

Docosahexanoic acid and omega-3 fatty acids in depression.

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Geographic areas where consumption of DHA is high are associated with decreased rates of depression. DHA deficiency states, such as alcoholism and the postpartum period, also are linked with depression. Individuals with major depression have marked depletions in omega-3 FAs (especially DHA) in erythrocyte phospholipids compared with controls. These data suggest that DHA may be associated with depression, and the limited data available on supplementation with DHA or other omega-3 FAs seem to support the hypothesis that DHA may have psychotropic effects. Overall, the use of EFAs is promising, particularly in view of the many illnesses potentially treatable with these substances; however, larger, carefully designed studies are needed to establish whether DHA is an effective and safe antidepressant, mood stabilizer, or antipsychotic. A few preliminary trials of DHA are in progress, but no studies comparing DHA against placebo or against an established antidepressant have been carried out. Studies to address this issue are being developed at the Massachusetts General Hospital. Studies likely will require escalating doses of DHA, eventually reaching high levels so as to ensure that patients will avoid a potentially ineffective subclinical dose. Careful monitoring of dietary intake among subjects also will be necessary because a high intake of omega-3-rich foods may confound results. Finally, large-scale, placebo-controlled, double-blind trials comparing the efficacy and safety of DHA against standard antidepressants are required before psychiatrists can recommend DHA therapy as effective and safe for the treatment of depression and other mood disorders. Given the popularity of self-medication by patients who already are taking marketed antidepressants, studies examining the use of DHA as an augmentor to standard antidepressants may answer whether DHA can occupy a niche as an augmenting agent for patients who have made a partial response or have not responded to conventional antidepressants. Considering that natural medications generally seem best for treating mild to moderate illness, the role of DHA as a therapy for minor and subsyndromal depression also should be considered. It is hoped that studies of these types will help to clarify some of the knowledge gaps outlined in this article.

