

Omega-3 EPA may benefit depressives, says study

07/04/2008- **Dietary supplements of the omega-3 fatty acid eicosapentaenoic acid (EPA) may ease symptoms associated with depression, suggests study.**

Depression ratings were cut by 50 per cent following daily one gram supplements of EPA, an effect similar to that obtained by the antidepressant drug fluoxetine, according to researchers.

"To our knowledge this is the first report of EPA monotherapy in major depressive disorder," wrote the researchers.

When the researchers provided the omega-3 supplement in combination with fluoxetine, depression ratings were cut by 81 per cent.

Omega-3 are polyunsaturated fatty acids (PUFAs) consumed predominantly in the diet from fish, nuts and seeds. The fish oil PUFAs include EPA and docosahexaenoic acid (DHA).

"Although this study had some limitation including small sample size and lack of placebo group, the findings suggest that EPA is safe and effective as monotherapy as well as adjunctive treatment for unipolar major depressive episode," wrote the researchers. *"Because EPA is a dietary supplement it may be more acceptable to patients than antidepressants."*

The study adds to a significant body of research linking the fatty acids to a wide-range of health benefits, including cardiovascular disease (CVD), good development of a baby during pregnancy, joint health, and certain cancers.

Study details

The researchers recruited 60 depressive outpatients with a score above 15 in the 17-item Hamilton Depression Rating Scale (HDRS). The subjects were randomly assigned to receive a daily EPA supplement (1000 mg, supplied by Minami Nutrition, Belgium), or 20 mg fluoxetine daily, or a combination of the two for two months. No placebo group was used.

At the end of the study, data from the 48 people who finished the study showed a 50 per cent reduction in HDRS scores for people in the EPA group, a 56 per cent reduction in people in the fluoxetin group, and a 81 per cent reduction in people in the combined intervention group.

Jury still out?

Despite the positive results reported by the study, the overall body of science is still insufficient to support a role for DHA and EPA for improving the symptoms of depression, concluded a review published in the British Medical Journal's *Drug and Therapeutics Bulletin* (DTB) in February 2007.

"Despite observational evidence linking depression with reduced intake of long-chain omega-3 fatty acids, there is no convincing basis for using these nutrients as a [means of alleviating] the condition," states the DTB.

After reviewing a number of randomised, double-blind, placebo-controlled trials using EPA, DHA or both, the DTB states that, while some studies reported positive effects, other reported no difference between the fish oil supplements and placebo for improving depression.

Two meta-analyses combining results of trials of fish oils in adults both reported positive relationships. *"However, as the authors of both reviews point out, there is significant heterogeneity among the trials, and this undermines the reliability of the combined results."*

However, the researchers state that previous discrepancies may be related to the EPA and DHA content of supplements.

"Considering the differential and sometimes potentially opposite effects of EPA and DHA, the discrepancies among the studies assessing omega-3 fatty acids can be explained by the absolute, as well as relative, amounts of EPA and DHA in supplements," they stated.