

Supplement Table 26. Summary of randomized controlled trials evaluating enteral fish oil supplementation in critically ill adult patients (KQ10)

Authors (year)	Study population	Study design (RCT)	Study protocol		No. of patients		
			Study group	Control group	Total	Study group	Control group
Tihista (2018) [133]	Patients admitted to our ICU with burns >15% BSA, inhalation injury, requiring mechanical ventilation for 6 days, and feeding exclusively by the enteral route for more than 6 days.	Prospective, randomized double-Blind trial	Fish oil rich in omega-3 PUFAs (FO-EN)	Standard low-fat diet (LF-EN) (sunflower oil) or a low-fat diet in which 50% of the fat	92	47	45
Ibrahim (2018) [134]	All septic patients who could receive enteral nutrition	Randomized double-blind study	Enteral nutrition supplemented with 3,000 mg omega-3 in three divided daily doses	Omega-3-free enteral diet	110	55	55
Shirai (2015) [135]	Adults patients receiving mechanical ventilation and able to be fed enterally within 24 hr of diagnosis of sepsis-induced ARDS	Single-center, prospective, randomized, single-blind, controlled trial	Enteral diet enriched with EPA, GLA, and antioxidants	Standard isocaloric enteral diet	40	20	20
Hosny (2013) [136]	Patients admitted to critical care department and developed within 24 hr of the criteria of sepsis	Prospective and randomized study	A. High dose omega-3 (14.2% of lipid content were omega-3 FAs) plus antioxidants B. Low dose omega-3 (4.7% of lipid content were omega-3 FAs) plus antioxidants	0% of lipid content were omega-3 FAs	75	A. 25 B. 25	25
Grau-Carmona (2011) [137]	Adult patients with sepsis and acute lung injury or ARDS	Prospective, randomized, open-label study	EPA-GLA diet: 52.5 g of protein and a 94:1 ratio of non-protein calories to nitrogen	66.6 g protein per liter, without glutamine, and with a 90:1 ratio of nonprotein calories to nitrogen	160	80	80
Pontes-Arruda (2011) [138]	Adults patients, at the ICU with a clinical diagnosis of early sepsis and required enteral nutrition.	Prospective, multicenter, randomized, double-Blinded, controlled trial	Oxepa™ (EPA, GLA and antioxidants) lipids	Ensure PlusHN™ lipids	106	53	53
Stapleton (2011) [139]	All intubated, mechanically ventilated patients as defined by ratio of partial pressure of arterial oxygen to fraction of inspired oxygen 300, chest radiograph demonstrating bilateral infiltrates consistent with pulmonary edema, and no evidence of left heart failure causing the infiltrates	Randomized controlled trial	Enteral fish oil (7.5 mL every 6 hr equaling 9.75 g EPA and 6.75 g DHA daily)	0.9% saline	90	41	49

RCT, randomized controlled trial; ICU, intensive care unit; BSA, body surface area; PUFAs, polyunsaturated fatty acids; FO-EN, fish oil–enriched nutrition; EPA, eicosapentaenoic acid; GLA, gamma-linolenic acid; FAs, fatty acids; ARDS, acute respiratory distress syndrome; DHA, docosahexaenoic acid.

