EPA/DHA Omega-3 Supplements Reduce Physical Aggression

Monday, 19 February 2018 00:00

Reference:
Omega-3 Supplements Reduce Self-Reported Physical Aggression in Healthy Adults
Begue, L. et al., Psychiatry Research, 261: 307-311, 2018

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Summary:
Several clinical trials have supported the beneficial impact of EPA/DHA omega-3 fatty acid supplementation on several psychological and mental disorders. The present research study was directed towards the potential benefits of EPA/DHA supplements on reducing aggressive behaviours. For this purpose, 194 French adults were enrolled (mixed genders and average age of 33 years) and randomly assigned to the placebo (control) or the omega-3 group. The control group consumed a daily supplement of 'copra oil' (ie, coconut oil) devoid of omega-3 fatty acids while those assigned to the omega-3 group ingested two capsules daily providing a total of 772 mgs EPA plus 638 mgs DHA (EPA/DHA sum being 1410 mgs/person/day) over a period of six consecutive weeks. The researchers focused on monitoring ‘physical aggressiveness’ since it is the form of aggressiveness with the highest social concern (ie, it being more likely to lead to bodily injury and sometimes death). Aggressiveness was measured at the baseline entry and at the end of the 6-week period using the physical aggression subscale of the Aggression Questionnaire (AQ) as validated in previous trials as reliable for monitoring self-reported aggressiveness.

Whereas no significant differences in the aggression levels between the two groups were found at entry, statistical analyses indicated that, after 6 weeks of supplementation, the omega-3 group had significantly lower aggressiveness scores (by 23-26 % overall) when compared to the placebo (control) group. Based on criteria established by the Promising Practices Network (PPN), the magnitude of the benefit provided by omega-3 fatty acid supplementation was considered to be ‘significant’, ‘important’, ‘notable’, and ‘consequential’. The authors suggest
that the potential for omega-3 fatty acids to reduce physical aggression in the general ‘healthy’ population represents yet another positive effect of such supplementation.

Dr. Holub’s Comments:

Since the present subjects were not subjected to any specific stressors, it remains to be determined as to what effect might EPA/DHA omega-3 supplementation exhibit under stressful conditions. Future clinical trials using varying levels of EPA/DHA intakes and EPA: DHA ratios would also be of interest. Finally, the measurement of other types of aggression besides only physical aggression (e.g., verbal aggressiveness) is worthy of follow-up research investigations. As reviewed, there is evidence that increased EPA/DHA omega-3 fatty acid intakes (via diet or supplementation) has the potential to favorably modify impulsive aggression in adults (Hibbeln, J.R. and Gow, R., Military Med., 179: 117-128 (2014)) and to reduce child aggression (Raine, A. et al., J. Child Psychol. Psychiatry, 57: 1038-1046 (2016)).