

Can't Stand to Be Dizzy? Demystifying Celiac

...by Peter Jo, DC, DACNB

Over six million Americans experience dizziness or balance problems. The world seems to turn around them and there's nothing they can do but lie down and wait for it to pass. Feeling dizzy on occasion may be a frightening inconvenience but when those symptoms lead to falls, serious injuries can result. According to the Centers for Disease Control, 30% of adults over age 65 will fall this year. Nearly 16,000 seniors die each year from injuries due to falls, and two million seniors visit the emergency room due to fall-related injuries. The good news is that many of these falls can be prevented.

There are three important factors in maintaining your balance: your eyes, inner ears, and body's muscles and joints. Information from all three areas converges on your brain to keep you steady and stable. If there is a mismatch in communication, you may experience symptoms.

Each person experiences symptoms of dizziness differently because everyone's brain is a little different

"Central vestibular dysfunction" is a fancy way of saying the brain is not processing information from the eyes, ears, and body efficiently enough to maintain balance. What is the best solution to this problem? Exercise! You may think that you're in no shape to exercise, but a custom exercise program can have dramatic effects on your symptoms. In fact, a study in the *American Journal of Medicine* published in June 2007 found that exercise programs and rehabilitation are among the most effective treatments for fall prevention.

A 2006 paper in the *Archives of Physical Medicine & Rehabilitation* showed that a custom exercise program over five months improved balance. Other studies have shown that exercise improves symptoms of lightheadedness and vertigo. The *European Journal of Applied Physiology* published a recent study that showed that eight weeks of exercise improved postural control.

While most balance exercises are simple to perform and don't involve heavy lifting or excessive sweating, they should be customized to your brain. Each person experiences their symptoms differently because everyone's brain is a little different. For example, one person may feel like he is spinning to the left; another person may feel she is spinning to the right. Some people spin quickly while others spin slowly. This individuality is also expressed during falls. Some fall forward,

others fall backward; some fall to the left and others to the right. Your uniqueness means that an exercise that works for you may not be appropriate for someone else.

It is important to know which positions your body is most stable in to select the right exercises. "Computerized dynamic posturography" has been used in vestibular (balance) research for years and is now accessible to clinicians to objectively measure a patient's balance and stability in all directions. It is an invaluable tool in assessing and treating a patient who is dizzy or at risk of falling and provides your doctor with clues to your brain function.

When engaging in an exercise program to improve balance, it is important to understand that you are not trying to build muscles; you are actually exercising your brain. In 2006, the *Journal of Gerontology* published research that showed that seniors' brain size can actually increase with exercise! Having stronger muscles is just a pleasant side effect.

Before beginning an exercise program, it is important to rule out metabolic or nutritional disturbances. High blood pressure, arrhythmias, thyroid conditions, anemia, and dehydration can lead to dizziness and should be carefully managed. Anemia is a condition where your blood cannot carry oxygen to tissues very well. It commonly results from iron or vitamin B12 deficiencies, both of which are common in seniors, and can be easily identified through routine blood tests. Blood loss secondary to ulcers or other gastrointestinal bleeds can also cause anemia. Dehydration is common among seniors and can be secondary to low water intake, vomiting, or diarrhea. A 2006 study found that many patients with dizziness have "impaired glucose metabolism." This means their blood sugar tends to be too high or too low. To maximize the benefits of an exercise program, seniors should address these health concerns that may be contributing to their symptoms.

While many dizzy patients need a medical evaluation, there are some immediate steps you can take to relieve symptoms. Eat well, stay hydrated, and get regular eye check-ups. Review your medications with your doctor or pharmacist as some medications cause dizziness. Finally, get plenty of sleep as fatigue can worsen your symptoms. ❖

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...by Merna Kochel



Merna Kochel

Celica disease, also called celiac sprue, is an autoimmune digestive disorder—a genetic intolerance to gluten. Celiac disease is found in approximately one of every 133 people. Until recently doctors in this country considered celiac to be a rare disease.

Gluten is the protein found in wheat, rye, barley, and, possibly, oats. Gluten is what gives bread its elasticity and cakes their spring. Gluten can also be found in a large variety of other foods including salad dressings, processed foods, and natural flavorings. Even the tiniest amount of gluten can cause problems for celiacs. It was once thought to be a childhood disease that would be outgrown. It is now known to be a permanent condition.

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When a person with celiac disease consumes gluten, it damages the lining of the small intestine, which is covered with tiny finger-like fronds, called villi. Villi absorb nutrients from food, but the villi in celiacs respond to gluten by launching an immune attack until the villi become so damaged they are unable to absorb nutrients. Malabsorption becomes a serious problem, and the loss of vitamins, minerals, and calories results in malnutrition, and subsequent weight-loss, despite an adequate diet.

To develop celiac disease three factors must be present: 1) one must inherit the gene, 2) consume gluten, and 3) have the gene triggered. Common triggers include surgeries, virus infections, and stress or trauma, such as with the birth of a baby, divorce, and death of a loved one. It is possible to carry the gene for a lifetime without it being triggered.

Interestingly, it wasn't until after

World War II, that a doctor in The Netherlands recognized that his celiac patients went into remission during the years grains were in short supply. When wheat was reintroduced into their diets, the celiac symptoms recurred. From this came the discovery that it was the gluten factor that caused the damage to the gut.

Why gluten causes celiac disease is unknown. What is known is that celiac disease affects mostly Caucasians of northern European ancestry and it affects more women than men.

The disease is permanent and damage to the intestine will occur every time one consumes gluten, regardless of whether symptoms are experienced.

The disease is difficult to diagnose because the symptoms are similar to those of other diseases such as irritable bowel syndrome, ulcerative colitis, or Crohn's disease. Symptoms vary greatly from one person to another. Common symptoms are weight loss, nutritional deficiency, anemia, abdominal discomfort, diarrhea, bloating, gas, and constant fatigue. Dermatitis herpetiformis is a skin manifestation of celiac disease, characterized by an intense burning and itching rash. The most common areas affected are the elbows, knees, upper back, and buttocks. And osteoporosis can be a complication in celiac patients

To detect celiac disease, doctors use blood tests to ascertain elevated levels of two antibodies produced in response to gluten. Confirmation of the diagnosis requires a biopsy of the intestinal lining accomplished by performing an upper endoscopy.

If left untreated, celiac disease can be serious, even life-threatening. Possible complications are osteoporosis, miscarriage, and a risk of developing intestinal malignancies.

The good news: celiac can be controlled by adhering to a strict gluten-free diet for life. ❖

Merna Kochel of Kirkland was 70 years old when she was diagnosed with celiac disease. She advises others to learn as much as possible about the condition: "Knowledge is the best medicine of all."

Additional Facts:

It is not uncommon for celiacs to also have allergy problems. Milk products are the first suspect and others may be eggs, soy, corn, and many other foods. Certain autoimmune disorders also can be associated with celiac disease, including rheumatoid arthritis, Sjogren's Syndrome, thyroid disease, and Type 1 *diabetes mellitus*. More information about celiac disease can be found at:

- Gluten Intolerance Group, 31214 – 124th Ave. SE, Auburn, WA 98092, 206-246-6652, www.gluten.net
- Celiac Disease Foundation, 13251 Ventura Blvd., Suite 1, Studio City, CA 91604-1838, (818) 990-2354, www.celiac.org
- Resource Books: *Gluten-Free Diet, A Comprehensive Resource Guide*, by Shelley Case and *The Gluten-Free Gourmet Cooks Fast and Healthy*, by Bette Hagman
- Check out this helpful website: www.glutenfreeceliacweb.com/, which includes a link to "Wheatless (and Gluten Free) in Seattle"