CYREX® Laboratories

CLINICAL SPECIFICATIONS

INSTANT COFFEE

Antigen Made From:

Packaged Instant Coffee [Ingredients: Whole Coffee Bean, Natural and Artificial Flavors]

Associated With:

Allergy/hypersensitivity[1,2]
Anaphylactic shock[2]
Contact dermatitis[3]
Heart arrest[2]
Urticaria[4]

Known Cross-Reactions: Gum Arabic,[2] Gliadin[5]

Clinical Significance:

The presence of antibodies to Instant Coffee 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 Coffee plant, inhaled grounds and consumed food products have been reported.[1,2,3,4,6] Our in-house study on gliadin cross-reactions showed that Instant Coffee has the highest measurable intensity for cross-reactivity to purified gliadin, while whole bean coffee had no reaction,[6] which indicates Instant Coffee is contaminated with wheat during processing, or it is a hidden ingredient.

Note: Array 4 assesses antibodies to Instant Coffee antigen, while Coffee Bean Protein, brewed (Array 10) did not show cross-reactivity with gliadin.[5]

References:

1. Arentz-Hansen et al. The molecular basis for oat intolerance in patients with celiac disease. PLoS Med, 2004; 1(1):084-092.
2. Janatuinen et al. A comparison of diets with and without oats in adults with celiac disease. N Engl J Med, 1995; 333:1033-1037.
3. Keet et al. Barley and oat allergy in children with wheat allergy. J Allergy Clin Immunol, 2009; 123(2):S110.
4. Silano et al. In Vitro tests indicate that certain varieties of oats may be harmful to patients with coeliac disease. J Gastroenterol Hematol, 2007; 22:528-531.
5. Vojdani and Tarash. Cross-reaction between gliadin and different food and tissue antigens, Food Nutri Sci, 2013; 4:20-32.
6. Srinivasan et al. Immunohistochemical analysis of coeliac mucosa following ingestion of oats. Clin Exp Immunol, 2006; 144:197-203.