

CLINICAL SPECIFICATIONS

XANTHAN GUM

Antigen Made From:

Xanthan Gum was purchased from an antigen supplier

Associated With:

Xanthan Gum immune reactivity

Known Cross-Reactions:

Clinical Significance:

Xanthan gum is a microbial gum consisting of polysaccharides and glycoproteins derived from the bacterium *Xanthomonas campestris*. Xanthan gum is used in gluten-free baked goods as it substitutes for the stickiness properties of wheat flour. Uses also include: salad dressings, egg substitutes, yogurts, frozen foods, beverages. Non-food commercial uses for xanthan gum include: cosmetics and toothpaste. Studies on food immune reactivities predominantly use raw food antigens. However, some researchers have noted that heating or combining food proteins can change their antigenicity.¹⁻³

This array tests for IgG and IgA food immune reactivity.^{4,5} Equivocal or out-of-range results indicate antibody reactivity to the tested food antigen. We tested 288 blood donor sera against xanthan gum antigens at optimal dilution, 12.5% of these donors were IgG and IgA reactive.

Due to cross-reactivity, possible connections between food antigens and human autoimmunity has been previously suggested because proteins in nature can have a similarity in sequence and structure to certain human tissues.⁶⁻⁹

Data suggests that eliminating foods identified using IgG antibody food testing can play a role in improvement of symptoms.¹⁰ Because certain food components can lead to gut flora changes and gut permeability, eliminating specified food antigens should result in the reduction of antigenic stimuli and the improvement of symptoms.^{10,11}

The results of this food array may be used to develop and implement an immune targeted dietary plan, which includes the avoidance of triggering and known cross-reactive foods. Furthermore, when followed over time, avoidance/prevention treatment plans tailored and supervised by the ordering healthcare professional, may help: (a) repair the gut barrier; and (b) re-establish oral tolerance to the offending food.^{10,11}

References:

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