

CLINICAL SPECIFICATIONS

RICE

Antigen Made From:

Medium grain and basmati white Rice

Associated With:

Allergy/hypersensitivity^{1,2}
 Enterocolitis³

Known Cross-Reactions: Wheat;⁴ Corn/Maize;^{4,5} Millet;^{4,5,6} Soybean;² Gliadin;⁷
 Glutamic Acid Decarboxylase-65;⁸ Triiodothyronine (T3)⁹

Clinical Significance:

The presence of antibodies to Rice 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 Rice have been reported.^{1,2} Despite its cross-reactivity to wheat, Rice is often over-consumed in a gluten-free diet, which can result in the patient developing an immune reactivity to Rice.

References:

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3. Gray et al. Rice-induced enterocolitis in an infant: TH1/TH2 cellular hypersensitivity and absent IgE reactivity. *Ann Allergy Asthma Immunol*, 2004; 93:601-605.
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5. Yamada et al. The involvement of rice protein 16KD in cross-allergenicity between antigens in rice, wheat, corn, Japanese millet, Italian millet. [Japanese] *Arerugi*, 1991; 40(12):1485-1492.
6. Hemmer et al. Food Allergy to millet and cross-reactivity with rice, corn and other cereals. *Allergology International*, 2017; 66:490-492.
7. Vojdani and Tarash. Cross-reaction between gliadin and different food and tissue antigens, *Food Nutri Sci*, 2013; 4:20-32.
8. 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.
9. Kharrazian, et al. Immunological reactivity using monoclonal and polyclonal antibodies of autoimmune thyroid target sites with dietary proteins. *J Thyroid Res*, 2017; 2017:4354723.