

[Clin Exp Allergy. 2007 Jun;37\(6\):823-30.](#)

Comment in:

[Clin Exp Allergy. 2007 Jun;37\(6\):805-7.](#)

***Alterations of food antigen-specific serum immunoglobulins G and E antibodies in patients with irritable bowel syndrome and functional dyspepsia.***

**Zuo XL, Li YQ, Li WJ, Guo YT, Lu XF, Li JM, Desmond PV.**

Department of Gastroenterology, Qilu Hospital, Shandong University, Jinan, China.

**BACKGROUND:** Post-prandial worsening of symptoms as well as adverse reactions to one or more foods are common in the patients with functional gastrointestinal diseases, such as irritable bowel syndrome (IBS) and functional dyspepsia (FD). However, the role played by true food allergy in the pathogenesis of these diseases is still controversial and there are no well-established tests to identify food allergy in this condition. **OBJECTIVE:** To investigate serum food antigen-specific IgG, IgE antibody and total IgE antibody titres in controls and patients with IBS and FD, and to correlate symptoms with the food antigen-specific IgG titres in IBS and FD patients. **METHODS:** Thirty-seven IBS patients, 28 FD patients and 20 healthy controls participated in this study. Serum IgG and IgE antibody titres to 14 common foods including beef, chicken, codfish, corn, crab, eggs, mushroom, milk, pork, rice, shrimp, soybean, tomatoes and wheat were analysed by ELISA. Serum total IgE titres were also measured. Last, symptomatology was assessed in the study. Results IBS patients had significantly higher titres of IgG antibody to crab ( $P=0.000$ ), egg ( $P=0.000$ ), shrimp ( $P=0.000$ ), soybean ( $P=0.017$ ) and wheat ( $P=0.004$ ) than controls. FD patients had significantly higher titres of IgG antibody to egg ( $P=0.000$ ) and soybean ( $P=0.017$ ) than controls. The percentage of individuals with detectable positive food antigen-specific IgE antibodies of the three groups did not show any significant differences ( $P=0.971$ ). There were no significant differences between IBS patients, FD patients and controls in the serum total IgE antibody titres ( $P=0.978$ ). Lastly, no significant correlation was seen between symptom severity and serum food antigen-specific IgG antibody titres both in IBS and FD patients. **CONCLUSION:** Serum IgG antibody titres to some common foods increased in IBS and FD patients compared to controls. But there is no significant correlation between symptom severity and elevated serum food antigen-specific IgG antibodies in these patients.