

FIVE THINGS TO KNOW ABOUT ...

Celiac disease

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Celiac disease is common and is associated with other immune diseases

Celiac disease is an immune-mediated systemic disorder that is triggered by gluten (a protein found in wheat, rye, barley and triticale) in people who are genetically susceptible.¹ It affects 1 in 133 North Americans,² with a similar prevalence reported in Europe, South America, Africa and parts of Asia. Individuals who have a first-degree relative with celiac disease have a 10-fold increased risk of acquiring the condition.² The risk is also increased among people with autoimmune thyroid disease (3%–5%), type 1 diabetes mellitus (5%–10%) and Down syndrome (5.5%).¹

Select groups can be screened with serum antibody tests

Screening for celiac disease is recommended for people who have associated symptoms, an associated condition or a family history of celiac disease.¹ The most widely available test is the tissue transglutaminase IgA antibody test, which has an estimated sensitivity of 90%–96% and a specificity of 95%.⁵ Selective IgA deficiency, which occurs in 2%–3% of people with celiac disease, may cause a false-negative result. If antibody testing is negative and celiac disease is suspected, the IgA level should be measured.⁵ All adults with an abnormal screening result should undergo a small-bowel biopsy to confirm the diagnosis of celiac disease.⁵ A confirmatory biopsy may not be necessary in children with additional criteria.¹

Resources

- Canadian Celiac Association Resource Guide: www.celiacguide.org
- Celiac Education: www.celiac-education.com
- Canadian Celiac Association: www.celiac.ca

Diagnostic testing should be performed before adopting a gluten-free diet

Because of an increasing awareness of celiac disease, people may choose to adopt a gluten-free diet before diagnostic testing. Symptomatic response to such a diet is a poor predictor of celiac disease, as shown in a recent double-blind placebo-controlled trial.⁶ Further diagnostic testing should be performed following a medically supervised gluten challenge of at least four weeks, with sufficient gluten to produce symptoms.⁵

References

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The disease can develop at any age with diverse clinical symptoms

In celiac disease, gluten perpetuates the destruction of villi in the small intestine. Diarrhea is common in the classic form of the disease and may be accompanied by abdominal discomfort and malabsorption.³ “Silent” presentations (e.g., unexplained iron deficiency and osteoporosis) and atypical presentations (e.g., fatigue, abdominal bloating, weight loss, bone and joint symptoms, and constipation) are common.^{1,4}

Treatment is lifelong adherence to a gluten-free diet

Oats, buckwheat, millet, rice and quinoa are naturally gluten-free grains. These grains are safe to eat provided there has been no cross-contamination with gluten during production or preparation. Adherence to a gluten-free diet ameliorates symptoms and reduces the risk of complications such as osteoporosis and intestinal lymphoma.⁵

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Competing interests: None declared.

This article has been peer reviewed.

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CMAJ 2013. DOI:10.1503/cmaj.111646