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Biomedicine: Diabetes precursor may be checked by omega-3 fatty acids

by **Nathan Seppa**

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A diet rich in omega-3 fatty acids might delay the onset of type 1, or juvenile-onset, diabetes in children prone to the disease, a new study suggests.

Researchers identified 1,770 babies who were at increased risk of developing type 1 diabetes because they had a gene variant linked to the disease or a parent or sibling with the condition. Between 1994 and 2006, the babies' parents completed annual questionnaires about foods the children ate.

During the study, 58 of the children developed an antibody against the islet cells in the pancreas that make insulin. Such antibodies are often, though not always, a precursor of type 1 diabetes.

Children who consumed the most omega-3 fatty acids—commonly found in fish, some nuts, and plant oils—were less likely to make the antibodies than were children with low intakes, the researchers report in the Sept. 26 *Journal of the American Medical Association*. Children whose red blood cell membranes showed high amounts of omega-3 fatty acids were also less likely to have the antibodies, says study coauthor Jill M. Norris, a nutritional epidemiologist at the University of Colorado Health Sciences Center in Denver.

Might omega-3 fatty acids postpone diabetes? "They certainly have reduced the risk in the short term," Norris says. "But we won't have the answer until we follow the kids longer."

References:

Norris, J.M., *et al.* 2007. Omega-3 polyunsaturated fatty acid intake and islet autoimmunity in children at increased risk for type 1 diabetes. *Journal of the American Medical Association* 298(Sept. 26):1420-1428. Abstract available at <http://jama.ama-assn.org/cgi/content/short/298/12/1420>.

Further Readings:

Norris, J.M., *et al.* 2003. Timing of initial cereal exposure in infancy and risk of islet autoimmunity. *Journal of the American Medical Association* 290(Oct. 1):1713-1720. Available at <http://jama.ama-assn.org/cgi/content/full/290/13/1713>.

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Sources:

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