

## The Celiac/Autoimmune Thyroid Connection

### Research links Celiac Sprue Gluten-Intolerance to autoimmune thyroid disease

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About.com Health's Disease and Condition content is reviewed by our [Medical Review Board](#). According to research reported on in the medical journal *Digestive Diseases and Sciences*, a significant number of patients with autoimmune thyroid disease also have [celiac disease](#)<sup>1</sup>. Celiac disease is a disorder that causes the intestines to react abnormally to gluten, a protein found in wheat, rye, barley, oats, spelt, kamut, and other related grains.

**"...researchers found that...organ-specific autoantibodies (i.e., thyroid antibodies) -- will disappear after 3 to 6 months of a gluten-free diet."**

Celiac disease, which is sometimes referred to as *celiac sprue*, *sprue*, or *gluten intolerance*, makes it difficult for the body to properly absorb nutrients from foods. Symptoms include various intestinal difficulties, recurring abdominal bloating and pain, nausea, anemia, gas, tingling numbness in the legs, sores inside the mouth, painful skin rash on elbows, knees, and buttocks, cramping, hives, joint/muscle pains and aches, diarrhea, and constipation, among others. Untreated, celiac disease raises risks of contracting certain stomach cancers by more than double.

The researchers studied 172 patients with autoimmune thyroid disease, and two control groups, and found that the 3.4% of patients with autoimmune thyroiditis had celiac disease, and the prevalence was only 0.6% and 0.25% among the control groups. The study also found that undiagnosed celiac disease may actually be part of the process that triggers an underlying autoimmune disease. In their findings they wrote: "We believe that undiagnosed celiac disease can cause other disorders by switching on some as yet unknown immunological mechanism. Untreated celiac patients produce organ-specific autoantibodies."

Of perhaps greatest importance to thyroid patients, the researchers found that the various antibodies that indicate celiac disease - organ-specific autoantibodies (i.e., thyroid antibodies) -- will disappear after 3 to 6 months of a gluten-free diet.

The researchers suggest that patients with autoimmune thyroiditis "may benefit from a screening for celiac disease so as to eliminate symptoms and limit the risk of developing other autoimmune disorders."

(*Digestive Diseases and Sciences*, February 2000;45:403-406.)

#### More On Celiac Disease

The underlying propensity to develop celiac disease is considered hereditary, and the condition often runs in families.

Some practitioners theorize that celiac disease may be triggered after infection by a type of virus that biologically resembles the proteins in gluten. After the infection, the body cannot distinguish between the invading virus and the gluten protein, and subsequently, the body reacts allergically, releasing mucous into the intestinal tract upon gluten exposure, and causing damage to the intestines.

In addition to viral infections, celiac disease is also known to be triggered in susceptible people by pregnancy, severe stress, or physical trauma. Celiac disease also is more common among people with type

1 diabetes.

## **Impact for Thyroid Patients**

This is important information for autoimmune thyroid disease patients (Hashimoto's Disease, Graves' Disease) , who are typically told that there is nothing that can be done to reduce antibody levels, or to improve the "autoimmune" aspect of their thyroid conditions. While some recent books have reported on the impact of diet and nutrition on antibody levels, this research demonstrates scientifically how diet may in fact have a major role in autoimmune reactions.

To diagnose celiac disease, your doctor can do a blood test to measure the levels of antibodies to gluten. These antibodies are called antigliadin, anti-endomysium, and antireticulin. A preliminary diagnosis of celiac disease can be confirmed by the results of your going on a totally gluten-free diet, or, in more extreme cases, an intestinal biopsy.

## **The Gluten-Free Diet: The Cure for Celiac Disease**

The only real treatment for celiac disease is strict adherence to a 100% gluten-free diet for life. Following a gluten-free diet can prevent almost all complications caused by the disease. A gluten-free diet means avoiding anything that contain wheat, rye and barley, or any of their by-products.

Foods which can be eaten on in a gluten-free diet include:

- Fresh meats, fish and poultry
- Milk and unprocessed cheeses
- Dried beans
- Plain fresh or frozen fruits and vegetables
- Corn and rice

Foods prohibited on a gluten-free diet:

- Any bread, cereal or other food made with wheat, rye, barley and oat flours or ingredients and byproducts made from those grains.
- Processed foods containing wheat, gluten-derivatives, or thickeners. These foods include hot dogs, ice cream, salad dressings, canned soups, dried soup mixes, non-dairy creamers, processed cheeses, cream sauces, and hundreds of other common foods.

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