Reference:

Depression in Parkinson’s disease: a double-blind, randomized, placebo-controlled pilot study of omega-3 fatty-acid supplementation

Moralez de Silva et al., Journal of Affective Disorders 111: 351-359, 2008

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Summary:

Parkinson’s disease is diagnosed based on medical history and neurological examination and has an average prevalence of approximately one in 6,000 in the global community with considerable variation between races and regions. Parkinson’s disease affects various movements (motor symptoms) and is accompanied by very high rates of depression approaching approximately 40-60% of patients. The present study was conducted to evaluate the potential effect of fish oil supplementation in patients with Parkinson’s disease with a focus on their depressive symptomology as measured by various scales including the Montgomery-Asberg Depression’s Rating Scale (MADRS). The 12 week trial involved 29 patients with a mean age of 68 years (58% were female). In this double-blinded, placebo-controlled study, the patients received a placebo capsule or encapsulated fish oil daily providing 1200 mg of EPA (eicosapentaenoic acid) + DHA (docosahexaenoic acid) – 720 mg of EPA + 480 mg of DHA per day. The authors also measured the omega-3 fatty acid levels in the circulating red blood cells to confirm compliance with the fish oil supplementation. Based on the MADRS evaluations, both groups of patients (taking or not taking anti-depressive medication) demonstrated a significant reduction in their depression symptomology when given fish oil supplementation as compared to the placebo group. Furthermore, 42 % of the patients responded to fish oil anti-depressant therapy while only 6 % showed the same depression reduction for the placebo combined groups. The authors concluded that improvements in depressive symptoms were observed with fish oil supplementation in Parkinson’s patients with or without anti-depressants and that EPA/DHA intake can be used with an anti-depressant effect or as adjuvant therapy with some other medications.
Dr. Holub's Comments:

The very encouraging findings from this first pilot study using omega-3 supplementation in patients with Parkinson's disease can be expected to stimulate further clinical trials in this patient population using different doses and ratios of EPA and DHA in larger numbers of subjects over more extended time periods. While the daily dose (1200 mg/day) employed in the present study as EPA plus DHA is approx. 8-times average North American intakes, the dose employed is well within commonplace intakes within a considerable portion of the Japanese population.