

CLINICAL SPECIFICATIONS

CORN

Antigen Made From:

Whole Corn kernel

Associated With:

Allergy/hypersensitivity^{1,2} Anaphylaxis² Celiac disease^{3,4} Crohn's disease³ Ulcerative colitis³

Known Cross-Reactions: Gliadin,⁵ Potato,⁶ Rice,⁷ Soybean,⁷ Millet,⁸ Glutamic Acid Decarboxylase-65,⁹ Triiodothyronine (T3)¹⁰

Clinical Significance:

The presence of antibodies to Corn is an indication 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.^{1,2,3,4} Corn gluten activates mucosal neutrophils and eosinophils, which enhance mucosal nitric oxide produce and thus exacerbates the gastrointestinal inflammatory conditions found in Celiac disease⁴ and other inflammatory bowel disorders.

References:

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- 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.
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- 8. Hemmer et al. Food Allergy to millet and cross-reactivity with rice, corn and other cereals. Allergology International, 2017; 66:490-492.
- 9. Kharrazian, et al. Detection of islet cell immune reactivity with low glycemic index foods: is this a concern for type 1 diabetes? J Diabetes Res, 2017; 2017:4124967.
- 10. Kharrazian, et al. Immunological reactivity using monoclonal and polyclonal antibodies of autoimmune thyroid target sites with dietary proteins. J Thyroid Res, 2017; 2017:4354723.