

PRESS RELEASE

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The low-risk peanut

London/Zurich, 7 June 2010 - A peanut that significantly reduces the risk of an allergic reaction could be produced, say US scientists. The research is a major step forward in overcoming a potentially dangerous condition in children and adults.

Research scientist Soheila Maleki from the US Department of Agriculture's Agricultural Research Service (ARS) in New Orleans described results of her studies of 900 varieties of peanut at the congress of the European Academy of Allergy and Clinical Immunology in London today. She and her team were looking for variations in the levels of the allergens (proteins that cause allergy). Genetic mutations in some varieties showed a lack or lower levels of one of the major allergens. "We wanted to find out if it was possible to breed these varieties without some of the allergens," she said.

The ARS team found that some of the second-generation peanut seeds had significantly reduced levels of the allergens. They also discovered that these same allergens were less able to bind to antibodies in the body that cause the allergic reaction.

It is estimated that allergies to peanuts, nuts and nut oils affect effect between 0.8-1.5% of people, and children are particularly vulnerable. The severity of an allergic reaction varies from person to person, ranging from a rash to digestive problems to anaphylactic shock that could cause a person to collapse.

Professor Maleki said, "Through conventional breeding, we have shown it is possible to significantly reduce or eliminate more than one allergen. We hope this will ultimately lessen the development and the severity of the allergic response to peanuts." Future studies will involve breeding peanuts that lack major allergens, with a view to developing a peanut that significantly reduces the potential for allergy.

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NOTES TO EDITORS

- Professor Soheila J. Maleki, USDA-ARS-SRRC, 1100 Robert E. Lee Blvd., New Orleans, LA 70124 soheila.maleki@ars.usda.gov. She is also Adjunct Association Professor at Tulane School of Medicine, New Orleans
- **Research summary**
http://www.ars.usda.gov/research/projects/projects.htm?ACCN_NO=418844

About EAACI:



EAACI - The European Academy of Allergy and Clinical Immunology is a non-profit organisation active in the field of allergic and immunologic diseases such as asthma, rhinitis, eczema, occupational allergy, food and drug allergy and anaphylaxis. EAACI was founded in 1956 in Florence and has become the largest medical association in Europe in the field of allergy and clinical immunology. It includes 5'500 individual members from 107 countries, as well as 40 National Allergy Societies.

Throughout 2011, EAACI will develop different activities to celebrate the 100th anniversary of immunotherapy in Allergy, which will aim at increasing the knowledge in this field among healthcare professionals, increase awareness in the general population, and finally, promote the availability of immunotherapy for allergic patients.

EAACI 2010 Press Center

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