Omega-3 DHA shows promise against eczema

02/06/2008- **Daily supplements of the omega-3 fatty acid docosahexaenoic acid (DHA) may improve symptoms of eczema, according to the results of a new trial.**

Measures of eczema improved by about 23 per cent over eight weeks after consuming the DHA supplements, and this was associated with significant reductions in levels of markers of inflammation, according to results published in the *British Journal of Dermatology*.

"With this randomised, double-blind, controlled trial we show that an 8-week supplementation with 5.4 g daily of the n-3 PUFA DHA led to a significant clinical improvement of atopic eczema compared with baseline scores," wrote the researchers.

Omega-3 fatty acids, particularly EPA (eicosapentaenoic acid) and DHA, have been identified as one of the super-nutrients taking the food and supplements industry by storm. Much of its healthy reputation that is seeping into consumer consciousness is based largely on evidence that it can aid cognitive function and may help protect the heart against cardiovascular disease.

The new study indicates that the fatty acids may also have potential for people with atopic eczema, although the researchers state the small sample size and modest effects require supporting evidence from additional trials.

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

The researcher recruited 53 people with atopic eczema (average age 26.6) and randomly assigned them to receive either a daily supplement of DHA (5.4 grams) or a control of saturated fatty acids with an equal caloric value.

After eight weeks, Worm and co-workers report that the severity scoring of atopic dermatitis (SCORAD) reduced from 37.0 to 28.5 in the DHA group, and by 35.4 to 33.4 in the control group.

"DHA, but not the control treatment, resulted in a significant clinical improvement of atopic eczema in terms of a decreased SCORAD," they wrote.

In terms of markers of inflammation and immune response, as measured by production of immunoglobulin E (IgE), were affected only in the DHA group.

"The observed clinical efficacy in atopic eczema patients points to anti-inflammatory properties of DHA," wrote the authors.

Conclusions and caution

"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," they wrote.

"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 added.

"Therefore, a larger randomised, placebo-controlled, three-armed follow-up study should be performed."