primary studies - published RCT

Bioavailability and safety of a high dose of docosahexaenoic acid triacylglycerol of algal origin in cystic fibrosis patients: a randomized, controlled study.

Code: PM16226012 **Year:** 2006 **Date:** 2006 **Author:** Lloyd-Still JD

Study design (if review, criteria of inclusion for studies)

randomized trial

Participants

Twenty subjects with CF (8 to 20 y of age)

Interventions

algal oil providing 50 mg of DHA per kilogram per day (1 to 4.2 g of DHA per subject per day) or placebo for 6 mo

Outcome measures

Fatty acids, liver enzymes, and lipid soluble antioxidants were measured in blood at baseline and at 1, 3, and 6 mo. Rectal biopsy specimens were collected at baseline and at 3 mo for fatty acid analysis. Lung function, anthropometrics, and adverse experiences were monitored throughout the study.

Main results

Compared with placebo, DHA supplementation increased plasma, erythrocyte, and rectal DHA levels four- to five-fold (P

Authors' conclusions

Algal DHA triacylglycerol oil is readily absorbed, well tolerated, and increases blood and tissue DHA levels in patients with CF. No adverse developments were associated with this large dose of DHA oil. Larger studies of longer duration are needed to determine whether DHA supplementation results in any clinically significant benefits in patients with CF.

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See also

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Keywords

Adolescent; Adult; Child; Docosahexaenoic Acid -DHA-; non pharmacological intervention - diet; Supplementation; essential fatty acids; omega-3; High-Dose; glycerol; Other drugs;