

CLINICAL SPECIFICATIONS

GELATIN

Antigen Made From:

Knox® Gelatin derived from both cow and pig

Associated With:

Gelatin immune reactivity

Known Cross-Reactions: Pork, Beef, Lamb;¹ Triiodothyronine (T3), Thyroxine (T4)¹⁵

Clinical Significance:

Gelatin is a collagen-derived protein from hide and bones. Gelatin is used in jellies, gummy candies, frozen desserts, marshmallows, deli meats, and beverages such as juices and wines.¹ Additionally, gelatin can be found in cosmetics and other products including vaccine stabilizers.^{2,3} Immune reactivity including anaphylaxis can occur to measles, mumps, and rubella (MMR) vaccine due to the gelatin in the vaccine.⁴ 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.⁵⁻⁷

This array tests for IgG and IgA food immune reactivity.^{8,9} Equivocal or out-of-range results indicate antibody reactivity to the tested food antigen. We tested 288 blood donor sera against gelatin antigens at optimal dilution, 11.4% 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.^{1,10-12}

Data suggests that eliminating foods identified using IgG antibody food testing can play a role in improvement of symptoms.¹³ 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.^{13,14}

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.^{13,14}

References:

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