

## CLINICAL SPECIFICATIONS

# TOMATO PASTE

### Antigen Made From:

Pre-packaged Tomato Paste from a can

### Associated With:

Tomato Paste immune reactivity

**Known Cross-Reactions:** Latex;<sup>1</sup> Japanese Cedar pollen;<sup>2</sup> Birch pollen, Potato, Peach, Hazelnut;<sup>3</sup> Bell Pepper<sup>4</sup>

### Clinical Significance:

Tomato paste is made by cooking tomatoes for several hours, then straining out the seeds and skin, and mixing in other additives. One hundred grams of tomato paste contain 4.32% of protein.<sup>5</sup> 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>6-8</sup>

This array tests for IgG and IgA food immune reactivity.<sup>9,10</sup> Equivocal or out-of-range results indicate antibody reactivity to the tested food antigen. We tested 288 blood donor sera against tomato paste 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.<sup>11-14</sup>

Data suggests that eliminating foods identified using IgG antibody food testing can play a role in improvement of symptoms.<sup>15</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>15,16</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>15,16</sup>

### References:

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