

### Why use **Cyrex Array 10**?

- To evaluate immune reactions to foods, raw and/or modified, food enzymes, lectins and artificial food additives, including meat glue, colorings and gums.
- For early detection of dietary-related triggers of autoimmune reactivity.
- To monitor the effectiveness of customized dietary protocol in patient.

(Cyrex Laboratories, LLC, 2015)

### What does **Cyrex Array 10** test?

- 180 common food antigens cooked, raw and modified: Heat changes the protein structure of foods thus presenting a different antigen to the body. For example, one may react to broccoli when it's raw versus cooked or one may react to roasted almonds but not react to raw almonds.
- Cross-reactivity of food antigens with human tissue: Cyrex has identified certain food antigens that cross-react with human tissues. When antibodies are produced to the food antigen and there is any gut permeability, this presents an opportunity for the antibodies to attack the human tissue causing tissue damage, autoimmune reactivity and eventual autoimmune disease.
- Multiple food protein interactions: One may not react to certain foods individually but may react when common foods are combined and ingested.
- Large gum molecules found in many gluten-free and dairy-free processed foods: Gums such as xanthan gum, gum Arabic, guar gum are large molecules that can cross-react with other food proteins causing immune reactions.
- Lectins and Agglutinins: Lectins are glycoproteins that bind carbohydrates together and agglutinins bind cells together. Lectins and agglutinins are found in about 30% of foods.
- Tissue-Bound Artificial Food Colors: Food colorants bond with food proteins creating a new antigen that may elicit an immune reaction whereas the food itself may not.
- Amplified Antigenic Proteins and Peptides: These are specific proteins and peptides found within entire food proteins, such as shrimp tropomyosin and pineapple bromelain.
- Oil proteins found in nuts and seeds
- Meat glue: A powder used in food manufacturing to combine smaller pieces of meat into larger pieces, and is also used as a thickener in some dairy products.
- Both IgG and IgA antibodies for each food item:

(Cyrex Laboratories, LLC, 2015)

How does **Cyrex Array 10** differ from ALCAT testing?

- Comparing the two is like comparing apples to oranges. Each test measures a different immune response.
- ALCAT tests Mediator Release Response which measures general immune reaction to foods and food chemicals. The responses measured by the test are used to identify substances that may cause potentially harmful immune system reactions. (Cell Science Systems, 2015)
- Cyrex measures the response of the adaptive immune system, a specific response in which the body produces antibodies that specifically target the foods and food chemicals.
- ALCAT results are used to construct a specific elimination/rotation diet designed to remove the burden on the immune system. The triggers are removed for a period of time and then reintroduced.
- Cyrex results are used to identify food immune reactivity that may be the underlying culprit in disorders the patient may be suffering with and potential autoimmune disease.
- Cyrex measures permanency. If test is positive for gluten, gluten and its cross-reactors must be avoided on a permanent basis due to the memory specific immune response it elicits. Other foods can be avoided for a period of time allowing the immune system to reset and the food can be reintroduced.