CYREX® Laboratories

CLINICAL SPECIFICATIONS

SORGHUM

Antigen Made From:

Packaged Sorghum flour

Associated With:

Allergy[1]
Asthma[1]

Known Cross-Reactions: Corn/Maize,[2,3] Millet,[4] *Neurospora crassa* (a bread mold),[5] Triiodothyronine (T3)[6]

Clinical Significance:

The presence of antibodies to Sorghum is an indication of food immune reactivity. The offending food and its known cross-reactive foods should be eliminated from the diet. Sorghum flour, although difficult to process, is becoming a popular alternative flour to use in gluten-free baking. A study on the effects of Sorghum in celiac patients showed that the flour was not antigenic.[7] If a recently diagnosed gluten-reactive patient results with high levels of antibodies against Sorghum, it is most likely due to the late introduction of the food to the patient's diet, rather than a gluten-associated reaction.

References:

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4. Parameswaran and Thayumanavan. Isolation and characterization of a 20 kD prolamin from kodo millet (Paspalum scrobiculatum) (L.): homology with other millets and cereals. Plant Foods Human Nutr, 1997; 50:359-373.
5. Virdi et al. A sorghum 85 kDa heat stress-modulated protein shows calmodulin-binding properties and cross-reactivity to anti-Neurospora crassa Hsp 80 antibodies. FEBS Letters, 2009; 583:767-770.
6. Kharrazian, et al. Immunological reactivity using monoclonal and polyclonal antibodies of autoimmune thyroid target sites with dietary proteins. J Thyroid Res, 2017; 2017:4354723.
7. Ciacci et al. Celiac disease: in vitro and in vivo safety and palatability of wheat-free sorghum food products. Clin Nutr, 2007; 26(6):799-805.