ^b	0.2 ^b	NA ^b	0.5 ^b	2.1 ^b	0.5 ^c	0.4 ^c
EPA	NA ^{b,d}	NA ^{b,d}	NA ^{b,d}	NA ^{b,d}	19.2 ^{b,d}	3.1–3.7 ^{a,d}	3.0 ^d
DHA	NA ^{b,d}	NA ^{b,d}	NA ^{b,d}	0.0–0.5 ^{b,d}	12.1 ^d	2.3–2.5 ^{a,d}	2.0 ^d

AA, arachidonic Acid; CO, coconut oil; DHA, docosahexanoic acid; EPA, eicosapentaenoic acid; FAC, fatty acids concentration; FO, fish oil; LCT, long-chain triglycerides; LE, lipid emulsion; MCT, medium-chain triglycerides; MUFA, monounsaturated fatty acids; NA, not available; NR, not reported; OO, olive oil; PUFA, polyunsaturated fatty acids; SMOF, soybean oil, coconut oil, olive oil and fish oil; SFA, saturated fatty acids; SO, soybean oil.

^aLinseisen et al., 2000.

^bWanten and Calder 2007.

^cDriscoll et al., 2009.

^dVanek et al., 2012.

^eXu et al., 2012.

Fatty acid concentrations cited in the Table are reported as percentage by weight for the full product profiles but will not add up to 100% as only selected FAs are listed.

*Data provided is according to manufacturer monograph as per the lipid emulsion product.

below. The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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