

Fish may reduce eczema risk in children: Study

26-Sep-2008 - **Including fish in the diet of an infant before nine months of age may reduce the risk of developing eczema by 25 per cent, suggests new research from Sweden.**

Data from 4921 infants was inconclusive however concerning the possible role of omega-3 fatty acids, despite other studies reporting a potential protective effect against the skin condition, wrote the Swedish researchers in the *Archives of Disease in Childhood*.

"The fact that fish is rich in omega-3 fatty acids could partly explain the effects found in this cohort," wrote lead author Bernt Alm from the University of Gothenburg. *"However, we found no influence of the type of fish ingested (lean/white or fat/oily) in this study, which is compatible with [two other studies]."*

"This makes it somewhat difficult to ascribe the effect to omega-3 fatty acids only."

Eczema, also known as atopic dermatitis (AD), is one of the first signs of allergy during the early days of life and is said to be due to delayed development of the immune system. According to the American Academy of Dermatologists it affects between 10 to 20 per cent of all infants, but almost half of these kids will 'grow out' of eczema between the ages of five and 15.

Study details

Alm and his co-workers studied infants participating in the ongoing Infants of Western Sweden study. Parents of the infants of six-month old babies were quizzed about their child's diet and any evidence of allergic eczema. The parents were quizzed again when the children reached 12 months of age.

At six months of age, 13 per cent of the children had developed eczema. At 12 months of age, the figure had risen to 20 per cent. Symptoms first appeared after an average of four months.

Nature rather than nurture was found to exert the greatest affect, with children born into families with a history of the condition being twice as likely to be affected by the age of 12 months, said the researchers.

However, nurture did appear to exert an effect when the researchers considered the introduction of fish into the diet before the age of nine months. This was associated with a 25 per cent reduction in the likelihood of developing the condition.

No effect on the risk of developing eczema was recorded for breast feeding, or the age at which dairy products were introduced into the diet, said the researchers.

Nutrition versus eczema

While this study could not link omega-3 intake to the relative risk of eczema, previous studies have reported that the fatty acids may exert a beneficial effect. A study published in the British Journal of Dermatology reported a 23 per cent improvement in eczema after consuming DHA supplements for eight weeks.

Researchers from the Charite-Universitätsmedizin Berlin reported: *"Our data suggest that dietary DHA could be bioactive and might have a beneficial impact on the outcome of atopic eczema, but our results need to be confirmed in a larger study."*

"Whether or not the observed clinical effect of dietary DHA is of therapeutic significance will need further clarification and have to be confirmed in larger studies," they concluded (*British Journal of Dermatology*, Vol. 158, Page 786-792).