

Sources

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2. Celiac disease over view. Children's digestive health and nutrition foundation. 2007. Available at: http://www.celiachealth.org/cms/en/PatientsAndFamilies/PF/PatientsFamilies_Overview.aspx?menu=patientsandfamilies. Accessed March 15, 2008.
3. Celiac Disease. NIH Publication No. 07-4269. August 2007. Available at: <http://digestive.niddk.nih.gov/ddiseases/pubs/celiac/>. Accessed March 3, 2008.
4. Celiac Disease: The Great Mimic. Michigan Pharmacist Association. Available at: www.michiganpharmacists.org/pharm_prof/Celiac%20Disease%20article.pdf. Accessed March 3, 2008.
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6. Given Imaging Announces New Mayo Clinic Study Concludes Celiac Disease May Be More Severe Than Symptoms Indicate for Some Patients. CNN. March 2008. Available at: <http://money.cnn.com/news/newsfeeds/articles/marketwire/0369297.htm>. Accessed March 5, 2008.

Gluten Free Recipe

Sinful Chocolate Pie

Ingredients

1 c GF baking mix
1 stick margarine
1 c pecans, chopped
1 8-oz pkg cream cheese
1 c powdered sugar
1 12-oz pkg whipped topping
1 3-oz pkg GF chocolate pudding
3 c milk, divided
grated chocolate
1 3-oz pkg vanilla pudding (or substitute pistachio pudding)

Directions

To make crust, mix flour, margarine and pecans; press into a 9x13-inch pan. Bake 25 minutes at 325 degrees. Let cool. Mix cream cheese, powdered sugar and one cup of the whipped topping. Layer over cooled crust. Mix chocolate pudding with 1 1/2 cup milk, according to the directions on the package. Pour over cream cheese layer. Let stand 20 minutes in refrigerator until set. Mix vanilla (or pistachio) pudding with remaining 1 1/2 cup milk. Pour over the chocolate layer. Let stand 20 minutes in refrigerator. Top with remaining whipped topping and sprinkle with grated chocolate. Refrigerate until ready to serve.

<http://www.csaceliacs.org/recipes3.php?id=22>

Celiac Disease

The Great Mimic



<http://consensus.nih.gov/IMAGES/Art/118.jpg>

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What is Celiac Disease?

Celiac disease is characterized by intolerance to the protein gluten. This intolerance creates an autoimmune reaction in the small intestinal villi. These villi allow nutrients from food to be absorbed into the bloodstream. A lack of villi results in chronic malnutrition from lack of nutrients which can bring about a host of new medical problems. (3)
Celiac disease appears to be genetic and is commonly found in tandem with other diseases. Symptoms may not develop until later in life and the disease itself may not be present until "triggered." Such triggers include: surgery, pregnancy, childbirth, viral infection, or severe emotional stress. (3)



What are the Symptoms?

Untreated, CD has the potential to result in various health problems that can manifest in the following symptoms: (3)

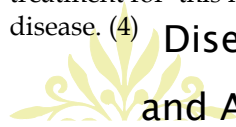
- recurring abdominal bloating and pain
- chronic diarrhea
- constipation
- pale, foul-smelling, or fatty stool
- weight loss/weight gain
- fatigue
- unexplained anemia (a low count of red blood cells causing fatigue)
- bone or joint pain
- osteoporosis, osteopenia
- behavioral changes
- tingling numbness in the legs (from nerve damage)
- muscle cramps
- seizures
- missed menstrual periods (often because of excessive weight loss)
- infertility, recurrent miscarriage

- delayed growth
- failure to thrive in infants
- pale sores inside the mouth, called aphthous ulcers
- tooth discoloration or loss of enamel
- itchy skin rash called dermatitis herpetiform



Why is it called, "The Great Mimic?"

As a result of the extreme variation in celiac symptoms, it is often termed, "The Great Mimic," due to the variation in manifestations. Often patients show NO symptoms. CD is known to be under diagnosed and often patients suffer for decades before they receive treatment for this highly manageable disease. (4)



Diseases Linked to CD

and At-Risk Populations

Studies have consistently shown that CD effects approximately 1% of the population. (5) Susceptibility is associated with HLA genes which govern immune reactions. Genetic markers can be inherited from either parent. CD is more frequent in those of European descent. (2) The prevalence is even higher in first and second degree relatives of people with celiac disease due to its genetic link. (5) Many diseases have found to be linked with CD and may indicate a need for CD testing: (3)

- Thyroid Disease
- Systemic Lupus Erythematosus
- Type 1 diabetes
- Liver Disease
- Collagen Vascular Disease
- Rheumatoid Arthritis
- Sjogrens Syndrome
- Lymphoma and adenocarcinoma
- Down Syndrome (2)
- Turner Syndrome (2)
- Willams Syndrome (2)



How is it diagnosed?

Diagnosis begins with one or several antibody blood tests which allow the physician to see if you have antibody characteristics of someone with CD. An individual with abnormally elevated antibody levels, specifically endomysial and anti-tissue transglutaminase antibodies have a greater than 95% of actually having CD. (7) A final biopsy of the small intestine is needed to confirm the diagnosis. A recent technological advancements has created a new alternative to the biopsy. The Pillcam has been shown to be useful in diagnosing Celiac by taking visual images of the small intestine to show villi damage. (6)

How is it treated?

Treatment of celiac disease requires removing all dietary gluten. Wheat, barley and rye products should not be eaten. Recent studies show that oats do not damage the mucosa in celiac disease. Patient symptoms may resolve quickly, but actual intestinal healing can take months or years. For serious cases, the patients may require supplements to replace nutrient deficiencies. (1)

What gluten-free alternatives are there?

Recipe Books:

Gluten-Free Quick & Easy: From Prep to Plate Without the Fuss - 200+ Recipes for People with Food Sensitivities:

by [Carol Fenster](#)

List of GF foods at Kroger Grocery Stores:

http://www.kroger.com/healthy_living/nutrition/Pages/gluten_free.aspx

Online Shopping:

www.gfmall.com

Support Groups:

Indiana Gluten Intolerance Support Team

West Lafayette, IN

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7. Martin Kagnoff, M.D. Keynote Address at CSA/USA Conference in San Francisco, October 6, 1995. Lifeline, Winter 1996, Vol XIV, No 1, pp 4-5. Available at: <http://www.csaceliacs.org/library/genetics.php>. Accessed March 16, 2008.