An increasingly popular food “sensitivity” blood test, which costs hundreds of dollars, can lead people to needlessly eliminate foods from their diets that are in fact entirely harmless for them, warns an article in Canada’s leading medical journal.

The paper follows recent statements from European and US allergy societies emphasizing that the tests are unstandardized and unproven, and that doctors should never conclude that people are allergic on the basis of such tests alone.

from a Postmedia wire item on Canada.com, March 19

Blood testing is a useful diagnostic tool for any doctor concerned with either food allergies or food sensitivities. However, it’s very important to understand the distinction between the two when attempting to evaluate their clinical utility.

It is important to keep in mind that allergists have reserved the term “allergy” for IgE related hypersensitivity. IgG hypersensitivity is different from IgE hypersensitivity, and this important distinction needs to be stated and explained. IgG and IgE hypersensitivity can coexist in an individual or may occur exclusive of each other.

Most allergists critical of IgG testing compare IgG food reactions to IgE reactions and on finding differences, declare IgG useless for the identification of food allergies. The problem with this conclusion is that IgG food reactions are separate and distinct from IgE reactions. Immunologists make the distinction as follows: IgE is a Type I hypersensitivity reaction whereas IgG reactions are Type III hypersensitivity reactions. In practical terms, that means the following:

* **IgE reactions**
  - Mast cells are primed on first exposure and ready to release chemical mediators like histamine immediately upon next exposure to antigen
  - Occur within minutes of exposure to reactive food (i.e., immediate reaction)
  - Occur with minimal exposure
  - Can occur to virtually any food
  - Can be life threatening (e.g., anaphylaxis, laryngeal swelling)

* **In contrast, with IgG reactions**
  - Antibody-antigen complexes form, and when elimination by macrophages is saturated, they are deposited in tissue and release inflammatory cytokines
  - Occur hours to days after exposure (i.e., delayed reaction)
  - Are dose dependent (the greater the quantity of reactive food that is consumed the more likely a reaction is to occur)
  - Typically occur with frequently consumed foods
  - Often go undetected

In other words, food sensitivity is completely different from food allergy.

Food allergy is considered a clinical diagnosis, while there is currently no consensus as to the definition of food sensitivity. The fact that food sensitivity is not recognized as a contributor to disease is one of the challenges for doctors treating food sensitive patients. However, the tide may be changing in favour of creating diagnostic criteria for food sensitivities.

In June 2011, the International Celiac Symposium (2011) agreed that gluten sensitivity was a separate diagnosable condition. The criteria for diagnosis included: elevated IgG and IgA antibodies to gliadin, negative sera and biopsy for celiac disease, and clinical symptoms consistent with wheat allergy or celiac disease. (See NDNR, January 2012, “Defining Gluten Sensitivity” by Dr. Christine Doherty—graphic below.)

In fact, scientists and medical professionals have long known that IgG reactions can be highly significant. One of the first cases of severe hypersensitivity to medications was IgG mediated—for penicillin, or serum sickness, which was also IgG mediated. There are also an increasing number of peer-reviewed research papers that demonstrate the clinical benefits of eliminating IgG reactive foods from the diet—particularly for migraines and irritable bowel syndrome. In addition, an article on elevated IgG antibodies to food in obese juveniles (published in Experimental and Clinical Endocrinology and Diabetes) in 2008 reported that their findings raise the “…possibility, that anti-food IgG is...
pathogenetically involved in development of atherosclerosis and obesity.”

If a patient has significant health issues, removal of IgG reactive foods for a minimum of three months is typically called for. If the patient is clinically normal consuming small amounts of the reactive food on a rotational basis is likely safe. As long as reactive foods are not consumed everyday or to excess, the macrophages can generally keep up with the removal of the antibody antigen complexes. In other words, it’s the excess that creates the burden and creates the risk of inflammatory cytokine release in tissue.

Use of the IgG test works best with a classic naturopathic protocol, involving a patient’s current health issues, health history, and overall health concerns. As part of a patient’s clinical history it can help identify reactive foods and depending on the test and patient, may help guide a specific protocol where certain foods are limited. In short, the process isn’t about running a single test and removing foods, as the Postmedia article maintained, but rather gathering as much information as possible to make the most informed and relevant decisions on behalf of each patient.

Some of the criticism of IgG food sensitivity testing may stem from an “IgG-related” food sensitivity test readily available OTC in Canada, or, in a separate incident, a private US lab (seldom used by Canadian clinicians) which recently announced its CLIA accreditation for IgG had been revoked. It’s very important that practitioners use reputable and/or accredited diagnostic labs which ensure consistency of testing procedures and quality of results. It’s also worth noting that the Postmedia article was “expert opinion” and not based on clinical data.

Ultimately, the key lies in the appropriate use and interpretation of test results. And, as bears repeating, this applies to any laboratory test.

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