

CLINICAL SPECIFICATIONS

SESAME OLEOSIN

Antigen Made From:

Sesame Oleosin purchased from an antigen supplier

Associated With:

Sesame Oil immune reactivity

Known Cross-Reactions: Anti-*B. burgdorferi* antibodies;¹ Kiwi, Poppy Seed²

Clinical Significance:

Sesame seeds have one of the highest oil content. Seed plants with high oil content contain oleosin, a structural protein found in the monolayer of oilbodies.^{3,4} 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 sesame oleosin antigens at optimal dilution, 10.4% 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.¹⁰⁻¹³ Data suggests that eliminating foods identified using IgG antibody food testing can play a role in improvement of symptoms.¹⁴ 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.^{14,15}

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.^{14,15}

References:

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