

## CLINICAL SPECIFICATIONS

### ORANGE JUICE

#### Antigen Made From:

Orange Juice from concentrate

#### Associated With:

Orange Juice immune reactivity

**Known Cross-Reactions:** Anti-EBV early antigen IgG,<sup>1</sup> Triiodothyronine (T3),<sup>2</sup> Peach<sup>3</sup>

#### Clinical Significance:

One hundred grams of orange juice contain 0.68% protein.<sup>4</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>5-7</sup>

This array tests for IgG and IgA food immune reactivity.<sup>8,9</sup> Equivocal or out-of-range results indicate antibody reactivity to the tested food antigen. We tested 288 blood donor sera against orange juice antigens at optimal dilution, 16.6% 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>10-13</sup>

Data suggests that eliminating foods identified using IgG antibody food testing can play a role in improvement of symptoms.<sup>14</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>14,15</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>14,15</sup>

#### References:

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