Reference:

Plasma Eicosapentaenoic Acid is Inversely Associated with Severity of Depressive Symptomatology in the Elderly: Data from the Bordeaux Sample of the Three-City Study


Equipe Epidemiologie de la Nutrition et des Comportements Alimentaires, Bordeaux, France.

Summary:

The present study was conducted in view of emerging reports from the evidence-based literature that higher intakes of omega-3 fatty acids as EPA (eicosapentaenoic acid) plus DHA (docosahexaenoic acid), found predominantly in fish/fish oils, may have protective effects against depressive disorders. Unlike previous studies, the present investigation was directed towards an elderly population of French community dwellers where the relationship between blood plasma levels of various fatty acids and depressive symptomatology was assessed.

For each of the cognitive tests performed, no significant change was found from baseline to the end of treatment at four months (with DHA supplementation) as compared to the placebo (control) group. However, a significant and positive relationship was found between blood levels of DHA and the scores obtained on the Peabody Picture Vocabulary Test which is a test of listening comprehension and vocabulary acquisition.

Dr. Holub's Comments:

The finding of no significant effect of DHA supplementation on the cognitive test scores despite a positive association between higher levels of DHA in the circulating blood and scoring on the
Peabody Picture Vocabulary Test (a test of listening comprehension for the spoken word in standard English) suggests that, in some children, DHA supplementation at 400 mg/day or at higher levels for a similar or longer time period may improve some subtle cognitive outcomes during childhood. Thus, future studies are warranted. It should be pointed out that the level of supplementation (400 mg DHA/day) used in the present investigation is commonly consumed from dietary sources (primarily fish/seafood) in young children living in Japan (some of whom regularly consume even higher levels).