

MEDIA ALERT

Embargoed Wednesday 11am 28 January 2015

Oral therapy could provide treatment for peanut allergies

Researchers from Murdoch Childrens Research Institute have successfully trialled a treatment for peanut allergies that could potentially provide a long term cure for allergy sufferers.

Over 60 peanut allergic children in the study were either given a dose of a probiotic, *Lactobacillus rhamnosus*, together with peanut protein in increasing amounts, or a placebo over 18 months to assess whether children would become tolerant to peanut.

The probiotic was a fixed daily dose, while the peanut oral immunotherapy was a daily dose of peanut protein starting at very low doses followed by a dose increase every two weeks until the maintenance dose (2 grams peanut protein) was reached. At the end of the treatment, the child's ability to tolerate peanut was assessed by a peanut challenge performed two to five weeks after stopping treatment.

Astoundingly, researchers found over 80% of children who received the oral immunotherapy treatment were able to tolerate peanut at the end of the trial, compared to less than 4% of the placebo group. This is 20 times higher than the natural rate of resolution for peanut allergy.

23 of 28 (82.1%) probiotic treated children and one of 28 (3.6%) placebo-treated children were able to include peanut in their diet at the end of the trial. The likelihood of success was high - if nine children were given probiotic and peanut therapy, seven would benefit.

Lead researcher, A/Professor Mimi Tang said the study results are extremely exciting as they could potentially provide an effective treatment for food allergy.

"In the study the combined delivery of probiotic and oral immunotherapy was a safe and effective treatment for peanut allergy; however it is important to point out that this treatment must be only be given under close medical supervision as we are giving peanut to children who are allergic to peanut, and children did have allergic reactions. Nevertheless, the likelihood of success was high - if nine children were given probiotic and peanut therapy, seven would benefit."

"It appears that we have been able to modify the allergic response to peanut such that the immune system produces protective responses rather than a harmful response to the peanut protein."

Peanut allergies have increased over 350% in the last 20 years. The need for a curative treatment is greatest for peanut allergy since this is usually lifelong, and is the most common cause of fatality due to food induced anaphylaxis.

Further research is now required to confirm whether patients can still tolerate peanut years after the study has finished.

MEDIA OPPORTUNITY

Where: Murdoch Childrens Research Institute
Level 5, Dame Elisabeth Boardroom

The Royal Children's Hospital
50 Flemington Road, Parkville

Please ask for Simone Myers at the Murdoch Childrens reception (entry is via the smaller revolving door at the front of the hospital)

When: 11:00 am Wednesday 28 January

Who: Lead researcher, Associate Professor Mimi Tang
Study participant Olivia (7 years) and mother Tanya
Study participant Sarah (10 years) and mother Michelle
**Both Olivia and Sarah can now safely eat peanut*

...ends...

Media contact: Simone Myers – (03) 8341 6433 or 0407 852 335
Caitlin Moore – (03) 8341 6245 or 0452 193 800