CYREX® Laboratories

CLINICAL SPECIFICATIONS

CORN (saliva)

Antigen Made From:
Whole Corn kernel.

Associated With:
Loss of oral tolerance

Known Cross-Reactions: Gliadin,[6] potato,[7] rice,[3] soybean[3]

Clinical Significance:

The presence of salivary antibodies to Corn is an indication of loss of mucosal tolerance and the onset of food immune reactivity. The offending food and its known cross-reactive foods should be eliminated from the diet. Adverse reactions to Corn have been reported.[1, 2, 4, 5] Corn gluten activates mucosal neutrophils and eosinophils, which enhance mucosal nitric oxide produce and thus exacerbates the gastrointestinal inflammatory conditions found in Celiac disease[2] and other inflammatory bowel disorders.

Suggested Reading:

1. Davidson, et al. Antibodies to maize in patients with Crohn's disease, ulcerative colitis and coelic disease. Clin Exp Immunol, 1979, 35:147-148.
2. Kristjánsson, et al. Gut mucosal granulocyte activation precedes nitric oxide production: studies in coeliac patients challenged with gluten and corn. Gut, 2005; 54:769-774.
3. Lehrer, et al. Corn Allergens: IgE antibody reactivity and cross-reactivity with rice, soy, and peanut. Int Arch Allergy Immunol, 1999; 118:298-299.
4. Pastorello, et al. A lipid transfer protein involved in occupational sensitization to spelt. J Allergy Clin Immunol, 2001; 108(1):145-146.
5. Scibilia, et al. Maize food allergy: a double-blind placebo-controlled study. Clin Exp Immunol, 2008; 38(12):1943-1949.
6. Vojdani and Tarash. Cross-reaction between gliadin and different food and tissue antigens, Food Nutri Sci, 2013; 4:20-32.
7. Vos-Scheperkeuter, et al. Immunological comparison of the starch branching enzymes from potato tubers and maize kernels. Plant Physiol, 1989; 90:75-84.