

Researchers investigate Kiwi solution for childhood eczema

20 July 2009

Childhood eczema is common in New Zealand and now researchers from The Universities of Auckland and Otago are testing a very Kiwi solution - an enriched butter that can be eaten in small amounts as part of a normal diet.

“Rates of eczema and other allergic diseases have increased 3 to 4-fold in the last 40 years in developed countries,” says Professor Peter Black. “We know that this must be something to do with our lifestyle, because genetic changes in the population cannot occur in such a short time.”

“One school of thought is that changes in our environment - such as greater cleanliness - are to blame, but it is unlikely that this explains all of the increase says Dr Black. “Another possibility is that changes in the diet are involved, and there is increasing evidence for this. One important change in our diet in the last few decades has been an increase in the consumption of margarine and a decrease in the use of butter.”

Results from several large observational studies suggest that eating butter may protect against the development of allergic disease. The New Zealand researchers have identified two substances that occur naturally in milk and butter which may account for the effect: 9, 11 conjugated linoleic acid (CLA) and vaccenic acid (VA).

Levels of these two fatty acids in milk can be increased by supplementing cow's normal feed with fish oil. Substances in the fish oil are converted into the CLA and VA as part of the cow's digestive process.

Early results with the enriched butter have been promising. It was shown to reduce allergic inflammation in the lungs and skin of mice with eczema, and patients with asthma (a closely related allergic disease) participating in a pilot study had fewer symptoms while eating the butter.

The new study will involve around 100 children aged between two and 16 years from the greater Auckland and Wellington regions. The children will consume 10gm of butter (around the amount spread on a single slice of bread) each day, in addition to their normal diet, for a period of six weeks. Half will receive the enriched product and half normal butter.

Eczema affects 15-20% of children in New Zealand and most have mild disease that comes and goes. A food product such as the enriched butter may be an alternative to intermittent treatment with steroid creams or ointments for children with mild or moderate eczema where the condition is not severe enough to require regular treatment.

The research is being led by Professor Peter Black and Professor Ed Mitchell at The University of Auckland, and Professor Julian Crane and Dr Kristin Wickens at the University of Otago, Wellington. It is funded by LactoPharma - a joint venture of Fonterra Corporate Research and Development Limited and Auckland Uniservices Limited.

Parents interested in participating in the study should contact the research nurse Barbara Rotherham in Auckland (b.rotherham@auckland.ac.nz or 09 373 7599 ext 86580) or Dr Kristin Wickens in Wellington (kristin.wickens@otago.ac.nz or 04 918 6780).

[« Back](#)