Cod Liver Oil Reduces Diabetes Risk

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ISLAMABAD, November 01 (Online): Taking cod liver oil early in life appears to reduce the chances that children will develop insulin-dependent ("type 1") diabetes, researchers report. The protection may possibly come from the anti-inflammatory effects of long-chain n-3 fatty acids found in cod liver oil.

"In Norway, cod liver oil is an important source of dietary vitamin D and the long-chain n-3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)," according to Dr. Lars C. Stene, of the Norwegian Institute of Public Health, in Oslo, and colleagues.

All these nutrients "have biological properties of potential relevance for the prevention of type 1 diabetes," they explain in the American Journal of Clinical Nutrition.

The researchers looked to see if intake of dietary cod liver oil by mothers or by children during their first year of life was tied to a lower risk of type 1 diabetes among children.

The nationwide study in Norway included 545 cases of childhood-onset type 1 diabetes and 1668 control subjects. Families completed questionnaires on the use of cod liver oil, other vitamin D supplements, and other factors.

The team found that the use of cod liver oil in the first year of life reduced the risk of diabetes by 26 percent.

No such effect was found with the use of other vitamin D supplements life or with maternal intake of cod liver oil or other vitamin D supplements during pregnancy.

These results point to the fatty acids EPA and DHA as the beneficial components. "These fatty acids may influence gene expression, have anti-inflammatory effects, and have been shown to be relevant in the prevention and treatment of several chronic diseases," Stene and colleagues write.

They hope to repeat the findings in children at genetically high-risk for type 1 diabetes. If so, "cod liver oil or individual fatty acids such as DHA may be candidates for preventive intervention trials," they conclude.