

Use of Omega-3 for Suicide Prevention  
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Is there adequate evidence to support the use of Omega-3 supplements for treatment of depression or suicide risk? There are currently two studies in support of a positive effect on depression and suicide risk. Logan (2004) concluded there is enough epidemiological, laboratory and clinical evidence to suggest that omega-3 fatty acids may play a role in certain cases of depression. Hallahan et al. (2007) conducted a study with two groups (placebo and Omega 3). They found statistically significant differences in suicidal ideation when compared categorically, but the proportion of self-harm episodes was higher in the placebo group, although the difference was not statistically significant.

Conversely, other studies have failed to find an effect of omega-3 supplements. Hakkarainen et al. found no associations between the dietary intake of omega-3 fatty acids or fish consumption and depressed mood, major depressive episodes, or suicide. The authors concluded that dietary intake of omega-3 fatty acids showed no association with low mood level. A double-blind, placebo-controlled study of the omega-3 fatty acid docosahexaenoic acid in the treatment of major depression failed to show a significant effect of DHA monotherapy in subjects with major depression.

In terms of safety of taking these supplements, Emsley et al. (2008) looked at the safety of the omega-3 fatty acid, eicosapentaenoic acid (EPA) in psychiatric patients. The authors found that adverse event reporting was similar for the two groups (EPA vs. placebo). While there were no significant between-group differences, in the blinded phase the EPA group showed a significant increase in body mass index (BMI) and bleeding time. In the open-label extension, there was again a modest increase in BMI. Total cholesterol and HDL levels were significantly decreased. EPA 2 g/day is generally well tolerated. Clinicians should be aware of possible increases in bleeding time, as well as changes in weight and lipid metabolism.

In conclusion, there is minimal concern regarding the side effects of these supplements or patient's inability to tolerate them. Use of these supplements may improve certain symptoms or lower risk of suicide, but they are certainly not a "magic bullet" to cure suicide.