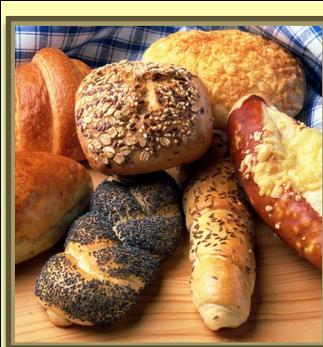


Evidence-based research on the serious effects of gluten on mental health, with an in-depth look at testing and the gluten-free diet

Trudy Scott, BS, CN (Certified Nutritionist), author *The Antianxiety Food Solution*

“...gluten sensitivity remains undertreated and underrecognized as a contributing factor to psychiatric and neurologic manifestations” (Jackson 2012)



What is gluten and gluten sensitivity

- Gluten is found in wheat, barley, rye, spelt, kamut, and triticale. Oats may be contaminated during processing and transportation. Gluten is also found in beer, cosmetics and stamps. Individuals are sensitive to a protein called gliadin, which is part of gluten (Scott 2011).
- There is now consensus on new nomenclature and classification of gluten-related disorders: wheat allergy/IgE reactions, celiac disease/autoimmunity and gluten sensitivity (Sapone 2012).

Many health problems may be associated with gluten intolerance

- Digestive problems, such as diarrhea or constipation, abdominal pain, gas, and bloating
- Rheumatoid arthritis, fibromyalgia, dermatitis herpetiformis, eczema, colon cancer, and thyroid abnormalities (Braly 2002).

Effects of gluten on mental health

- A gluten-free diet may alleviate depressive and behavioural symptoms in adolescents with coeliac disease (Pynnönen 2005).
- A higher prevalence of social phobia was seen with coeliac disease (Addolorato 2008)
- “The monitoring and control of gluten sensitivity may have significant effects on the management of individuals hospitalized with acute mania.” (Dickerson 2011).
- Depression, anger and suicide ideation were eliminated on a gluten-free diet (Carr 2012).
- Elevated gliadin antibody levels were seen in individuals with schizophrenia (Okusaga 2013).

Testing (not always conclusive)

IgA tissue transglutaminase and IgA antigliadin antibodies (Braly 2002); IgG food sensitivities or delayed reactions (Scott 2011); Saliva and stool tests for antigliadin antibodies, HLA-DQ2 and HLA-DQ8 genes (a greater risk of celiac disease), biopsy of the small intestine (Braly 2002); Elevated levels of thyroid antibodies antithyroglobulin and antithyroperoxidase may indicate Hashimoto's thyroiditis, an autoimmune condition common with celiac disease (Barker 2008).

Elimination and challenge

“The use of a gluten-free diet or an elimination diet is encouraged in assisting people to determine whether or not they are gluten sensitive” (Brown 2012). They then challenge with gluten and observe adverse symptoms (Scott 2011).

The gluten-free diet

The goal is for the individual to eat real whole foods and avoid all the processed gluten-free foods (Scott 2012). “In trying to make patients totally gluten-free, it is very challenging to tell them to be totally restrictive. In my practice, I refer them to a nutritionist” (Johnson 2013).

The Future

Gluten free is not a fad (Pietzak 2012) and “gluten-sensitive nonceliac disease is going to get considerably more attention” (Johnson 2013). This is an evolving field and high-quality, large-scale randomized trials are needed (Pietzak 2012).

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