## **Position Statement**

## AAAAI support of the EAACI Position Paper on IgG4\*

May 2010

Adverse Reactions to Foods Committee

The recent European Academy of Allergy and Clinical Immunology (EAACI) Position Paper by Stapel et al<sup>1</sup> concerning testing for IgG4 against foods is a timely reminder that this issue is pervasive throughout the world. The ease of obtaining laboratory tests for suspected allergic symptoms, which then need sophisticated interpretation, is an ongoing problem. It should be stressed that the use of all tests for allergy should be supported by the scientific evidence base, when it exists. The improper use of certain tests to make diagnoses, in the absence of supporting clinical evidence, can lead to poor patient care and can have a serious adverse impact on patient quality of life.

The American Academy of Allergy, Asthma & Immunology supports the EAACI Position Paper, and without reiterating the entire document, the following points deserve emphasis:

- 1. It is neither possible nor appropriate to use serum antibody tests to diagnose food allergy in the absence of a good history and possible challenge testing.
- Serum antibody levels for IgG4 or IgE (or other IgG subclasses) indicate the presence of specific antibody but do not make a diagnosis. The presence of antibody does not indicate disease.
- 3. It is common for primary care providers to order serum antibody tests (usually IgE) for food allergy in the absence of a thorough history and without a skilled background for interpretation. These tests are often obtained as panels rather than being selected based on the history. The results may then lead to confusion when incriminated foods that are well tolerated by patients are removed from the diet. Well tolerated foods should not be removed from the diet even in the presence of positive tests.
- 4. Some practitioners order IgG and IgG4 antibody tests for foods, and the results may be misinterpreted leading to diets that may be nutritionally inadequate and are certainly not easy for patients to follow.
- 5. Commercial laboratories frequently offer these tests to all types of practitioners, and it is not unusual for their marketing and sales people to oversimplify the ease of interpretation of the tests.
- 6. The misinterpretation of IgE-mediated specific antibody tests could lead to serious reactions when an undetectable antibody level is interpreted as negative and the patient is told to consume the food, and then clinical symptoms occur, emphasizing the point that an undetectable result is not necessarily a negative result.

These comments reiterate those of Stapel et al<sup>1</sup> that the detection of food-specific antibody in patient sera does not necessarily indicate food allergy or intolerance, but rather a physiologic response of the immune system to exposure to food. For IgG and more specifically IgG4, this may be the normal human response. Although the detection of specific IgE antibody may indicate the potential for a reaction to occur, there frequently is no clinical consequence to the presence of these antibodies.

## Reference

1. Stapel SO, Asero R, Ballmer-Weber BL, Know EF, Strobel S, et al. Testing for IgG4 against foods in not recommended as a diagnostic tool: EAACI Task Force Report. Allergy. 2008;63:793-796.

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Disclosure of potential conflict of interest: The authors have declared that they have no conflict of interest.

American Academy of Allergy, Asthma & Immunology support of the European Academy of Allergy and Clinical Immunology position paper on IgG4: Submitted by the Adverse Reactions to Foods Committee

2009 European Academy of Allergy and Clinical Immunology (EAACI)

Journal of Allergy and Clinical Immunology (JACI)

\*This endorsement is neither a position statement nor a work group report. However, it does present the opinion of the AAAAI Adverse Reactions to Foods Committee and was approved by the AAAAI Board of Directors. It was published at <u>www.jacionline.org</u> in May of 2010.

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