# SENATE SELECT COMMITTEE ON MENTAL HEALTH INQUIRY SUBMISSION of Douglas L. McIver

### ATTACHMENT F

## Studies About Fish Oils and Schizophrenia

**EPA helps schizophrenia** <a href="http://www.ventris.org.uk/article\_is\_fish\_oils\_mental.htm">http://www.ventris.org.uk/article\_is\_fish\_oils\_mental.htm</a>

Researchers at the Imperial College School of Medicine in London report that schizophrenia symptoms can be eliminated or at least vastly diminished by oral supplementation with EPA, the major component of fish oils. Their experiment involved a 30-year-old man who had suffered from schizophrenia for over 10 years.

He had frequent (at least daily) hallucinations and also suffered from persecutory delusions and thought disorder. The patient was put on 2 grams/day of EPA and was evaluated for schizophrenia symptoms and blood plasma and red blood cell membrane levels of fatty acids at monthly intervals for 6 months. The results were—spectacular. After 6 months the overall score for schizophrenia symptoms had dropped by a factor of 6 (an 85% reduction in severity). Episodes of delusions were completely eliminated and there was an 88% reduction in the number of hallucinatory episodes.

Clinical improvement in symptoms in this case was associated with substantial increases in the levels of EPA, DHA and AA in red blood cell membranes and with significant increases in EPA and DHA levels in blood plasma. The researchers conclude that EPA supplementation is able to reverse the abnormal fatty acid profiles found in schizophrenics and that this reversal is associated with, and is likely to be the cause of, the clinical improvement.

Richardson, A. J., et al. *Red cell and plasma fatty acid changes accompanying symptom remission in a patient with schizophrenia treated with eicosapentaenoic acid.* European Neuropsychopharmacology, Vol. 10, 2000, pp. 189-93.

### Fish Oil supplementation helps schizophrenia patients

Joy, CB, et al. *Polyunsaturated fatty acid (fish or evening primrose oil) for schizophrenia.* The Cochrane Library, Issue 4, 2000.

The Cochrane Library, Oxford, UK, a prestigious medical think-tank dedicated to the development of evidence-based medicine, has released a review of the evidence concerning the use of polyunsaturated fatty acids (fish oils and evening primrose oil) in the treatment of schizophrenia. A wide-ranging literature survey revealed 4 studies that met the Library1s stringent quality measures. The most recent study (Shah 2000) included 30 newly diagnosed schizophrenia patients who were not on antipsychotic drugs at the beginning of the trial. The patients were randomized to receive either a placebo or a daily dose of eicosapentaenoate (quantity not specified). At the end of the 12 weeks all the patients in the placebo group needed to be placed on antipsychotic drugs. Only 9 of the 15 patients in the active treatment group needed these drugs after the 12 weeks.

Another study (Peet 1997) compared evening primrose oil supplementation with placebo in 43 schizophrenics. The patients' mental state was not improved in either the placebo or the treatment group after 12 weeks.

A third study involving 29 schizophrenics compared supplementation with fish oil to evening primrose oil and found fish oil superior.

The researchers conclude that fish oils may be useful in the treatment of schizophrenia and that medical doctors should not discourage their patients from taking fish oil supplements. They add that fish oils seem to be well tolerated and free of adverse effects.

## Article provided by Recovery Initiative

A U.K. research project has reported that fish oil supplement has been used to treat schizophrenia, while people were still on their psychiatric drug interventions.

The report revealed that:

"Patients suffering from chronic schizophrenia, one of the most devastating mental disorders, have been successfully treated by dietary supplements of fish oils.

During the six-week treatment, a group of 20 patients at a psychiatric hospital in Britain received the fish oils as part of their regular diet. Drug treatment was not interrupted.

There was a reduction in the severity of their symptoms, particularly in regard to positive symptoms such as the Parkinson-like body movements of tardive dyskinesia (TD). Negative symptoms, including interest and motivation, also improved, according to research reported in the first issue of: The PUFA Newsletter.

The fish oils used belong to a group known as n-3 long chain polyunsaturated fatty acids (LC-PUFAs). Scientific and medical interest in the LC-PUFAs is growing rapidly, with more than 1,000 research papers published in the last three years".

An international conference: Highly Unsaturated Fatty Acids in Nutrition and Disease Prevention, will be held in Barcelona, Spain, 4-6 November next.

The conference is sponsored by F. Hoffmann-La Roche Ltd., Basel, Switzerland, and co-sponsored by the International Society for the Study of Fatty Acids and Lipids (ISSFAL), Washington, DC, USA, the Institut National de Recherche Agronomique, Paris, France, and the Society of Nutrition and Food Science, Japan.

It will be followed by a second international conference under the title: PUFA in Infant Nutrition, Consensus and Controversies, 7-9 November, in Barcelona.

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