Reference:

Fish Consumption and school Grades in Swedish Adolescents : a study of the large general population


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Summary:

The main focus of the present study was to determine if a relationship existed between the consumption of fish (containing DHA/EPA) and academic achievement amongst Swedish adolescents. A questionnaire was completed by 9448 Swedish schoolchildren (age of 15 years, both genders) regarding the frequency of their fish consumption and other factors. The total school grade was calculated by summing their grades in 16 different subjects which is the standard approach to express the cumulated knowledge from 9 years in compulsory schools. School grades were obtained from the Swedish pupil register.

A fish intake of approx. one serving/week was reported by 56.5 % of the schoolchildren and 19.3 % consumed fish more than once per week. The overall school grade was significantly higher (by 15 %) in those who consumed fish more than once per week as compared to those who consumed less than one serving per week. This significant difference remained even after adjusting for other factors such as socioeconomic status. Furthermore, higher grades were also found in those consuming fish only once per week as compared to those consuming less than one serving per week. The authors concluded that frequent fish consumption among schoolchildren may yield benefits in academic achievement.

Dr. Holub's Comments:
The present findings have potential implications for more specific dietary recommendations for children with regard to the frequency and types of fish that are consumed and advocated by public health authorities. Very few schools now offer the serving of quality fish containing DHA/EPA omega-3 fatty acids in their lunch programs and cafeterias. The role for DHA omega-3 (and EPA to a lesser extent) in supporting neuronal development and cognitive functioning has received much support from a wide range of studies in animal models as well as in population studies and controlled clinical trials in different sub-groups of human subjects of varying ages.