

Celiac Disease - Hidden & Dangerous

What is Celiac Disease?

Celiac disease, or gluten-sensitive enteropathy, is a genetically based permanent intolerance to ingested gluten. It results in an immunologically mediated inflammatory damage to the mucosa of the small intestine. Untreated, it can result in severe steatorrhea and malnutrition, and increased risk of other diseases including lymphoma and osteoporosis.

Genetics

Celiac disease is a heritable condition, and more than 50% of patients with celiac disease have a parent, brother, sister or child with undiagnosed celiac disease. Environmental factors such as severe emotional stress, pregnancy, surgery, or a severe viral infection sometimes trigger the symptoms.

Incidence

The incidence of celiac disease in a number of European countries is estimated at 1 in 250, with more women than men being affected. Growing awareness of celiac disease, better diagnosis, and improved screening point to the possibility of similar incidence figures in Canada and the United States.

Symptoms

The symptoms of celiac disease tend to be unspecific, and vary greatly from one person to another. More than half of the common symptoms in adults, including anaemia, extreme fatigue, depression, bone or joint pain, osteoporosis, etc. are often not recognized as gut related. The similarity of the symptoms of celiac disease with those of other diseases often results in a misdiagnosis of irritable bowel syndrome, Crohn's disease, chronic fatigue syndrome, or diverticulosis.

Common symptoms

The following symptoms may occur singly or in combination **in children and adults**:

- anaemia - deficiency of iron or folic acid (often both)
- extreme weakness and lethargy
- deficiency of vitamins A, D, E, K & B₁₂
- depression
- diarrhea, sometimes constipation (often both)
- steatorrhea (large, pale, foul-smelling stools)
- flatulence, bloating, abdominal pain
- nausea and vomiting
- mouth ulcers
- weight loss
- easy bruising of the skin
- bone/joint pain
- edema of ankles and hands
- lactose intolerance
- amenorrhea

Additional symptoms in children

- dental abnormalities
- severe irritability
- short stature
- delayed puberty

Associated Conditions

Conditions more prevalent in individuals with celiac disease include:

- dermatitis herpetiformis
- insulin dependent diabetes
- thyroid disease
- osteoporosis
- miscarriages and infertility
- lymphoma
- attention deficit disorder (ADD)
- neural tube defects in newborns

Diagnosis

Several studies report a frequent delay of many years between the appearance of symptoms and diagnosis. The only definitive test for diagnosing celiac disease is an endoscopy, preferably with multiple biopsies of the distal duodenum and proximal jejunum, to determine villous atrophy.

A GLUTEN-FREE DIET SHOULD NEVER BE STARTED BEFORE A BIOPSY IS DONE, since it will interfere with making an accurate diagnosis. A variety of blood screening tests to detect antibodies to connective tissue (endomysium and reticulin) and to gliadin are available in some Canadian hospitals, to help determine whether other suspected family members should be biopsied.

Treatment

THE ONLY TREATMENT FOR CELIAC DISEASE IS A STRICT GLUTEN-FREE DIET FOR LIFE.

Gluten is the general name for the prolamins of wheat, rye, barley, and oats. A strict gluten-free diet will enable recovery of the gut, and reduce the risk of developing other associated diseases. Because of the complexity of the gluten-free diet, patients should be referred to a professional dietitian for counselling, and encouraged to join their local chapter of the Canadian Celiac Association.

Bibliography:

- Catassi C, Råtsch IM, Fabiani E, Rossini M, Bordicchia F, Candela F, Coppa GV, Giorgi PL. Coeliac disease in the year 2000: exploring the iceberg. *Lancet* 1994;343:200-3.
- Holmes GKT, Prior P, Lane MR, Pope D, Allan RN. Malignancy in coeliac disease - effect of a gluten free diet. *Gut* 1989;30:333-8.
- Marsh MN. Bone disease and gluten sensitivity: time to act, to treat, and to prevent. *Am J Gastroenterol.* 1994;89:2105-7.
- Murray JA. The widening spectrum of celiac disease. *Am J Clin Nutr* 1999;69:354-65.

For more information on celiac disease, dermatitis herpetiformis, gluten free diets, and ingredient information, please contact the local chapters of the Canadian Celiac Association, or contact the National Office at:

Canadian Celiac Association / L'Association canadienne de la maladie coeliaque

5170 Dixie Road, Unit 204
Mississauga, Ontario L4W 1E3
1-800 363-7296
Phone: (905) 507-6208
Fax: (905) 507-4673
Website: www.celiac.ca

Canadian Celiac Association Chapter Locations:

Vancouver	Victoria
Kelowna	Kamloops
Calgary	Edmonton
Regina	Saskatoon
Manitoba	Thunder Bay
Sudbury	London
St. Catharines	Hamilton
Kitchener/Waterloo	Toronto
Quinte	Ottawa
Montreal	Fredericton
Saint John	Halifax
Moncton	Charlottetown
St. John's	

Toronto Chapter
Canadian Celiac Association
Castlewood PO Box 23056
550 Eglinton Avenue West
Toronto, ON M5N 3A8