

## CLINICAL SPECIFICATIONS

# GUM GUAR

### Antigen Made From:

Gum Guar (guaran) was purchased from an antigen supplier

### Associated With:

Gum Guar immune reactivity

**Known Cross-Reactions:** Peanut, Garden pea, Garbanzo bean, Soy,<sup>1,2</sup> Insulin, Islet Cell<sup>15</sup>

### Clinical Significance:

One hundred grams of guar gum contain 4.60% protein.<sup>3</sup> Guar gum is produced from the ground endosperm of guar beans. Guar gum is an emulsifier, firming agent, stabilizer, and thickener used in baked goods and baking mixes, cereals, beverages, cheeses and other milk products, fats, oils, gravies, jams, jellies, sauces, soup mixes and soups, syrups, toppings, vegetable juices, processed vegetables and deep-frozen foods. 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.<sup>4-6</sup>

This array tests for IgG and IgA food immune reactivity.<sup>7,8</sup> Equivocal or out-of-range results indicate antibody reactivity to the tested food antigen. We tested 288 blood donor sera against guar gum 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.<sup>9-12</sup>

Data suggests that eliminating foods identified using IgG antibody food testing can play a role in improvement of symptoms.<sup>13</sup> 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.<sup>13,14</sup>

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.<sup>13,14</sup>

### References:

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