



EMBARGOED UNTIL
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Note to media: See abstract 118

Could Rural Environment Protect Against Food Allergy?

SAN FRANCISCO – The prevalence of food allergy may be lower in rural areas versus more urban areas, according to new research from China presented at the 2011 Annual Meeting of the American Academy of Allergy, Asthma & Immunology (AAAAI).

“Studies have shown that a rural environment is protective against the development of asthma. Food allergy is often the first manifestation of the ‘atopic march’ in individuals who are prone to develop multiple allergies,” said first author Gary W. K. Wong, MD. “Thus, it would also be important to determine if a rural environment is protective against food allergy.”

To investigate, Wong and colleagues recruited children between the ages of 6 and 11 from Hong Kong, Beijing, Guangzhou and rural Shaoguan. A total of 28,283 children were enrolled in the study and a parent or guardian was asked to fill out two questionnaires. In addition, a random case-control sample of 1,780 children was recruited for skin prick testing and to determine their specific levels of IgE.

The researchers defined probable food allergy as having symptoms to a certain food within two hours of eating it and a skin prick test of 3 mm or greater. Using these parameters, they found the rate of probable food allergy to be 3.8% in Hong Kong, 2.6% in Beijing and 1.8% in Guangzhou, compared with only 0.2% in rural Beijing and 0.1% in rural Shaoguan.

“All our subjects were of the same genetic background and our results clearly showed that food allergy is far less common in the rural populations. It is highly likely that there are important modifiable rural environmental factors protecting against the development of food allergies. Detailed studies of the rural environment to identify these protective factors will be our next step of research,” explained Wong.

The AAAAI represents allergists, asthma specialists, clinical immunologists, allied health professionals and others with a special interest in the research and treatment of allergic disease. Established in 1943, the AAAAI has more than 6,500 members in the United States, Canada and 60 other countries. Visit www.aaaai.org for more resources and expert advice from allergists.

Editor's notes:

- *This study was presented during the 2011 Annual Meeting of the American Academy of Allergy, Asthma & Immunology (AAAAI) on March 18-22 in San Francisco. However, it does not necessarily reflect the policies or the opinions of the AAAAI.*
- *A link to all abstracts presented at the Annual Meeting is available at www.annualmeeting.aaaai.org*