

The fishy link to low rates of depression

21/11/2006 - **Australian researchers found omega-3 fatty acids to be the most promising nutrient for alleviating the symptoms of depression, a finding that adds to the putative benefits associated with the lipid.**

Most notably, the [omega-3](#) fatty acids DHA and EPA have been linked in numerous studies to cognitive, cardiovascular and eye health. The review study conducted at the [University of Sydney](#) analyzed literature relating to [depression](#) in order to see how dietary manipulation might alleviate its effects.

The conclusion that omega-3 fatty acids offer the most hope in terms of nutritional support for depression could further expand the burgeoning market.

Depression is among the leading causes of disability worldwide and affects about 121m people, according to the World Health Organization.

"A review of epidemiological data suggests that there is a link between depression and fish consumption, and although it is true that correlation is not causation, there is evidence that fish and fish oils may be protective against depression," wrote lead author, Dianne Volker from the university's department of psychology.

The review, published in the November issue of the Dieticians Association of Australia's *Nutrition and Dietetics* journal, drew conclusions from previous literature from around the world, with 103 sources cited.

Fish oil from cold water marine fish contains a high concentration of the long-chain omega-3 fatty acids DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid). However vegetarian alternatives, such as DHA derived from marine algae, are playing an increasing role in the market.

But the study identified predisposing nutritional factors that have been linked to a smaller relative occurrence of depression in certain communities or populations that consume a lot of fish.

The study refers to studies which have linked people with extremely high consumption of cold-water fish, such as the Inuit in Greenland, to virtually non-existent rates of depression. The study nonetheless highlighted the fact that there are numerous social and environmental factors that cause depression.

The other ingredients cited in the study for their potential benefits for depression, were the amino acid tryptophan, vitamins B6, B12, folate and S-adenosyl-L-methionine. However, omega-3 fatty acids carried significantly more evidence in literature, according to the researchers.

They said that membrane lipid abnormalities are thought to occur in depression and omega-3s, in particular DHA, are depleted in depressed subjects.

The study also drew attention to weaknesses in the nature of studies that exist on depression and omega-3.

"Although there is a growing body of literature on the role of fish and fish oil consumption in depression – most of which report results from epidemiological and observational studies – clinical experimental data in this area remain scarce," said the study.