

CLINICAL SPECIFICATIONS

OATS

Antigen Made From:

Whole grain Oats

Associated With:

Atopic dermatitis¹
 Celiac disease^{2,3}
 Food hypersensitivity⁴
 Gluten sensitivity^{2,3}

Known Cross-Reactions: Gliadin,⁵ often cross-contaminated with Wheat;⁶
 Glutamic Acid Decarboxylase-65;⁹ Triiodothyronine (T3), Thyroxine (T4)¹⁰

Clinical Significance:

The presence of antibodies to Oats 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 Oat have been reported.^{2,3,4} Genetically speaking, Oats do not contain gluten and thereby should be safe to eat for the celiac or non-celiac gluten-sensitive patient.^{7,8} However, due to cross-contamination of Oats during transportation and food processing, they may become harmful to the gluten-reactive population.^{2,3} Some varieties of Oats have been shown to cross-react with gliadin.

References:

1. Varjonen et al. IgE-binding components of wheat, rye, barley and oats recognized by immunoblotting analysis with sera from adult atopic dermatitis patients. Clin Exp Allergy, 1994; 24(5):481-489.
2. Arentz-Hansen et al. The molecular basis for oat intolerance in patients with celiac disease. PLoS Med, 2004; 1(1):084-092.
3. 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.
4. Keet et al. Barley and oat allergy in children with wheat allergy. J Allergy Clin Immunol, 2009; 123(2):S110.
5. Comino et al. Diversity in oat potential immunogenicity: basis for the selection of oat varieties with no toxicity in coeliac disease. Gut, 2011; doi:10.1136/gut.2010.225268.
6. Thompson. Gluten contamination of commercial oat products in the United States. N Engl J Med. 2004; 351(19):2021-2022.
7. Janatuinen et al. A comparison of diets with and without oats in adults with celiac disease. N Engl J Med, 1995; 333:1033-1037.
8. Srinivasan et al. Immunohistochemical analysis of coeliac mucosa following ingestion of oats. Clin Exp Immunol, 2006; 144:197-203.
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.